



# ECONOMIC DEVELOPMENT CHAPTER

## 2015 REGIONAL MASTER PLAN

For the Rockingham Planning Commission Region

# Economic Development

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*Cover photo credits: Portsmouth waterfront, NH Sea Grant (top right); Great Bay Community College, GBCC (middle right)*

# Economic Development

## Introduction

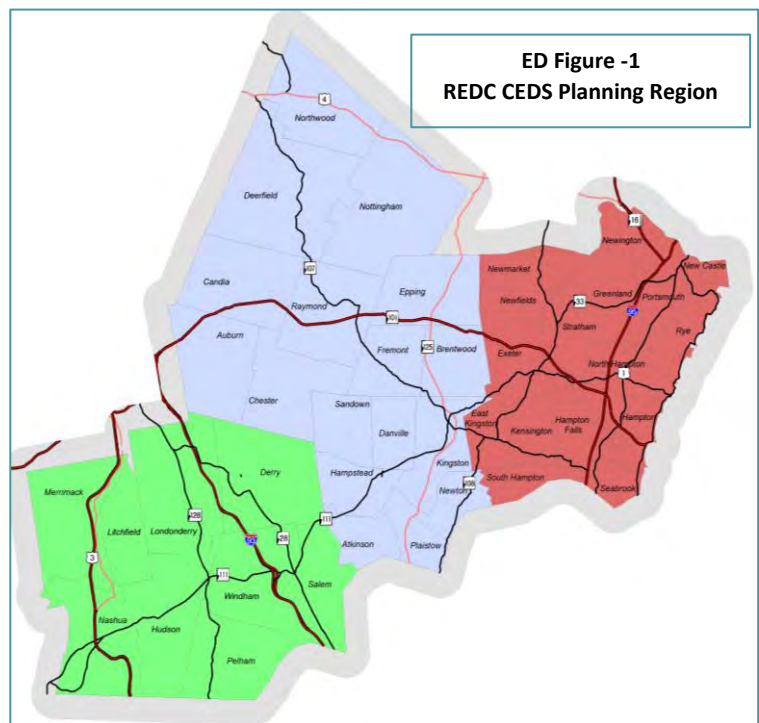
Economic development both strongly influences and is influenced by land use planning policies and is of high importance in developing the **region's** master plan. The success or failure of economic development will have a profound effect on the future prosperity and character of the region. One of the central purposes of regional planning commissions in New Hampshire is to assist municipalities in coordinating policies for the development of the region, including economic development policies. Approaching economic development regionally can lead to better coordination of investments in infrastructure, workforce development and other areas of need and can magnify their effectiveness in achieving economic development goals.

## Relationship to CEDS

The RPC partners with Regional Economic Development Center of Southeastern New Hampshire (REDC) which has the lead responsibility for economic development planning in southeastern New Hampshire. The REDC was initially established in the early 1990s during a severe recession caused by a retraction in the housing, construction and banking industries. It was established to cover Rockingham County and funded by the U.S. Economic Development Administration to develop an economic development strategy for the County. Since then, this ongoing planning effort has evolved into what is now the "Comprehensive Economic Development Strategy" or CEDS, and the REDC itself has expanded to include a significant portion of Hillsborough County in addition to all of Rockingham County. In addition, the REDC has been designated by EDA as an economic development district, which helps communities, and other public entities in the region gain access to federal economic development grants to fund infrastructure (sewer, water, transportation access) improvements and other investments to support economic development. ED Figure - 1 shows the geographic area encompassed by the REDC and covered by the CEDS.

The CEDS is an economic development planning tool for the region, and a means to prioritize which development projects are most important and most deserving of public investment. The list of prioritized projects, which is updated annually, has become a key indicator of the economic development priorities for the broader region. The CEDS is developed in a bottom-up fashion whereby communities submit proposals for consideration to REDC. The CEDS advisory committee, made up of a diverse mix of municipal, education and business officials, evaluates projects and establishes the priorities among them.

The RPC works closely with REDC each year in developing the CEDS. RPC assists by gathering the economic and demographic data needed to monitor the state of the regional economy, updating information about major infrastructure projects planned or underway, in identifying key trends which may impact growth and development, and ensuring that an integrated planning perspective is brought to the table on issues like public transportation, water quality, natural hazards, housing and other factors. Rather than maintaining a separate



*ED Figure - 1 The REDC Region, shown in green, covers all of Rockingham County and 5 communities in Hillsborough County including Nashua. Coastal communities are within the Coastal EDC, but share the REDC's CEDS. Source: REDC*



regional plan for economic development, the RPC defers to the CEDS as the primary document to serve that function. In so doing, the planning efforts are combined rather than duplicated. The intent of this chapter is to distill relevant parts of the CEDS, to summarize information about the current state, direction and challenges of **our region's economy**, to articulate the common goals, policies and strategies for economic development in the region, and **make recommendations that are relevant to the region's** economic development objectives. Communities can use this chapter to inform the content of their individual master plans, to act on the strategies and recommendations that are appropriate for them locally, and to provide the means to cooperate with their neighbors in pursuing broader economic development in the region.

## Common Visions and Goals Related to Economic Development

Throughout the 1970s and 1980s most communities in the RPC region did not place a significant emphasis on economic development in their local land use planning efforts. Often, economic development was not even included as a subject in local master plans. The more urgent concern at the time in much of southern New Hampshire in those years was in managing high rates of growth and the significant land use and infrastructure development impacts that flowed from that growth. Encouraging economic development in many communities experiencing high growth was often considered not needed or even desirable. However, as overall growth slowed in the 1990s and 2000s, and local tax rates rose in response to requirements for increased services brought on by their earlier growth, many communities recognized a need to plan for economic development to achieve overall community development goals and a diversified tax base.

## What the Region Said About Economic Development

The vision and goals for the economic development chapter are drawn from five sources: (1) content of the individual master plans from communities in the region (as available through 2013); (2) opinions expressed by attendees at the regional workshops held during the development of the regional master plan (2013-2014); (3) results from the statewide opinion survey conducted by the UNH Survey Center (Spring 2013); (4) the 2013 BIA Strategic Economic Plan for New Hampshire; and finally, (5) the current CEDS for the region, updated in **June of 2014. Together, these were considered against the RPC's economic development positions in the Commission's existing land use policies.**

### Local Master Plans

The review of current local master plans undertaken as part of this plan development shows an increased emphasis in economic development. The following generalized vision or goal statements are common:

- Diversify the local tax base to include more commercial and industrial development.
- Encourage high quality jobs to attract and retain young people.
- Encourage economic development that is in character with the community.
- Create tax incentives to encourage local agriculture and preserve remaining agricultural land.
- Promote moderate density downtown/town center development with a mix of practical, useful stores.
- Provide infrastructure and services necessary to promote economic development.
- Establish limits to the amount of retail commercial development allowed by zoning.

### Public Input from Regional Workshops

Three general **visioning workshops, called "community conversations"**, were held around the region in 2013 soliciting input about key concerns and issues on a variety of topics, including economic development. The **discussion format followed the "SWOT" format: a brainstorming session that moved sequentially from discussion of the region's strengths, weaknesses, opportunities and threats. The key theme's that arose from these discussions are more fully explored in the Key Issues and Challenges section of this chapter.** The perceptions of key strengths and opportunities focused on a high quality of life, both the natural environment and cultural resources, quality schools, good transportation infrastructure, a highly educated and motivated workforce, and access to developable land. Weaknesses and threats centered on lack of infrastructure in parts of the region (sewer, water, natural gas, broadband internet access, transit) and in the maintenance and upgrading of existing infrastructure, the scarcity of workforce-affordable housing, high relative cost of energy, and the lack of intermunicipal cooperation in approaching regional scale problems and needs.

### Statewide and Regional Survey

A statewide random sample survey was conducted by UNH Survey Center in the spring of 2013 as part of the statewide Granite State Future project. The survey included a number of questions aimed at measuring public attitudes toward community and economic development. Among the notable findings for the RPC region related to economic development are the following:

- Quality schools was by far the most important asset to have in a community, followed by local businesses and stores, nearby jobs, and cultural and recreational facilities.
- Two-thirds of **respondents** favored future development occur in already developed areas as opposed to undeveloped areas.
- The majority supported additional public investment in roads and bridges (70%), water and sewer lines/facilities (61%), bike and pedestrian facilities (58%) and special needs/senior transportation (54%). The least support was shown for public investment in broadband access (36%).
- People most favored taking local action to encourage local agriculture (91%), protect historic buildings and neighborhoods (90%), create safe places for walking and biking (87%), expand existing businesses (78%), promote non-polluting industries (76%) and improve access to forests, trails and other recreation (76-74%). Least favored was attracting new retail stores (43%) and promoting tourism (49%).
- Environmental protection in general (66%-81%) and protecting drinking water supplies (94%) were highly supported.
- Just over half of respondents in the region (51%) felt that houses for purchase were very or somewhat affordable, but less than half (40%) felt that rental units were affordable.

The full results of this survey, both for the statewide and RPC region samples can be found in the Regional Overview Chapter Appendix.

#### BIA Strategic Economic Plan for New Hampshire

In November 2013, the Business and Industry Association of New Hampshire, the statewide chamber of commerce organization released its strategic economic plan for the state. This was done, as explained in the **Plan's preface, because there is presently a need for a statewide 'playbook' for economic development and no such statewide plan exists.** It is motivated by a growing sense that, unlike in the past when circumstances nearly guaranteed healthy economic growth, our **state's future economic success** will require a well thought-out strategic economic plan coupled with thoughtful, intentional decision-making about public investments. Past successes are no longer guaranteed due to slowing population growth and several other **economic "headwinds"**, including a shrinking workforce, aging population, growing healthcare costs, high energy prices and a backlog of needed infrastructure investment.

The BIA strategic plan identified nine strategic goals, five of which parallel the goals of the CEDS and this chapter (shown in italics). They are as follows:

- Business growth, retention and attraction – New Hampshire offers the best environment for innovation and entrepreneurship in the Northeast United States, consistently growing, creating and drawing in successful businesses and the people that create and lead them.
- *Education, workforce skills and labor pool – New Hampshire possesses a high-quality, cost-effective, lifelong educational system that provides access and affords all residents the same educational opportunities to create a robust, innovative, flexible and productive workforce.*
- *Energy – New Hampshire businesses have access to reliable, high-quality, low-cost, diverse energy sources.*
- Fiscal policy – New Hampshire encourages business growth and retention by maintaining a state tax structure that is simple and equitable and by efficiently operating state and local governments.
- Health care – All New Hampshire residents are among the healthiest in the nation and have lifelong access to a high-quality, affordable, integrated and preventive health and community support system.

- *Infrastructure – Safe, reliable multi-modal transportation; high bandwidth, high-speed communication; and improved water supply, wastewater and storm water systems able to meet the needs of businesses and residents throughout New Hampshire.*
- *Natural, cultural and historic resources – New Hampshire values, stewards and enhances its natural, cultural and historic resources, making them available for current and long-term public benefit to foster vibrant communities, engaged citizens and economic vitality.*
- **Regulatory environment – New Hampshire’s regulations are clear, appropriate and consistently applied, providing the state’s businesses with objective, predictable and consistent outcomes while protecting the state’s natural resources, workers and residents.**
- *Workforce housing – New Hampshire’s workforce has access to diverse, attractive housing options that are affordable to the full range of incomes for working men and women throughout the state.*

### CEDS Goals and Objectives

The 2014 CEDS for Southeastern New Hampshire identifies and articulates six broad goals and a series of objectives for each. The RPC incorporates the CEDS goals in this plan (below) as being wholly consistent with our own agency priorities. In addition, however, we have added two goals, one relating to energy efficiency and security, and another to climate change and resiliency, **which we believe are important to the region’s future economic development success.**

## Economic Development Goals

### Goal 1 (CEDS): Dynamic, Diverse Economy

The region maintains a diverse, dynamic and creative economy which supports innovative industry clusters and creates high-skill, higher-wage jobs.

### Goal 2 (CEDS): Infrastructure Development

Investment in infrastructure improvements, such as roads, bridges, sewer and water facilities, broadband, and multi-modal transportation systems is adequate to support the needs of the regional economy.

### Goal 3 (CEDS): Regional Cooperation

Cost-effective regional approaches to shared problems and municipal service sharing are developed which enable more regional cooperation and other intermunicipal solutions.

### Goal 4 (CEDS): Workforce Development

The resources available through the workforce development and university/ community college systems are effectively utilized and coordinated to address the training and educational needs of the work force and business community.

### Goal 5 (CEDS): Workforce Housing

A diverse mix of workforce-affordable housing options exist in all parts of the region able to live in **the region and support a growing workforce for the region’s expanding** businesses and new firms.

### Goal 6 (CEDS): Environmental Preservation

The high quality of life in the region is maintained through the preservation and restoration of natural, cultural and historic resources and a balanced approach to economic development.

### Goal 7: Resilience to Climate Change

Businesses and communities in the region have recognized potential risks and vulnerabilities from climate change and prepared for those threats by protecting and adapting critical infrastructure including culverts, roads, bridges, utilities, and community buildings.

### Goal 8: Secure & Efficient Energy Supply

The region has advanced energy developments that diversify energy sources, emphasize cost effective renewable sources and create innovative means to use existing utilities and smart power grids to achieve these ends.



TABLE ED-1

Relationship of Economic Development Goals to Regional Master Plan Goals

Economic Development Goals	<u>Regional Goal</u> Promote the efficient use of land, resources and infrastructure that:				
	Creates a high quality built environment while protecting important natural and cultural resources.	Promotes positive effects of development and minimizes adverse impacts.	Promotes economic opportunities and community vitality.	Enhances the coordination of planning between land use, transportation, housing and natural resources.	Considers and incorporates climate change into local and regional planning efforts
ED Goal 1	P	S	S	P	N/A
ED Goal 2	S	P	S	S	P
ED Goal 3	P	P	S	S	N/A
ED Goal 4	N/A	P	S	N/A	N/A
ED Goal 5	P	P	S	S	N/A
ED Goal 6	S	S	P	P	P
ED Goal 7	S	S	P	S	S
ED Goal 8	S	S	P	S	S

S = Goal supports the Regional Goal.  
P = Goal partially supports the Regional Goal.  
TBD = Goal applicability to support the Regional Goal is not yet known.  
N/A = Goal does not apply to the Regional Goal.

TABLE ED-2

Relationship of Economic Development Goals to NH Livability Principles

Economic Development Goals	NH Livability Principles					
	Traditional Settlement Patterns & Development Design	Housing Choices	Transportation Choices	Natural Resources Function & Quality	Community & Economic Vitality	Climate Change & Energy Efficiency
ED Goal 1	P	S	S	N/A	S	N/A
ED Goal 2	S	S	S	S	S	P
ED Goal 3	N/A	N/A	S	P	S	P
ED Goal 4	N/A	P	P	N/A	S	N/A
ED Goal 5	P	S	P	N/A	S	N/A
ED Goal 6	S	P	S	S	S	S
ED Goal 7	N/A	P	P	S	S	S
ED Goal 8	P	P	S	S	S	S

S = Goal supports the NH Livability Principle.  
P = Goal partially supports the NH Livability Principle.  
TBD = Goal applicability to support the NH Livability Principle is not yet known.  
N/A = Goal does not apply to the NH Livability Principle

## Existing Conditions

### Demographic Conditions and Trends<sup>1</sup>

Demographic conditions and trends significantly influence the trajectory of the region’s economic development. For example, as is more thoroughly presented in the regional overview of the Plan, the aging of our baby boom population cohort will, all other factors being equal, lead to a net reduction in the size of the region’s available workforce over the next 20 years. Likewise, the availability of workforce-affordable housing, as well the skill and education of the workforce, can affect the ability of businesses to expand. The following is a summary of the key demographic conditions and trends that effect economic development.

#### Population

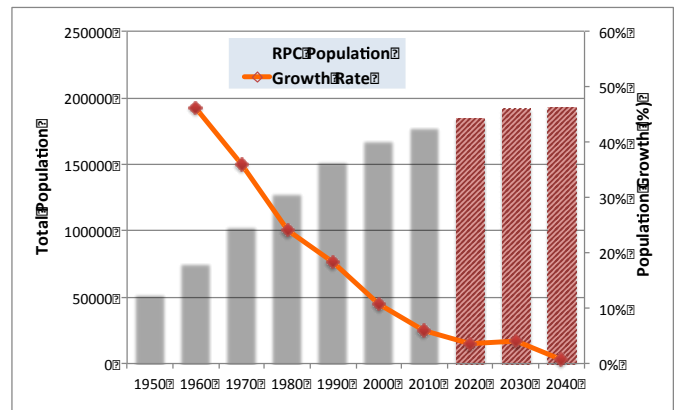
As noted in the introduction to this chapter, for most of the past 50 years, the RPC regional economy has been strongly influenced by rapid population growth. At times during the 1970s and 1980s several towns in the region were growing faster than any in the state. The number of people added between 1950 and 1990 averaged nearly 3% per year or about 25,000 per decade. Between 2000 and 2010, that rate fell by 60% to about 1000 persons per year across the region (Figure ED-3).

Since then the annual growth rate has been less than 1% per year. The period of rapid population and housing growth supported a very strong construction sector of the economy, but that changed in the early 1990s with a recession followed by housing market collapse and state banking crisis. Housing construction has never returned to those levels.

Looking forward, based on the age structure of the region’s population alone, it is likely that we have entered a prolonged period of very slow growth unless other factors intervene. The New Hampshire RPCs together with the NH Office of Energy and Planning (NHOEP) collaborated in 2013 to produce update population projections for the state. The new projections show relatively slow growth in the region’s population from 2010 to 2040 and zero growth from 2030-2040. This projection is driven primarily by the effect of the large baby-boom cohort beginning to age out of the population after 2030. It assumes that migration, the net number of people moving into the region, will remain on average as it was from 2000 to 2010 so even within migration occurring, population growth will flatten as a natural consequence of the age structure.

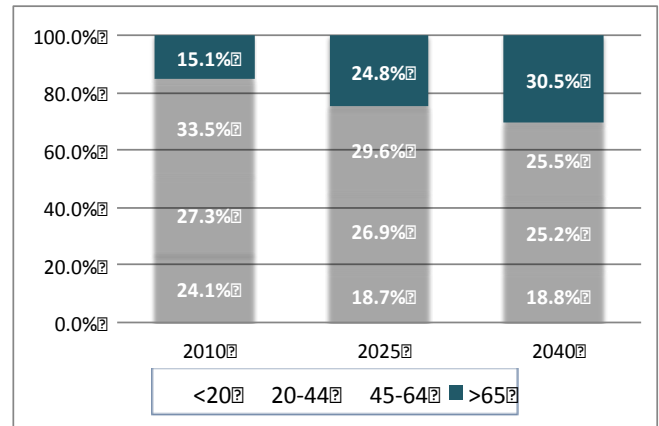
As depicted in Figure ED-4, this demographic determinism is “baked-in” to our population demographics. Over

**Figure ED-3  
Population Growth & Projections 1950-2040**



**Figure ED-4**

**Age Cohorts – RPC Region – 2010-2040**



<sup>1</sup> The data summarized in this section is available in the Economic Development Chapter Appendix on a town-by-town basis when the data is available at that geographic level.

the next 30 years the fraction of the population over age 65 and over 80 will grow very rapidly, more than doubling in their proportion while most other cohorts remain the same or shrink in size.

Compared to the U.S. average, Rockingham County has a significantly smaller number of people younger than 35, a significantly larger number between the ages of 45 and 64, and close to the average older than 65. This unbalanced age distribution has consequences to the **region's** economy over time. For the present, the age distribution is economically favorable because we have a bulge in the age segments where workforce participation, wages and household income are at their peak. As this large cohort ages, it becomes less favorable with a number consequential effects on the **region's** economy, some positive, but most negative. A shrinking school aged population will likely mean higher education costs per student (**since fixed costs won't change** significantly) or school closures and reduced staff. A decline in the 45-64 age group would likely mean a loss of household income and spending since they both peak with this age group. The rapid rise in people over 65 will mean expanded need for services catering to seniors such as healthcare, home services which will create business opportunities, but also higher per capita health care expenditures, less demand for housing, especially larger houses, property tax losses from senior exemptions and a smaller workforce. These are trends, not yet outcomes. Other factors, such as delayed retirement for some seniors and an effective economic development strategy that results in an increase in in-migration for younger age cohorts, may intervene to mitigate these trends.

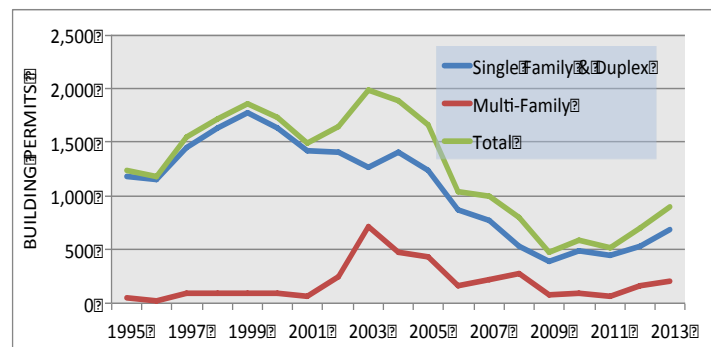
## Housing

Housing availability, diversity and affordability are important factors in creating and maintaining a favorable environment for economic development. The quality of the housing stock in the region, as measured by common census statistics like age of units, number of bedrooms, utility status, etc., is generally good. Another positive metric for the state and region is the high homeownership rate which is correlated with higher income and overall prosperity. New Hampshire ranked 2<sup>nd</sup> nationwide in homeownership with 71% occupied housing units being owned versus rented (ACS 2012, 3 Year Average). In Rockingham County, 77% are owned, the highest of all areas in the state except Carroll County. On the other hand, the RPC region has comparatively high housing costs which can **translate into higher living costs for the region's workforce**, and in turn, high labor costs for the **region's employers** if higher wages are needed to attract the workforce their business demands.

Both the REDC CEDS document and several recent studies of economic indicators in New Hampshire, flag housing affordability as a key factor in the sustainability of a healthy economy. The New Hampshire Center for Public Policy Studies publication [New Hampshire's Economic Climate: Key Indicators](#) (NHCPPS, October 2013) found that New Hampshire ranked among the lowest states on housing affordability metrics, including the percent of household owner costs that were greater than 30% of income (43 of 50) and the ratio of median housing price to median income (34 of 50).

Housing affordability has been a long-standing and significant challenge for southern New Hampshire and is identified both here and in the CEDS as a key issue to address. Beginning in the 1970s and continuing to today, the region has had a relatively constrained supply of workforce-affordable housing, both owned and rental. At least two factors have and continue to contribute to this. First, the proximity to the Boston housing market and high housing costs in neighboring communities in Massachusetts tends to inflate the cost of housing here, whereas wages are not as strongly affected. Second, there is an undersupply in multifamily housing, the source of most rental and other affordable housing. This is especially true in **the region's smaller communities**. **As of the 2010 Census**, about two-thirds of the housing units in the region were single-family units, but for many small communities that number is over 80%. Zoning restrictions in many communities make it relatively more difficult to construct affordable multi-family housing, but these restrictions are often in place because of the lack of municipal sewer and water

**Figure ED-5**  
**Housing Unit Production**





infrastructure in the majority of the towns in the region. Only ten of the 26 RPC communities have municipal sewer systems, and in most of those, the sewer district covers only a small portion of the town. Even where allowed by zoning, that lack of infrastructure increases the relative cost of multifamily construction in rural areas and becomes less attractive to builders.

Another factor in the comparatively small supply of multifamily housing presently available in the region is the relative weakness in the housing construction sector which began with the recession in the early to mid 1990s which affected the multi-family sector more than the single family sector. As shown in Figure ED-5 construction for all types of housing significantly weakened after 2006 and began recovering in 2012. Multifamily construction was virtually non-existent in the mid to late 1990s and slowed dramatically again after 2005. The net affect is a lagging housing stock for multifamily units. Since average prices and rents for multifamily housing are lower than single family housing, the affect is to reduce the available stock of workforce affordable housing.

One effect of the great recession was to ease high prices in the ownership housing market. Since their peak in 2005, purchase prices for all homes in Rockingham County, fell nearly 30% by their low point in 2010 and are still selling on average at 20% below the peak (Figure ED-6). As wages have remained more or less steady in that time, the result has been a lessening in the affordability "gap" (the difference between the median selling price and what is affordable at the median household income) largely disappeared for median income households, though certainly not for low and moderate income families.

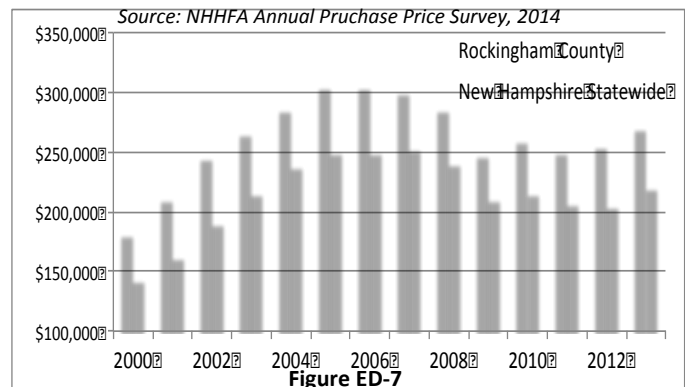
Unfortunately, the same cannot be said for rental prices, which have remained very high and are presently the highest in the State by a significant margin<sup>2</sup>. (Figure ED-7) The result is that housing affordability for renters, where the need is greatest, remains a significant problem. In the Portsmouth area rental costs are particularly high, followed closely by costs in the I-93 corridor.

Overall housing affordability is relatively low in the region. For the state as a whole the percentage of households where costs for housing exceed 30% of income, is similar to the other New England states. In Rockingham County and the Seacoast region, the percentage is only modestly higher due to higher incomes.

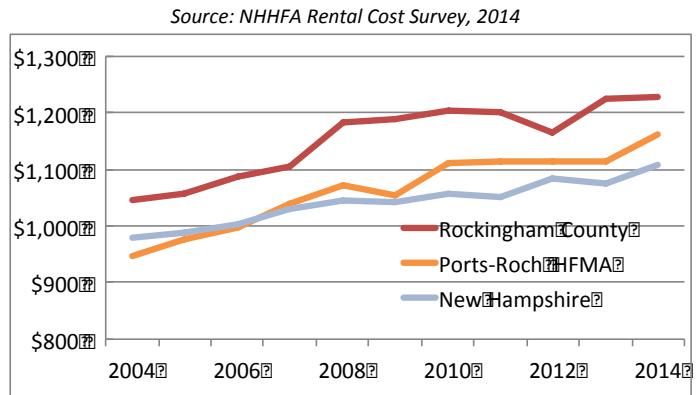
It is likely that the relatively high unemployment and low wage pressure that existed during the recession (and has persisted) is masking the negative impact of housing affordability on businesses. In a weak job market, employees are less likely to risk giving up a job to relocate to a more affordable location and instead will accept the higher housing or longer commute costs. As this reverses, housing affordability may once again become a significant concern among the region's larger employers.

Income

**Figure ED-6**  
**Average Housing Purchase Prices**



**Figure ED-7**  
**Average Housing Rental Costs (Monthly incl. Utilities)**



<sup>2</sup> NH Housing Finance Authority 2014 Residential Rental Cost Survey, June, 2014.

Median income, whether expressed as family, household or per capita income, is a common and important indicator of a community's or a region's relative prosperity. It is linked to other factors including labor force participation, unemployment, wages, and dominant industries in the region. Income is measured through the American Community Survey (ACS) which is taken annually and aggregated into 3 and 5 year moving averages. The most recent income data available for the RPC region is for 2012 and shows a median household income significantly higher than for the surrounding counties or state. Median household income for the RPC region is \$79,449, the highest of any region in the state and slightly higher than the county average of \$77,939. (Figure ED-8) Looking at individual communities within the region there is a wide and growing disparity of incomes. (Figure ED-9) The community with the highest household income, Newfields, (\$114,896), has more than double that of the lowest, Seabrook (\$56,031). The 200% difference between highest and lowest has been more or less constant since 1990, according to the decennial census income estimates.

Figure ED-8

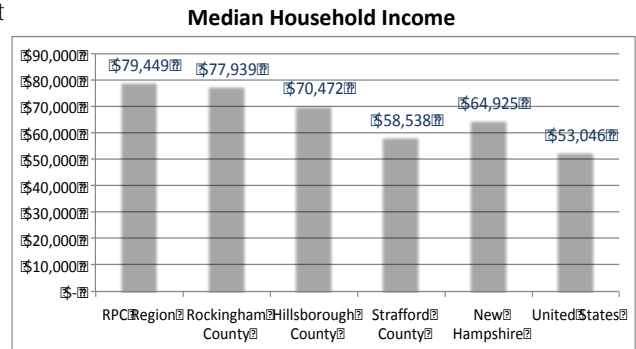
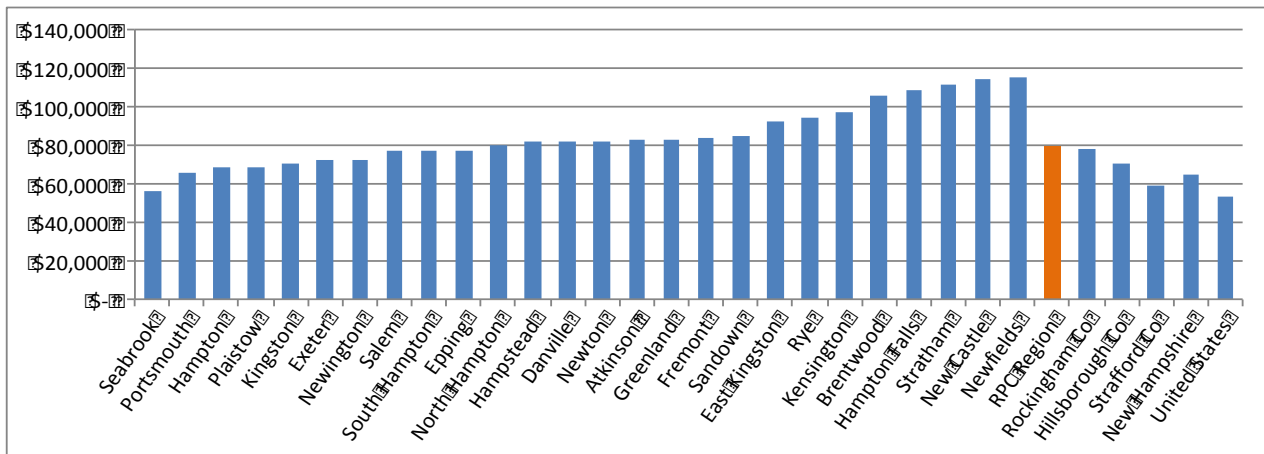


Figure ED-9

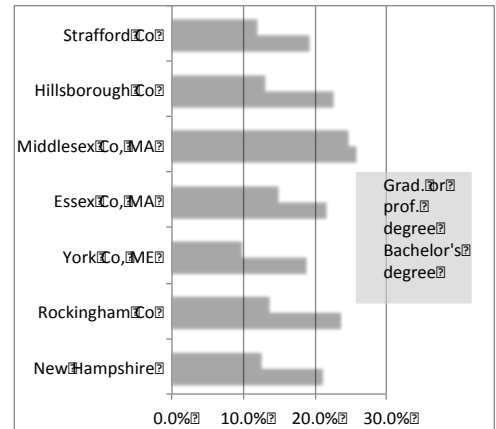
Median Household Income – RPC Communities



## Educational Attainment

Educational attainment, as an indicator of workforce quality, is an important predictor of economic development success for the region. A skilled labor force with high levels of education is an increasingly important differentiator in attracting new entrepreneurial companies to the region. An analysis in the 2014 REDC CEDS Update shows that over the past ten years, job growth among those with a bachelors degree or higher is twice that of the general workforce.<sup>3</sup> The previously cited NHCPPS report on key economic indicators for New Hampshire reported that, statewide, New Hampshire ranks high among the 50 states in the high school graduation rate (#4), and the percentage that have an Associate’s degree or better (#6) but not so well in two other measures: the rate at which those high school graduates go on to college (#24) and the level of student debt (#50). The ACS provides several commonly used metrics for education attainment at the county and town level including the level of traditional education that has been completed: grade school, high school, associate’s degree, bachelor’s degree and graduate or professional education. As shown in Figure ED-10, Rockingham County compares favorably with New Hampshire averages and other New Hampshire counties. However, Middlesex County Massachusetts to our immediate south has much higher rates of individuals with graduate and professional degrees and will compete favorability for businesses that rely of high education attainment, especially in the knowledge economy.

**Figure ED-10**  
**Educational Attainment**



## Economic Conditions and Trends

### Employment and Wages

The Southern tier of New Hampshire, especially Hillsborough and Rockingham Counties, account for the majority of jobs in the State. In 2012, together they accounted for 323,821 of 612,432 or 52% of employed persons in the state. The RPC region itself accounted for 102,855 persons employed. This is 16.8% of the total employment in the state that year, larger than its **14.6% share of the state’s population**. Statewide, the average ratio between jobs and people is 1:2 and the ratio between jobs and households is about 1:0.84 (Table ED-3). Those ratios hold for most of every other region except for the RPC area where the number of jobs per person and per household are noticeably higher. A likely explanation is that several of the key job centers, most notably Portsmouth/Newington/Pease, Salem, Seabrook and Plaistow are on the edge of the region and many of those employees are commuting into these centers from outside the region. These ratios have increased significantly since 1990 when they were more nearly in line with the state averages. In other words, since 1990, the RPC employment has grown faster than its population and its dependence on employment across the borders in Massachusetts has lessened. This has obvious implications both to future development of housing and an appropriately skilled workforce.

<sup>3</sup> CEDS 2014, Rockingham Economic Development Center of So. NH, page 60

Table ED-3

Employment and Wage Data - 2012

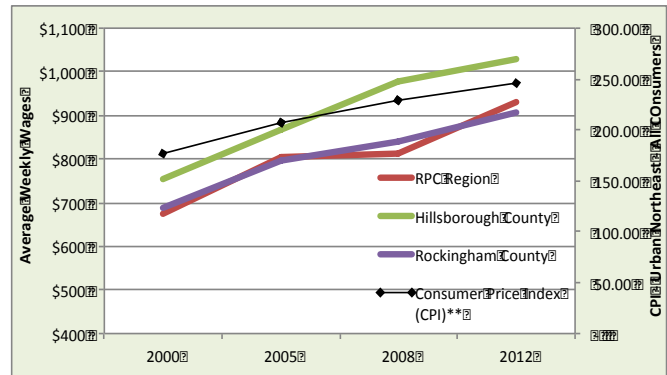
AREA	Population	Households	Business Estab.	Avg. Employment	Avg. Weekly Wages	Ratio: Employment to Population	Ratio: Employment to Households
RPC Region	79,210	72,329	7,187	1,02,855	\$29.68	0.57	1.42
REDCEDS Region	453,993	176,545	27,428	214,470	\$99.22	0.47	1.21
Hillsborough County	401,585	153,747	11,245	188,425	\$1,030.00	0.47	1.23
Rockingham County	296,594	115,552	9,828	135,396	\$707.00	0.46	1.17
New Hampshire	1,231,000	516,845	44,804	612,432	\$928.00	0.50	1.18

Source: REDCEDS, 2014; NH Dept. of Employment Security, Labor Market Information Bureau

Surprisingly, given the strong employment, educational attainment and comparatively high income, reported average weekly wages in the region are nearly the same as the state average – \$930 vs. \$928 in 2012. This may be explained by the fact that seasonal, tourism and retail-related jobs are more prevalent in the RPC region than in Hillsborough County, where wage rates are significantly higher (Figure ED-11). In addition while Hillsborough wages have just kept pace with inflation, growing 37% since 2000, compared with the regional CPI of 38% wages in Rockingham County have grown less, showing only a 31% gain in that period. Wages within the RPC region fared better, matching those of Hillsborough County. The state as a whole exactly matched the CPI at 38%. Level to slightly negative real wage growth has been a characteristic of the wage stagnation that most of the country experienced in this period.

Figure ED-11

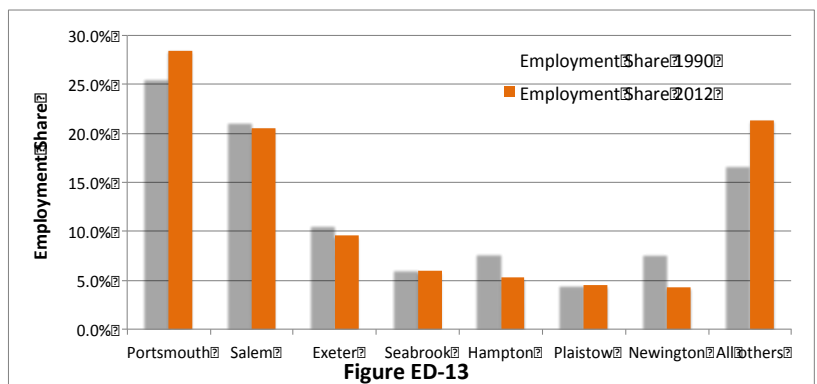
Wages and CPI



The region’s employment base has grown faster than its population over the last two decades, in part due to the development of Pease International Tradeport as a major employment center, and very slow growth in new housing development. However, the latest employment projections from the Economic and Labor Market Information Bureau (ELMI) of the NH Department of Employment Security indicates that the region’s share of state employment in the next ten years will remain about the same as it is today. This is supported by the fact that the Pease Tradeport is approaching buildout, at least under its existing land use plan.

Figure ED-12

Regional Employment Share – Top Cities and Towns



Net Growth in Jobs from 1990-2012 – Top Cities and Towns

Employment in the region is relatively concentrated in a half dozen communities which together account for nearly 80% of all jobs. (Figure ED-12) As expected, Portsmouth and Salem are by far the largest of the region’s job centers,



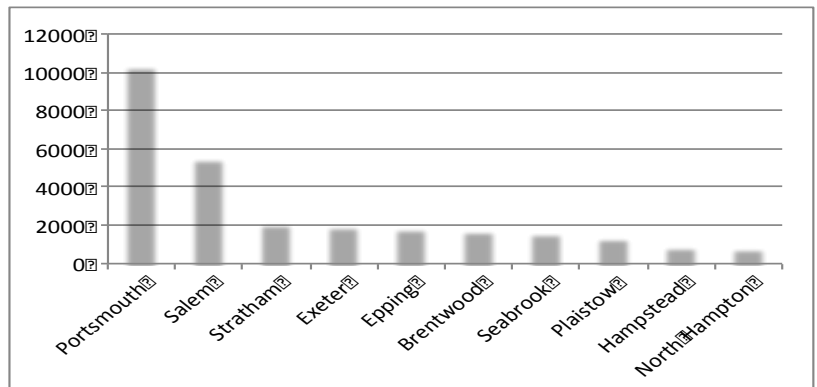
accounting for 50% of total employment. The next largest are Exeter, Seabrook, Hampton, Plaistow and Newington. The remaining 21% of the **region's jobs are shared in small amounts among the remaining 19 communities.**

Two trends regarding the distribution of employment around the region are evident from changes that have occurred since 1990. First, Portsmouth has grown significantly in its share from about 25% in 1990 to about 29% in 2012. Second, every other **community has lost share to the "All Other" set of smaller communities,** which grow from 17% to 22% of the total. As shown in Figure ED-13, absolute employment growth from 1990 to 2012 was dominated by Portsmouth and the development at Pease, with the addition of over 10,000 jobs, more that 35% of the net 28,700 jobs added in the region in that period. Salem was next largest, with about 5500 jobs added, or 19% of the total.

### Unemployment Rates and Trends

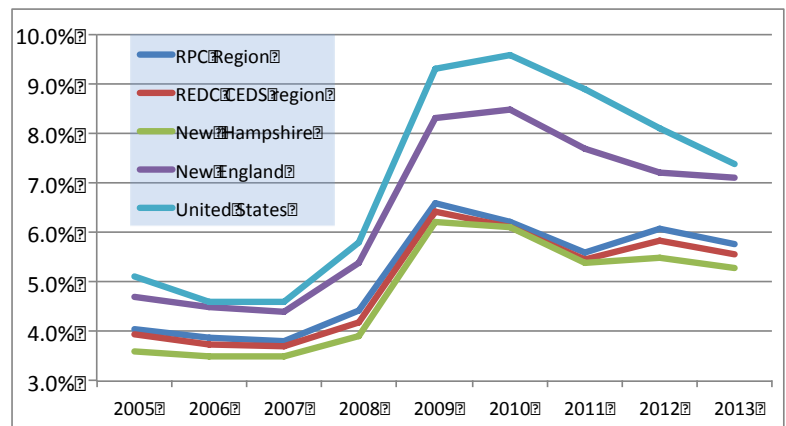
Historically, unemployment rates in the region have been well below both national and New England averages, on par with Rockingham County, but somewhat above the state as a whole. In the several years leading up to the Great Recession, New Hampshire experienced historically low levels of unemployment, dipping below 3% in 2000, considerably lower than the 4-5% rate that most economists consider 'full employment'. Since the recession ended in 2010 the unemployment rates have been slow to recover – uncharacteristic of New Hampshire's employment response to recent recessions. As depicted in Figure ED-14, **the region's rates** generally follow broader national employment trends but like New Hampshire as a whole are nearly always well below both the national number and average of New England states as well. **In the Great recession, the region's unemployment rate peaked in 2009 at about 6.7% and fell to 5.5% at the end of 2013.**

While the region has historically done well in maintaining low unemployment rates, there are persistent pockets of higher unemployment, especially among the border communities with Massachusetts that have a high percentage of a retail employment. These pockets include Seabrook, Plaistow and Salem where employment rates are historically and consistently higher than the regional average by 1.5 to 3 percentage points. (Map ED-2)



**Figure ED-14**  
**Unemployment Rate Comparisons**

Sources: US Bureau of Labor Statistics (BLS); NH Dept. of Employment Security





importantly, it is growing faster than the population which averaged only 0.7% over the same 8 year period (Figure ED-15).

This is a favorable development considering what is known about the age demographic of the region over the next 20 years. The concern described earlier in this section about a shrinking labor pool caused by the aging workforce may be partially mitigated by this differential positive growth in the labor force.

### Occupation and Industry Clusters

An important consideration for economic development strategy across the country in recent years has been the identification of concentrations of certain industry **types or “clusters.”** It is known that many businesses tend to locate near where others in the same industry in order to take advantage of conditions like a trained workforce and supporting businesses that locate with them. Industry clusters may initially develop informally, but often grow because they receive some type of benefit from the cluster. For example, by locating in such clusters, businesses gain efficiencies and locational advantages by making use of related suppliers, infrastructure and workforce.

Economic development regions can use this knowledge to develop polices that support these industry types and make their regions attractive to other businesses of the same industry. For example if specific labor force skills or transportation infrastructure or land uses or secondary support businesses are needed by the industry cluster, efforts can be made to help ensure that these conditions are supported. The REDC CEDS plan has, for many years, contained an analysis of the industry clusters in Rockingham County to help identify strategies that can help support success in these groups of businesses.

An industry cluster analysis identifies industries that are geographically concentrated and that are connected by the flow of goods and services. This is measured primarily by what is known as a **“Cluster Location Quotient”** which measures industry concentration by comparing the employment shares in the region compared to shares in the same industry in a broader area – in this case the entire US. An LQ of greater than 1.00 means that the industry group has a relative concentration higher than average, and we are a net exporter of goods and services in that industry.

Table ED-5 shows a compilation of the Industry Cluster results from the 2013 and 2014 CEDS. It shows LQ values not only for employment but for the number of establishments and total wages. The main analysis is for 2010 data, but changes as of 2012 are shown as well. The top industry clusters, ranked by 2012 employment LQ are as shown to the right:

Notably absent from this list is the tourism industry (arts, entertainment, recreation, visitor industries) which is **sometimes described as one of the region’s key** industries. This may be explained, however by the fact that the cluster analysis is for all of Rockingham County. Considering the RPC region which likely show greater concentration given tourism employment in seacoast communities.

**Comparing changes in LQ values over time shows that some of the county’s clusters are increasing in their importance and some are decreasing.** Growing clusters include Advanced Manufacturing, Glass and Ceramics, Fabricated Metal Manufacturing, Primary Metal Manufacturing and Chemical Products. Declining clusters include Defense and Security, Education and Knowledge Creation and Computer & Electronic Product Manufacturing. The decline in the Education section is likely specific to the contraction in local government spending following the end of ARRA stimulus funding which helped prevent layoffs earlier in the recession. Clusters with significantly declining location quotients were all in manufacturing industries including electronics, electrical equipment and computer products manufacturing.

**Figure ED-15**

**Population vs. Labor Force Growth 2005-2013**



Figure ED-16

Project Job Growth by Industry 2010-2020 – RPC Region

Top Industry Clusters in Rockingham County	LQ Index
Glass & Ceramics	2.44
Computer & Electronic Product Mfg	1.94
Electrical Equipment, Appliance & Component Manufacturing	1.62
Chemicals & Chemical Based Products	1.58
Advanced Materials	1.44
Information Technology & Telecomm.	1.43
Fabricated Metal Product Mfg	1.42
Machinery Mfg	1.4

Table ED-5

Industry Clusters in Rockingham County 2010 & 2012

INDUSTRY	2010							2012		
	Cluster Establishments	Cluster Establishments (Q)	Industry Wages (\$M)	Cluster Annual Wages (Q)	Cluster Employment	Cluster Employment (Q)	Average Industry Cluster LQ	Cluster Employment (Q)	Empl. Growth 2010-2012	Empl. Change 2010-2012
Total All Industries	10542	1	\$ 7,912	1	131904	1	1.00	1	1.5%	0.0%
<b>Advanced Materials</b>	<b>273</b>	<b>1.63</b>	<b>\$ 4,03</b>	<b>1.24</b>	<b>6153</b>	<b>1.27</b>	<b>1.38</b>	<b>1.44</b>	<b>8.4%</b>	<b>13.4%</b>
Agribusiness, Food Proc. & Technology	65	0.4	\$ 77	0.68	1595	0.51	0.53	0.41	3.2%	-19.6%
Apparel & Textiles	74	0.81	\$ 6	0.89	698	0.71	0.80	0.96	4.1%	35.2%
Arts, Entertainment, Recreation & Visitor Ind.	351	1.14	\$ 26	0.72	5111	0.98	0.95	0.98	3.1%	0.0%
Biomedical/Biotechnical (Life Sciences)	308	0.82	\$ 588	0.89	12139	0.84	0.85	0.86	4.5%	2.4%
Business & Financial Services	1680	1.01	\$ 98	0.87	10928	0.94	0.94	0.96	2.7%	2.1%
<b>Chemicals &amp; Chemical Based Products</b>	<b>82</b>	<b>1.03</b>	<b>\$ 74</b>	<b>1.4</b>	<b>2911</b>	<b>1.42</b>	<b>1.28</b>	<b>1.58</b>	<b>5.0%</b>	<b>11.3%</b>
Defense & Security	443	1.15	\$ 296	0.62	4465	0.62	0.80	0.6	-4.4%	-3.2%
Education & Knowledge Creation	173	1.2	\$ 76	0.33	1846	0.36	0.63	0.31	-58.8%	-13.9%
Energy (Fossil & Renewable)	534	1.14	\$ 405	0.99	5711	0.98	1.04	0.9	2.5%	-8.2%
Forest & Wood Products	76	0.94	\$ 3	0.69	939	0.66	0.76	0.64	-1.8%	-3.0%
<b>Glass &amp; Ceramics</b>	<b>17</b>	<b>1.37</b>	<b>\$ 28</b>	<b>2.33</b>	<b>612</b>	<b>2.32</b>	<b>2.01</b>	<b>2.44</b>	<b>-1.2%</b>	<b>5.2%</b>
<b>Information Technology &amp; Telecomm.</b>	<b>568</b>	<b>1.42</b>	<b>\$ 610</b>	<b>1.39</b>	<b>7554</b>	<b>1.49</b>	<b>1.43</b>	<b>1.43</b>	<b>3.6%</b>	<b>-4.0%</b>
Transportation & Logistics	233	0.93	\$ 39	0.78	2968	0.76	0.82	0.73	1.1%	-3.9%
Manufacturing Supercluster	239	1.52	\$ 98	1.42	6915	1.24	1.39	1.2	-1.9%	-3.2%
Primary Metal Mfg	6	0.88	\$ 7	0.79	338	0.91	0.86	1.33	-14.1%	46.2%
<b>Fabricated Metal Product Mfg</b>	<b>105</b>	<b>1.54</b>	<b>\$ 92</b>	<b>1.55</b>	<b>1662</b>	<b>1.3</b>	<b>1.46</b>	<b>1.42</b>	<b>20.2%</b>	<b>9.2%</b>
<b>Machinery Mfg</b>	<b>31</b>	<b>0.9</b>	<b>\$ 49</b>	<b>2.52</b>	<b>1640</b>	<b>1.6</b>	<b>1.67</b>	<b>1.4</b>	<b>-4.3%</b>	<b>-12.5%</b>
<b>Computer &amp; Electronic Product Mfg</b>	<b>72</b>	<b>3.27</b>	<b>\$ 95</b>	<b>1.93</b>	<b>2539</b>	<b>2.24</b>	<b>2.48</b>	<b>1.94</b>	<b>-14.0%</b>	<b>-13.4%</b>
<b>Electrical Equip. &amp; Appliance &amp; Compnt. Mfg</b>	<b>16</b>	<b>1.86</b>	<b>\$ 10</b>	<b>2.11</b>	<b>665</b>	<b>1.81</b>	<b>1.93</b>	<b>1.62</b>	<b>-4.1%</b>	<b>-10.5%</b>
Transportation Equipment Mfg	9	0.53	\$ 4	0.05	71	0.05	0.21	0.08	44.6%	60.0%
Mining	21	1.51	\$ 8	0.71	148	0.8	1.01	0.78	1.2	-2.5%
Printing & Publishing	220	0.99	\$ 82	0.66	1490	0.69	0.78	0.67	1.7%	-2.9%

Source: US Commerce Department's Economic Development Administration, Innovation in American Regions

Employment Forecasts

The Economic and Labor Market Information Bureau of New Hampshire Employment Security has recently completed New Hampshire industrial and occupational employment projections for 2012 – 2022. Over the ten-



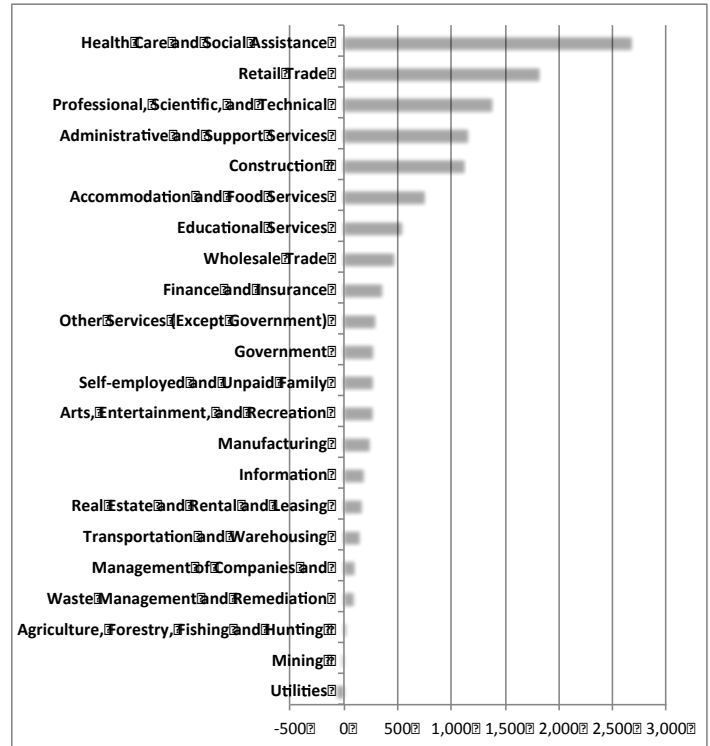
year period, employment in the state is expected to grow by 10.3 percent, an average of just under one percent per year. The 2012 estimated employment of 668,268 is projected to grow to 736,999 by 2022 statewide. These projections follow a long standing condition where service providing industries dominate New Hampshire's employment accounting for 80% of all jobs, while 13% are in goods producing industries and the remainder equally divided between government and self employment. Positive growth is expected for all the broad industry sectors both goods producing and service producing.

ELMI also produces employment project by regional planning commission. The most recent available cover, the period 2010-2020. While these are two years older than the current statewide numbers, the overall growth projection of about 10% employment growth over 10 years remains the same. Jobs in the RPC are expected to grow from 112,612 in 2010 to 124,819 in 2020, a net increase of 12,207 jobs or 10.8% - just slightly faster than the overall rate for the state of 10.4%.

Figure ED-16 shows the result by major industry sector in order of highest to lowest job growth. Trends from the recent past are forecast to continue with the most rapid growth, by far occurring in the health care sector, followed by strong growth in retail trade, professional and technical, administrative support and construction.

Whether longer term projections, to 2030 or 2040 continue to show positive employment growth will depend on whether the region is successful in attracting the necessary workforce to move to, or commute into, the region. As discussed earlier, based on existing age demographics and the continuation of average migration rates that occurred from 2000-2010, the OEP/RPC population projection suggest that the labor force within the region will peak at about 95,000 workers in 2020 decline by about 5000 workers by 2040. (Figure ED-17) There are factors that may mitigate this outcome which are discussed in the key issues section below, and are also the subject of one of the employment scenarios in the Land Use Chapter.

**Figure ED-17**  
**Projected Labor Force 2010-2020 – RPC Region**

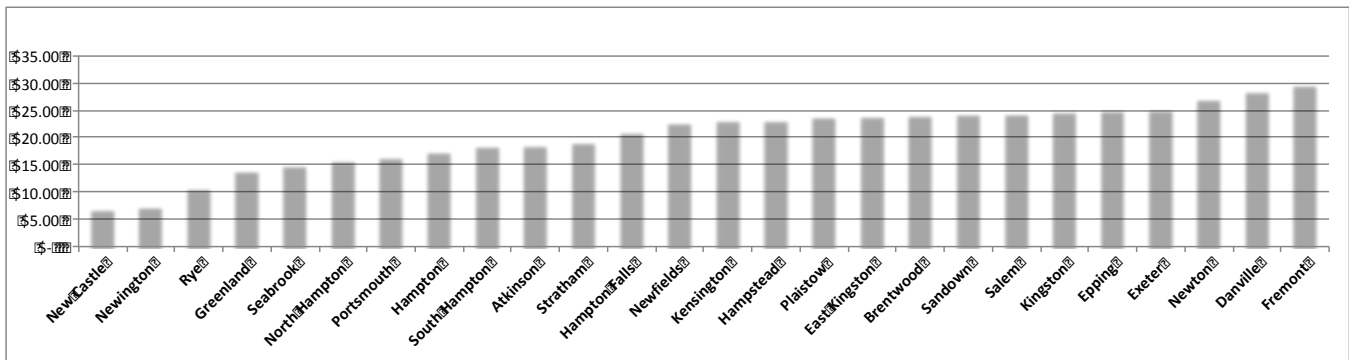
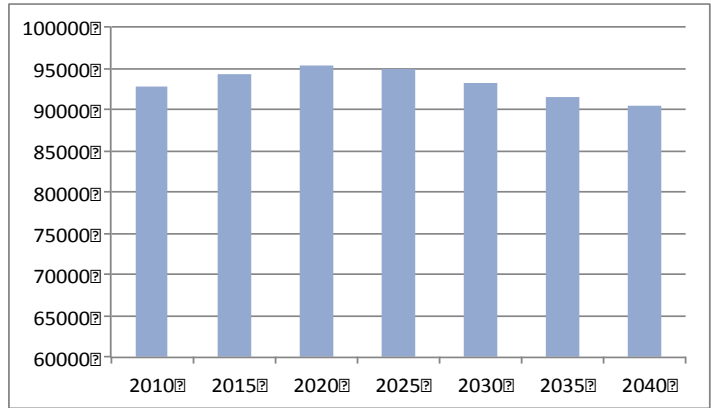


Property Valuation and Taxes

Many communities in the region are driven to focus on economic development as a means to expand their non-residential tax base and thus to mitigate the dependence on the residential tax base to fund the local schools and government. The existing tax rates in the region in 2012 averaged \$21.00 per thousand but varied considerably, ranging from just under \$30.00 to under \$7.00 per thousand in equalized valuation. (Figure ED-18)

While a high non-residential valuation is effective in some communities, the relationship between high non-residential valuation and low tax rate does not always hold true. There are a number of communities such as Salem, Exeter, Epping and Plaistow that have both a high non residential valuation but also are on the higher end of the tax rate scale. There are other factors that significantly interact with this relationship, such as whether the community supports sewer and water infrastructure, whether those cost are included in the tax rate, whether the non residential development requires a high degree of services (such as with retail development) or whether it is largely due to one or a few very high value properties, such as a power station or major manufacturer. Maps ED-4 and ED-5 illustrate the lack of correlation between equalized value and tax rates. A much stronger correlation is found, as expected, between high valuation per capita and low tax rate as seen in Figure ED-19 which graphs the ordinal regional rank of low-to-high tax rates with high-to-low ranks of per capita valuation.

**Figure ED-18**  
**Equalized Tax Rate - 2012**



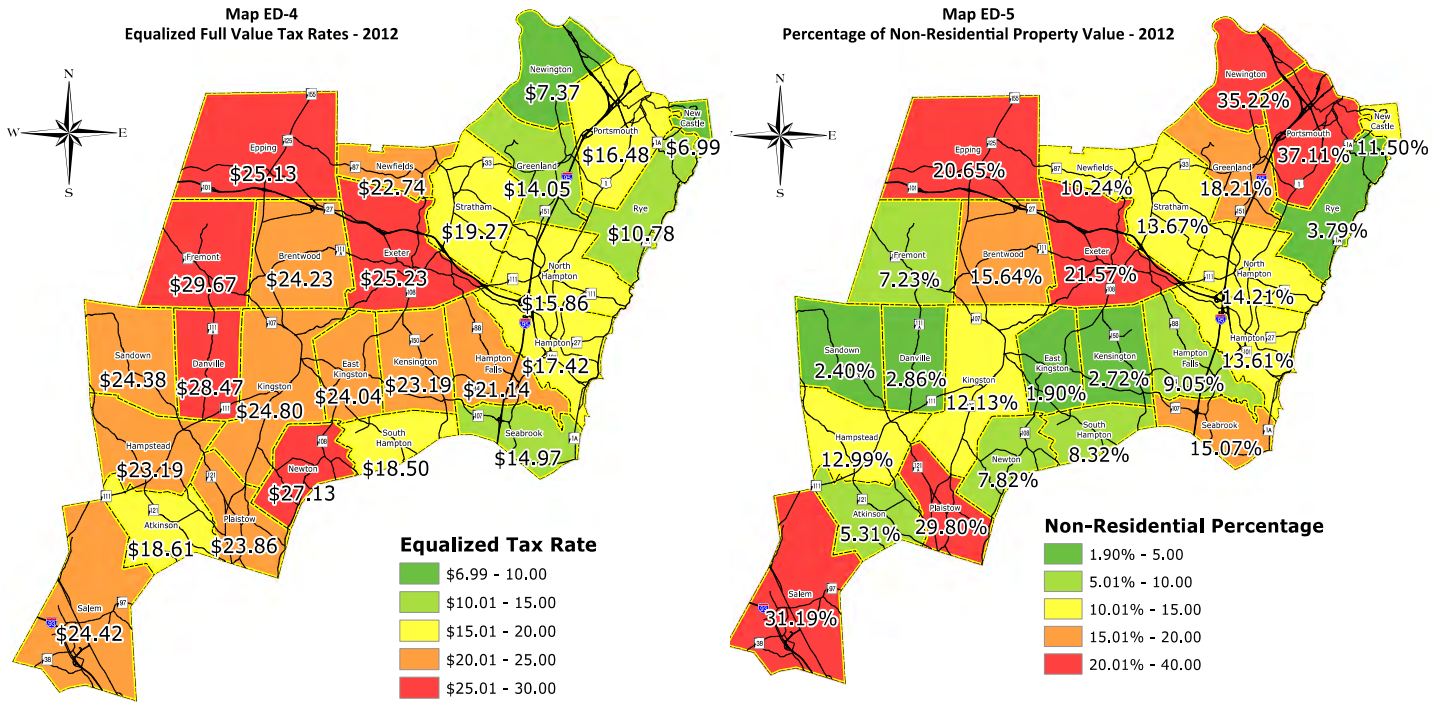
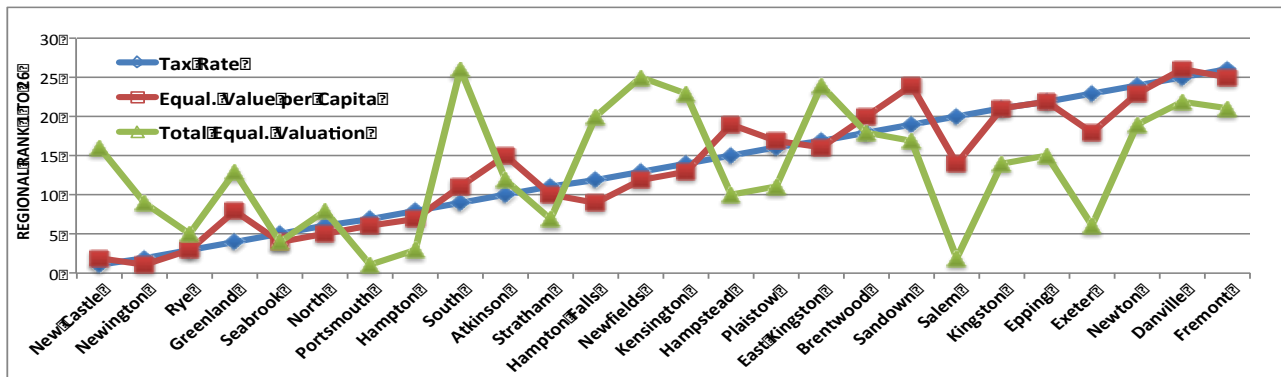


Figure ED-19



### Broadband Access, Capacity & Planning

Residents, visitors, municipalities and businesses, educational institutions and cultural organizations, and the health care industry in the RPC region all consider broadband to be critical infrastructure. Reliable, high speed internet service is an essential tool for accomplishing tasks that make positive contributions to our regional economic health and social welfare. In a short period of time, access to broadband has changed the ways in

which we manage both home and work. Today, no region can expect to have a healthy, competitive economy without it.

In 2010, the New Hampshire Broadband Mapping and Planning Program (NHBMP) was initiated with funding through the National Telecommunications and Information Administration (NTIA) as part of a national effort to expand broadband access and adoption. The goals of the NHBMP were to develop base line information of current access, capacity and use of broadband in New Hampshire, to better understand its importance to economic development, and what steps can be taken to ensure that it is widely (universally) available and has sufficient capacity to meeting the needs of the future. The NHBMP is a collaborative effort between the NH Office of Energy and Planning (OEP), NH Department of Resources and Economic Development (DRED), UNH Cooperative Extension (UNHCE), UNH Information Technology (UNHIT), and the state's nine regional planning commissions (RPCs) and is managed by the GRANIT System within the Earth Systems Research Center at the University of New Hampshire (UNH).



The NHBMP is comprised of several components, including a broadband service inventory and mapping and the development of broadband plans in each regional planning commission area. The following paragraphs summarize the current conditions information presented in the RPC Regional Broadband Plan. The issues and recommendations identified in the Plan are presented in their respective sections of this chapter.



#### Statewide Broadband Access

According to the NH Division of Economic Development and the National Telecommunications Information Administration (NTIA) national assessment, adoption of broadband has increased significantly in the past several years. In 2010, New Hampshire had a 73% broadband penetration rate (2nd in the Nation). In March 2013, broadband penetration rate had risen to 88% and was subsequently estimated to be 96% in September 2013. It should be noted, However these figures almost certainly overestimate the actual level of access to broadband services at individual addresses. Based on the mapping protocol, the smallest unit at which access was determined was the census block level, such that if any household with a block has broadband access, availability is assumed for all units in the block.

The National Telecommunications Information Administration (NTIA) also provided ARRA funds in New Hampshire to implement the Broadband Technology Opportunities Program (BTOP), which created a network of **publically controlled "middle mile" fiber** that provides long term broadband capacity between the major trunk fiber line and local distribution. The fiber will remain non-proprietary and accessible to a variety of public and private users. This was completed on December 31, 2013. (Map ED-5)

#### Regional Broadband Access

In the RPC region, most sectors of the economy perceive broadband service to be adequate. However, lack of competition is seen as preventing consumer choice and creating high costs for service. Lack of information on the location and type of broadband service available is an obstacle to planning for service improvements.

As part of the BMPP the RPC inventoried and mapped broadband access Community Anchor Institutions (CAIs) and utilized map information prepared by UNH to depict general areas of broadband access, speed and provider competition. The maps and information included in this section represent data received on broadband availability **through UNH's direct work with over 40 of the state's 63 identified broadband service providers and through an inventory 4,067 community anchor institutions (CAIs) across the state.**

It should be noted that NTIA defines broadband as providing a minimum speed of 768 Kbps download and 200 Kbps upload. The NHBMP has chosen to consider areas with available broadband download speeds less than 768 Kbps as 'un-served' and areas with download speeds of less than 3 Mbps as 'underserved.' A selection of the resulting maps are shown on the following page and described as follows:



In 2010. This initiative is part of a national effort, led by the National Telecommunications Information Administration (NTIA), to create and maintain a searchable, public database of information on broadband availability in the United States. It is also the first comprehensive effort to understand where broadband is currently available in New Hampshire. Broadband is defined in terms of how fast data can be downloaded and uploaded from the Internet. That capacity can be described in terms of how much data, measured in bits (8 bits to 1 Byte), can be transmitted per second, and is reported in kilobits (Kbps), megabits (Mbps), and gigabits (Gbps). NTIA defines broadband as providing a minimum speed of 768 Kbps download and 200 Kbps upload. The NHBMP has chosen to consider areas with available broadband download speeds less than 768 Kbps as 'un-served' and areas with download speeds of less than 3 Mbps as 'underserved.'

MAP ED-7 Broadband Availability at Community Anchor Institutions: This map illustrates the location and broadband access status of 496 CAIs in the Rockingham Planning Commission Region. Information regarding the internet speeds, cost of service, types of technology, service provider, and level of satisfaction with current service was collected from each of these CAIs through a comprehensive survey completed by RPCs in 2010. Since that time, this information has been verified and updated semiannually by UNH and RPC staff. See the Regional Broadband Plan for the full list of CAI and inventory results.

MAP ED-8 Broadband Availability: This map displays the status of available service for each census block within the RPCs planning region. The yellow and purple areas, these highlight census blocks with residences that have limited or no access to broadband. As noted earlier, the map almost certainly over-estimates the actual level of access to broadband services at individual addresses. Based on the mapping protocol, the smallest unit at which access was determined was the census block level, such that if any household with a block has broadband access, availability is assumed for all units in the block and the block will show that broadband is available even though that may not be true for all addresses within the block. The Census block is the smallest geography measured by the U.S. Census Bureau. These blocks are determined by population and can be greater than 2 square miles in size, especially in less densely populated areas.

MAP ED-9 Maximum Advertised Download Speed: This displays the maximum download speeds available to customers from any provider in each census block. The level of generalization described in Map 2 applies

Map ED-6  
BTOP "Middle Mile" Fiber Optic Network





here as well. The information made available to the NHBMPP does not differentiate between speeds provided for business/commercial service and residential broadband service.

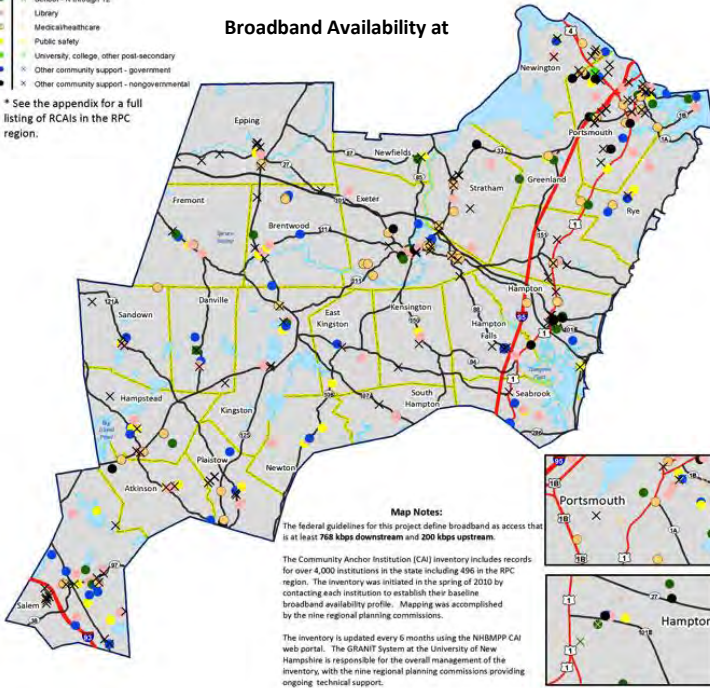
MAP ED-10 Competition for Broadband Availability: This depicts the number of broadband providers actively offering service within the Rockingham Planning Region. Providers represented on this map include fixed wireline (cable, fiber and DSL), wireless, and mobile internet service providers.



- CAI has Broadband Service
- School - K through 12
  - Library
  - Medical/healthcare
  - Public safety
  - University, college, other post-secondary
  - Other community support - government
  - Other community support - nongovernmental
- \* See the appendix for a full listing of RCAs in the RPC region.

MAP ED-7

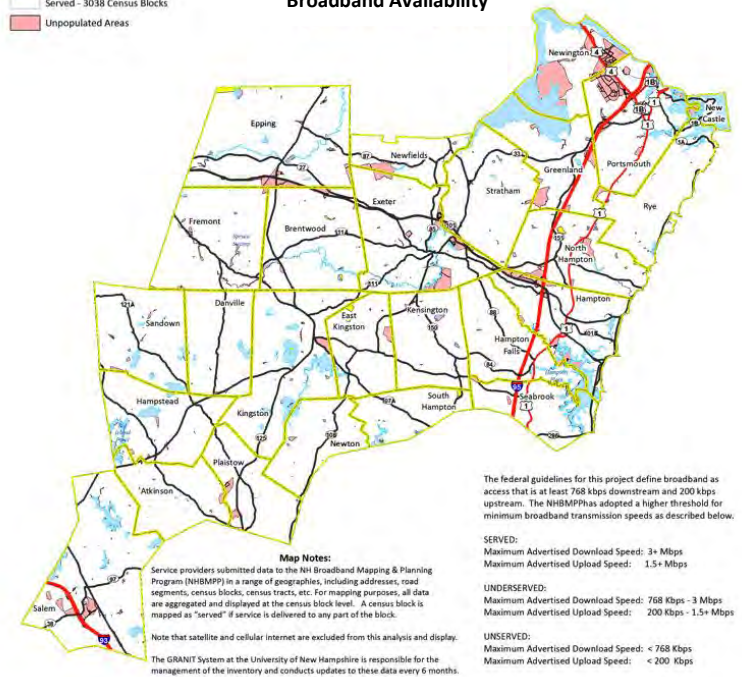
Broadband Availability at



- Underserved - 33 Census Blocks
- Served - 3038 Census Blocks
- Unpopulated Areas

MAP ED-8

Broadband Availability

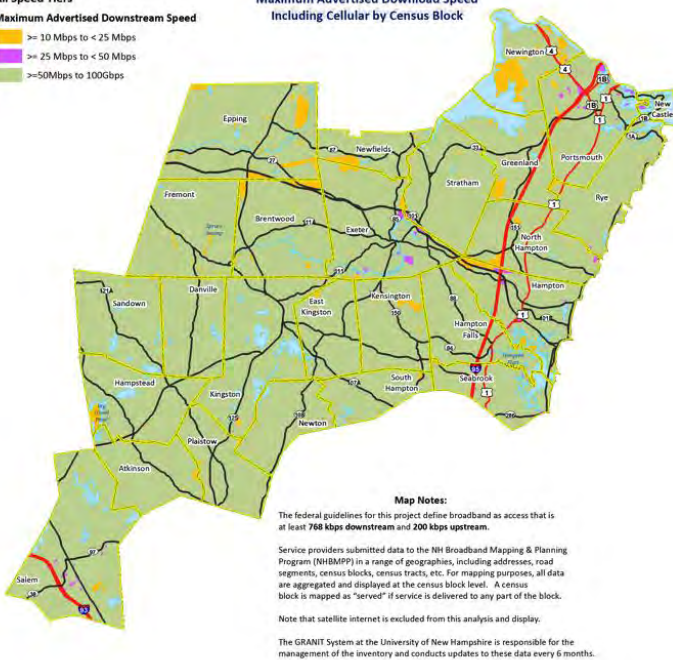


MAP ED-9

Maximum Advertised

- All Speed Tiers
- Maximum Advertised Downstream Speed
- ≥ 10 Mbps to < 25 Mbps
  - ≥ 25 Mbps to < 50 Mbps
  - ≥ 50 Mbps to 100 Gbps

Map 2  
Maximum Advertised Downstream Speed  
Including Cellular by Census Block



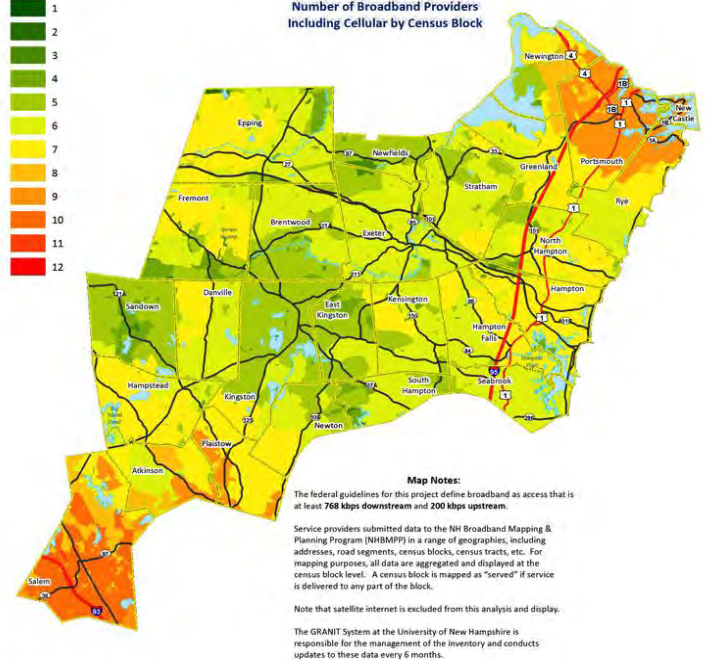
MAP ED-10

Service Provider Competition

Number of Providers

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12

Map 3  
Number of Broadband Providers  
Including Cellular by Census Block



### Statewide Access Survey

In 2012 the UNH Survey Center conducted survey of broadband technology uses and needs of small businesses in New Hampshire. Some of the key results include the following:

- 70% of respondents use the internet for advertising
- 64% said their internet speed is sufficient
- 50% accessed the internet via cable

The Survey Center also surveyed local governments and educational institutions in New Hampshire. Key survey findings for these groups include the following:

- 55% of local government respondents said they would like to learn more about e-governance, or conducting municipal business via the internet
- 51% of local government respondents would like training on making websites interactive
- 74% of educational institutions respondents stated that their biggest internet challenge was keeping up with technology
- 59% of educational institutions responding would like to learn how to effectively use technology for teaching

A survey of residential broadband access and use in New Hampshire was conducted by the UNH Survey Center in 2012. The findings indicated the following:

- 86% of respondents had access to the internet at home
- of those 86%, seventy three percent had broadband
- Respondents indicated that the biggest barrier to broadband use was keeping up with the technology
- 31% percent of respondents who did not have internet access at home said they did not because it was too expensive
- 94% of residents stated that their internet connection is adequate for their uses

### Regional Access Survey

During May-July 2013, the UNH Survey Center conducted surveys for several regions, including the nine regional planning commissions, as part of the Granite State Future project and the NH BMPP. Several regions, including the RPC, commissioned a region-specific survey. Key findings from the survey of RPC region residents included:

- 94% of residents surveyed have internet access at home
- 75% of residents have a cable internet connection
- 30% of residents pay \$50-99 per month for internet service
- 83% of residents pay for a bundled internet service, which includes, phone, cable and internet services
- 94% of residents state that their internet access is adequate for their uses
- 87% of residents would not be willing to pay for more faster internet speeds

Responses from residents of the RPC region were largely similar to those of statewide residents. The big difference involved what type of neighborhood residents live in, with more RPC residents living in a neighborhood close to the town center and less living in a rural location away from town.

The proprietary nature of broadband access and capacity information means that it is difficult to directly determine whether access and capacity of broadband is adequate. Based of survey result, however, it appears that most residents and business are satisfied with current levels of access, but are concern about cost and lack of competition. In summary the basic picture that emerges is that (1) the region has comparatively good access to broadband in most communities; (2) there are pockets in the most rural area of the region where broadband access is poor or non-existent except via satellite; (3) choice between providers is typically limited two companies and often just one thus limiting competition in the Broadband marketplace. Broadband speeds available in fiber and cable networks have continued to increase and appear to be keeping pace with increased demand and (4) the private and proprietary nature of broadband infrastructure information means that it is not possible to discern the condition and capacity of the system. At this point we must rely on the private providers **to ensure the system remains adequate to meet the region's needs** the future.

## Key Issues and Challenges

### Regional Strengths and Weaknesses in Economic Development (SWOT)

As described earlier, part of the process for gathering public input for this Plan involved three general visioning workshops, called “community conversations”, were held around the region in 2013 soliciting input about key concerns and issues on a variety of topics, including economic development. The discussion format followed the “SWOT” format: a brainstorming session that moved sequentially from discussion of the region’s strengths, weaknesses, opportunities and threats.

The key theme’s that arose from this discussion, which specifically relate to Economic Development are summarized in Figure ED-20. In general they are highly consistent with the goals and issues identified both in this document, in the CEDS, several recent NH Center for Policy Studies analyses and the BIA State Economic Development Strategy. The perceptions of key strengths and opportunities focused on a high quality of life, both the natural environment and cultural resources, quality schools, good transportation infrastructure, a highly educated and motivated workforce, and access to developable land. Weaknesses and threats centered on lack of infrastructure in parts of the region (sewer, water, natural gas, broadband internet access, transit) and in the maintenance and upgrading of existing infrastructure, the scarcity of workforce-affordable housing, high relative cost of energy, and the lack of intermunicipal cooperation in approaching regional scale problems and needs. The themes are further addressed in the issues and challenges described below.

Figure ED-20

#### “SWOT” Analysis Summary from Community Conversations

- Economic Development -

<p style="text-align: center;"><i>Strengths / Assets</i></p> <ul style="list-style-type: none"> <li>• Transportation infrastructure, esp. highway system and access to Amtrak passenger rail</li> <li>• Quality of life, both regarding the natural environmental and cultural and heritage assets</li> <li>• High quality schools</li> <li>• Well educated, motivated workforce</li> <li>• Good broadband access in most locations</li> <li>• Geography: access to metro Boston, ocean, mountains</li> </ul>	<p style="text-align: center;"><i>Weaknesses / Needs</i></p> <ul style="list-style-type: none"> <li>• Poor access to sewer and/or water and/or natural gas in many parts of the region</li> <li>• High local property taxes in many communities</li> <li>• High energy costs</li> <li>• Inadequate supply of workforce-affordable housing</li> <li>• Lack of intermunicipal cooperation to solve problems or share services</li> <li>• Lack of competition in broadband access: monopoly</li> </ul>
<p style="text-align: center;"><i>Opportunities / Resources</i></p> <ul style="list-style-type: none"> <li>• Developing as specialized manufacturing center</li> <li>• Growing, vibrant local agriculture, crafts movement, heritage tourism</li> <li>• Available undeveloped and redevelopable (e.g. Brownfields) land, incl. Pease</li> <li>• Deep water port</li> <li>• Recreational trails and open space networks</li> <li>• Attractive to mobile workforce incl. creative economy and entrepreneurs</li> </ul>	<p style="text-align: center;"><i>Threats / Barriers</i></p> <ul style="list-style-type: none"> <li>• Backlog of infrastructure investment needs (sewer, water, stormwater, roads/bridges)</li> <li>• Cost of servicing aging population (e.g. aging-in place support, transit)</li> <li>• Declining workforce, caused by demographics, high cost of living, limited workforce housing supply</li> <li>• Cost of managing climate change</li> <li>• Public intolerance for project impacts, i.e. “NIMBY-ism”</li> </ul>



## Demographic Headwinds

As presented in the Existing Conditions section of this chapter, our aging population presents several challenges to the regional economy. We have a small age cohort of people aged 15-34 and a very large cohort of those aged 45-64 and a labor force participation rate statewide that has fallen gradually for the past two decades. Over the next 20 years this will mean, unless mitigated by other factors, a smaller workforce available to businesses and low-to-no net population growth in the region. Second, the size of the aging population will add to healthcare and home care costs incurred by individuals, businesses and communities. The region lacks a well developed home health and community transportation systems that will enable a larger population of seniors to age place. Both factors will act as a drag on the regional economy.

There are mitigating factors and developments that may lessen these impacts. For example, higher levels of daily in-migration through increased commuting could occur which would supplement the available workforce. The labor force participation rate among older residents could (and likely will) increase for both part time and full time jobs to supplement retirement income. The **region may 'buck the trend'** of flat population growth by attracting more in-migration than in the recent past. All of these possible outcomes would effectively expand the available labor force and result in more economic activity. The implications of some of these outcomes are explored in the Scenario Planning section of the Land Use chapter of this Plan.

This challenge is not unique to this region and in fact is common to the state as a whole and most of New England. These and other factors causing collective economic "headwinds" are well described in The NH Center for Public Policy Research study "From Tailwinds to Headwinds"<sup>4</sup> published in 2012. The basic points made in that report are that the circumstances causing our past economic success in southern New Hampshire have changed, that future economic growth is no longer a 'given' and that a more deliberate effort to counter the trends will be necessary if we are to continue to have sustainable economic growth in the future.

## Infrastructure Investment

Economic development depends on the availability and adequacy of infrastructure to support that development. Development in many communities in the region is and will continue to be limited because they lack the type of

from "**Tailwind to Headwind: New Hampshire's Shifting Economic Trends**" – Sept. 2012

"Here, as elsewhere in the country, the Great Recession has disrupted much of the state economy. But it is a mistake to assume that the recession is the sole reason for the recent slowdown in New Hampshire's economic engine, or that, once the impacts of the recession are behind us, New Hampshire will return to the pattern of steady, reliable growth of years past.

A more expansive analysis of the state's economic and demographic trends – with a time frame of decades, not months or years – shows that the forces that helped create New Hampshire's advantage have largely run their course. As a result, the model that defined the state's economy since the 1980s – consistent population growth, increased productivity, and a more resilient economy than our competitors – no longer holds. After benefiting from nearly three decades of economic tailwinds, New Hampshire now faces a strong headwind: net out-migration, an aging population and decreased labor productivity.

The outcomes of these changes may not necessarily all be negative. Slower population growth will likely mean less congestion and less pressure on natural resources. And some of the core advantages upon which New Hampshire's economy is founded – proximity to Boston and a beautiful natural environment, for example – are not disappearing any time soon. But, at the least, the shift outlined in this paper demands a recalibration of the assumptions upon which much state and local policy is based. In short, we can no longer assume that New Hampshire will continue along the economic trajectory it has for many years.

There is no single, simple response to this new set of circumstances; policymakers will have to weigh various options. These include investing in human capital (an area where we rank relatively high when you consider educational attainment), redesigning the state's tax structure (where New Hampshire enjoys one of the lowest per-capita tax collection rates in the country but maintains high corporate taxes), or investing in improved infrastructure and transportation (an area in which the state ranks relatively poorly).

<sup>4</sup> "From Tailwind to Headwind: New Hampshire's Shifting Economic Trends", NH Center for Public Policy Research, September 2012

infrastructure, including sewer, water, natural gas, broadband and rail access that is a prerequisite for certain business and industry. Communities that do have infrastructure face high cost of maintaining and upgrading that infrastructure. Deferred investment, especially in sewer, water and transportation infrastructure is shifting these capital costs to the future and adding a cost burden on the economy going forward, either through loss of services from failed infrastructure or from higher fees and taxes required to restore it.

Higher wastewater discharge standards are required in new EPA NPDES permits because of the Great Bay and other water body impairments. It has been estimated that the cost of upgrading or replacing the eight wastewater treatment plants in the Great Bay and coastal watersheds may be as much as \$500 million, all occurring over the next 10 years. Drinking water treatment facilities and distribution systems also face increase treatment and regulatory standards have investment backlogs as well. The SB60 infrastructure

Investment Study Commission found multiple drivers for increasing water infrastructure costs:

- Water systems: Enhanced Surface Water Treatment Rule, Disinfection Byproducts Rule, Lead & Copper Rules, etc.
- Wastewater: Dechlorination, Nitrogen & Phosphorus reduction, and other NPDES permit requirements
- Dams: Safety and climate change (extreme precipitation events)
- Storm Water: Clean Water Act MS4 requirements

The SB-60 Commission estimated the following costs for the backlog of water related infrastructure investment

Infrastructure Type	10 Year Need
Wastewater – 98 municipal wastewater systems	\$1,710,000,000
Stormwater – In every community, MS4 permits in more urban areas	\$272,000,000
Drinking Water – 700 community systems	\$857,000,000
Dams – State Owned (278)	\$18,000,000
Dams- Municipal (358)	\$40,000,000
10 Year Total	\$2,897,000,000

statewide over the next ten years:

No similar estimates are available for the RPC region itself, but five of the eight wastewater treatment plants requiring upgrades are within this region, and our communities with water systems, like Portsmouth and Exeter, have among the oldest infrastructure in the state. In part because of the water quality impairment of the Great Bay and requirement for treatment plant upgrades, communities in this region face a disproportionate share of these costs.

Transportation infrastructure is another area where delayed and deferred maintenance and upgrades have been the norm, creating similar deficits in capital investment. The Transportation Chapter of this Plan identifies long range project needs in the RPC region over the next 20 years to be \$305.3M while the State 10 Year Plan (2014) budgets \$31 million for these projects over a 10 year period. (Note: neither figure includes major projects currently underway including Newington-Dover, the Sarah Long Bridge, and the remaining segments of the I-93 expansion).

In the case of both water systems and roads, user fees pay for the cost of maintaining and upgrading most infrastructure. Federal and state highway trust fund dollars come from the federal and state gas taxes while

local road costs are borne by property taxes. Water and sewer systems are funded by a combination of rate payer fees and property taxes. Federal support for capital investments, both in grants and loans, especially for water and wastewater infrastructure has diminished over time. Rates and fees have not adjusted to account for the loss of capital grants funds, or for the need to build in replacement costs into the user rates. To date, as a generalization, all levels of government have been unwilling to increase fees and taxes to address these infrastructure investment gaps and there is no sign that this will change in the near future.

## Broadband Access and Capacity

The ongoing ability of the region to attract the most sought after industries and manufacturers will increasingly depend on near universal access to high speed internet connections, and the bandwidth and capacity to meet future demand of businesses, institutions and residents. Broadband access has become an important differentiator in determining the competitiveness of a region for economic development and is likely to become much more so in the future as the reliance on fast, high capacity broadband access increases for many businesses. The importance of access to good broadband services for home based businesses and workers, especially entrepreneurs and the creative class adds to its importance as basic infrastructure necessary for a competitive economy.

The RPC region enjoys a very high level of residential access as measured by the percent of population identified in the mapping component of this project (See Map ED-4). However, gaps do remain, especially in the least densely populated areas of rural communities. Although these gaps do not always appear in the broadband mapping because of the Census block limitations, we are aware that there are numerous residential addresses in the lowest density Census blocks in the region that do not have broadband service. Achieving conventional wire-line broadband access to all of these unserved locations through private sector carriers will continue to be a challenge due to low or negative return on investment of broadband deployment in low density areas. Other perceived barriers exist in the form of providing superior bandwidth rates to commercial users, regulatory issues, and a perceived lack of competition among broadband providers.

Over the course of the RPC Broadband Plan development in 2013, the RPC Broadband Stakeholder Group (BSG) discussed and identified barriers, opportunities and recommendations to deployment and to expanding access to broadband service in the region. These are presented below.

### Barriers

#### *Political/Regulatory Barriers*

- *Regulatory Concerns* - Internet providers do not fall under the purview of the Public Utilities Commission. Broadband providers do not want internet service to be considered a utility as they would face increased regulation under the PUC. While cable TV (video) access franchises are subject to negotiated agreements with individual municipalities, the broadband/internet component of the service is not and is therefore is not formally part of franchise service negotiations with municipalities between providers.
- *Deployment Difficulties* - Deployment of landline broadband is cost-prohibitive in low density areas. Securing pole attachment rights can be time consuming and costly and sometimes abetted by competitive conflicts may impede service expansion and choice. Legislative effort (such as HB 1391) aimed to eliminate barriers to deployment have been unsuccessful to date.
- *Cable Franchise Agreements* –Cable Franchise Agreements (CSAs) cover the use of public rights-of-way to deliver video services. Even when internet service is delivered by the same company over the same 'pipe,' **communities do not have the legal authority to include internet services** in the terms of the CFA. This is so because of the fractured regulatory environment of telecommunications. Telephone service is regulated by the PUC; broadband/internet service is regulated by the FCC, and cable/video service by local government (via the Cable Franchise Agreement).

#### *Economic Barriers*

- *Adequacy of Service for Commercial Applications* - While the RPC region has better coverage than many parts of New Hampshire, the Regional Economic Development Center (REDC) still receives complaints

from businesses stating that greater bandwidth and improved technology infrastructure are needed, or are needed at more competitive rates, in the region. Anecdotally, it is thought that some industrially-zoned properties go underutilized due to the distance of “last-mile” connections and the cost of obtaining high speed access. Further, the level of service required by technologically demanding businesses (including some of this region’s targeted cluster industries) in the foreseeable future could potentially outstrip the planned build-out of broadband services in the region.

- *Economic Constraints* – The capital investment required to provide broadband service in areas with low population densities may not be feasible because the return on investment is too low. Additionally, some providers appear to be focusing on expansion of wireless broadband services rather than wired infrastructure, indicating it may offer better returns on investment. This may also be seen as a positive since wireless towers typically utilize a fiber-optic connection and can provide increasingly high speed service to users where last-mile connections are cost-prohibitive. Alternative economic models (e.g. municipal or neighborhood association financing) to provide last mile connections exist but are in some cases discouraged by existing providers.

#### *Social Barriers*

- *Complacency* – As noted in the 2013 UNH survey of RPC region residents, a large majority of respondents in our region say they are adequately served by existing broadband service. Throughout the planning process; however, input from our most rural communities indicates have observed there is some lack of concern about broadband access. The perception is that, by and large, broadband access and speed are adequate, and, while lack of provider competition is a concern, the consequence of that in terms of cost of service is not yet perceived as a major problem.

#### *Technological Barriers*

- *Infrastructure Information* - In order to understand future network expansion, the large commercial broadband users need to understand the existing broadband infrastructure, and its ability to meet future needs. The BSG has expressed a desire to have better information relating to the location of broadband backbone infrastructure as well as existing and potential bottlenecks. This information is available from public providers (such as NH Now) but is considered proprietary by the private providers and unavailable to us or users.

The RPC BSG also discussed opportunities to improve broadband access and adoption. The group identified the following opportunities in the region:

#### Opportunities

- *Public/Private Partnerships*: A guidance document to help communities and neighborhoods understand the potential to partner with service providers to extend lines into underserved areas of the community. A revolving loan grant program may support such an initiative.
- *Service Expansion Grants*: Explore grant opportunities to extend service/capabilities in underserved neighborhood/communities.
- *Regional collaboration*: Bundle a larger numbers of users to leverage increased investment and responsiveness from existing service providers to enhance their offerings.
- *Publish Accurate Service Maps*: Accurate service maps may show providers the potential savings by displaying accurate service regions (less wasted advertising to areas with no infrastructure), provide customers with information on the extent (or lack of) service.
- *Community Master Plans*: Develop a broadband-specific chapter into local and regional master plans to help with understanding of zoning for broadband infrastructure and awareness of broadband as critical infrastructure for economic development and quality of life.



- *Legal reform:* Identify regulatory issues, such as pole attachment, and work to resolve those within communities where possible.
- *Local Technical Assistance:* Develop a regional white paper for communities in the region to help local decisions makers better understand how to foster broadband through franchise agreement and other means.
- *Broadband Technological Opportunities Program (BTOP):* Ensure there is availability to expand or ensure there is adequate coverage of business quality broadband infrastructure, including regional access to fiber capacity implemented through the NH BTOP.
- *Cable Franchise Agreements:* Even though broadband services cannot be incorporated in CFA per se, the fact that broadband signals are delivered over the same system means that terms negotiated about cable service coverage and access in the community achieved through the CFA will also benefit broadband coverage and access.

## Workforce Housing

A constrained housing supply and high relative housing cost is likely to make some businesses, especially ones relying on lower wage employees less able to attract the workers they need. It may, in turn, stifle their ability to expand and may cause them to be less competitive compared to regions where housing costs are lower.

**Ensuring the availability of workforce housing is one of the nine strategic goals of the BIA's Strategic Economic Plan for New Hampshire, and for many years has been included as one of the REDC's major goals for the CEDS.**

**New Hampshire's Workforce Housing Laws require that municipalities provide reasonable and realistic opportunities for the development of workforce housing under their zoning and land use regulations.** Workforce housing is defined in the statute as being affordable to households with moderate incomes. Specifically, workforce-affordable homes for purchase should not cost more than is affordable to a family of four with the **area's median** income (meaning an equal number of home in the region have higher and lower incomes). Workforce-affordable home for rent should cost no more that can be afforded by a 3 person household making 70% of the median household income for the region. The limited underlying concept or goal of the statute appears to be simply that a region should, more or less, allow for the housing needed by its workforce, and that individual communities should take on their share of that need.

As reported in the Existing Conditions section of the chapter, average housing purchase and rental costs in the RPC region are, by considerable margins, the most expensive in New Hampshire, yet average wage rates are **no higher than the state's**. The current median purchase price of \$295,000 (2014, RPC region existing homes, NHHFA) **is slightly less than the NHHFA' estimated maximum affordable price of \$309,500 for the region.**<sup>5</sup> We estimate that this price would be unaffordable to about 45% of the households in the region. Monthly rental cost of \$1,237 (2 bedroom, with utilities, NHHFA), almost exactly equal to the current NHHFA maximum affordable rent guideline. Likewise, this rent would be unaffordable to about 50% of renter households (with 60% median income). More problematic is that the gap in affordability appears to be growing again. From 2000 to 2012 the average increase in housing rental and purchase price was 36-38%, and the average wage increase was 31%. Average rental costs in the RPC region have increased 5% in the past two years and average purchase prices have increased 9.5% while average wages have risen less than 2%.

Is housing affordability a serious concern of businesses if they can still attract the workers they need? The answer is almost certainly that it depends on the business. Businesses that are able pay high wages to compete for a highly skilled and creative workforce (the kind of businesses we say we seek) probably have less concern about his issue. Businesses at the lower end of the wage scale; however, are more sensitive to the availability

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<sup>5</sup> Based on the average maximum affordable price calculated by NHHFA for the four HUD Fair Market Rent Area which included in the RPC region

of workers. Yet they are vital to a thriving regional economy, which requires a diverse workforce with diverse wage demands. For those businesses, the lack of affordable housing within a reasonable commuting distance will make it more difficult to recruit workers and most costly to retain them. From a regional perspective it is **in the general interest to ensure that a diverse housing supply exists to match to needs of the region's economy.**

## Workforce Development

Targeted, industry-specific workforce training and skill set development is increasingly recognized both in New Hampshire and elsewhere as a critical economic development strategy. Equally important is recruiting and retaining a well educated talented, creative workforce. Such efforts are well aligned with an overall strategy to identify and support the needs of the key industry clusters that either exist or are developing in the region. Many of those industry clusters (Table ED-4) including Advanced Materials, Fabricated Materials Manufacturing, Machine Manufacturing and others require a highly skilled specialized workforce training.

This is an important area of growing collaboration between the public and private sectors. Regionally, the most important example is the development of advanced materials and manufacturing curriculum and private sector partnership at the Great Bay Community College (GBCC). GBCC was the lead applicant in 2011 on a \$19.9 million grant from the US Department of Labor to develop comprehensive training programs within the Community College System of New Hampshire **specifically to support the State's emerging advanced manufacturing industries.** Known as Advanced Manufacturing Partnerships in Education (AMPed) the program will provide training and skill development to over 8,000 students across the Community College System. In Rockingham and Strafford counties industry partners include Saffron (aerospace advanced manufacturing) and Albany International (advance textiles and material processing), Foss manufacturing and the Portsmouth Naval Shipyard.

AMPed is an outstanding model for a proactive public/private partnership in workforce development that supports a target industry cluster and an overall economic development strategy which can serve as a positive model for other such efforts that could extend beyond education to areas such as infrastructure improvements including freight access and broadband development.

## Regional Cooperation

**From an economic development standpoint, the region's and state's reliance on municipal government to deliver** nearly all local services in both a strength and a potential weakness. The strengths come in having accessible, responsive, accountable and flexible government. The weakness lies in the inherent inefficiency and lack of capacity in organizing and administering those services, especially in smaller communities. Greater levels of regional cooperation in the delivery of certain municipal services such as sewer, water, waste disposal, emergency services, purchasing, IT management, etc. hold the promise of achieving economies of scale, while retaining the benefits of local governance.

Gaining those efficiencies is becoming more important as a means to address rising cost of local government and thereby maintaining tax competitiveness with other regions and states. The economic and competitiveness concern is that the cost of duplicating services in every small town across the region drives up local property taxes. High taxes not only affect the affordability of living here but also may deter new business from locating here. Several studies of this issue, including in Maine and Vermont have shown that very small towns are relatively efficient because they rely on volunteers to handle certain basic services and require very few paid staff. As they exceed a population of about 5000 this reliance often breaks down and the need arises to professionalize some previously volunteer functions of town government to manage the growing demand for services. Many of the smaller towns in the RPC region have followed that pattern over the last 30 years and property taxes in many have risen as a result. In addition, the technical and regulatory requirements of local government have increased as well.

While the potential gains in efficiency seem evident, real regional cooperation has been slow to develop and difficult to achieve. Many local officials voice support for regional service sharing and problem solving in concept but find there are real barriers to implementation, including institutional, financial and administrative. While state law (RSA 53-A) allows virtually unlimited forms of intermunicipal cooperation, communities lack a common and reusable structure through which to implement cooperative relationships. In addition, there have been few compelling examples or models of successful municipal cooperative approaches that have yielded obvious cost savings and/or improved services.

Nevertheless, a number of small steps have been taken around specific issues including joint purchases, water supply and wastewater treatment. These are likely to become more widespread as the potential cost savings to be gained become compelling. The best strategy for communities may be to begin with small steps around very specific contracted services that are easy to share.

There are several important and long-standing instances of regional cooperation that do exist both in this region and elsewhere in the state. Obvious examples are the SAUs, regional (county) emergency dispatching, solid waste districts, regional transit agencies (such as COAST and CART), regional economic development organizations (like REDC) and even the regional planning commission. Many of these started, or were enabled through specific state legislation, and some formed to gain access to specific funding sources.

The Rockingham Planning Commission, as enabled under RSA 36, was formed by its member communities in the 1970s as an early form of regional cooperation. Its three-part mission is to undertake regional planning (such as developing this Plan) to share professional planning services at low cost, and to facilitate regional cooperation among its members. The last part is used less frequently than the others but that is beginning to change. Past examples include circuit rider planning services (10 communities), highway corridor planning (Route 1, Route 125), sewer and water facilities sharing feasibility study (Exeter and Stratham), regional household hazardous waste collection. Future efforts by the RPC to facilitate municipal services sharing will depend on the desire of communities in the region to pursue such efforts and their directive to us to assist.

## Climate Change and Coastal Impacts

The region's coastal municipalities are confronted by a particularly challenging set of land use and hazard management concerns that include extreme weather events, storm surges, flooding, coastal erosion, and loss of key coastal habitats. These issues are exacerbated by changes in climate that result in an increase in the frequency and intensity of storms and an increasing rate of sea level rise. Projections of sea level rise over the next century range from 1.6 to 6.6 feet, according to the latest National Climate Assessment (2013).

Sea level rise has the potential to displace coastal populations, threaten infrastructure and ultimately lead to the loss of homes, businesses, public infrastructure, recreation areas, public space, coastal wetlands and salt

Excerpt from "*Towns and Taxes: Growing Dilemma*," New England Futures Project

*...And then there's the sheer cost of today's sprawling development. New residents in quiet, outlying town typically start demanding a town manager, more police and professionalized services. They want new facilities, from safety buildings to expanded water and sewer systems to new roads to serve the spread-out development. So do the people in the next town of city over. So what's the result? Immense duplication, dramatically rising maintenance costs, inflated cost of government, and little accountability for the full regional costs.*

marsh. These increased flood risks are compounded by continued growth and development and escalating property values in low lying vulnerable areas.

Preparing for higher sea level could be enormously costly and economically damaging as it becomes necessary to elevate building and infrastructure. Even assuming a conservative level of sea rise of two to three feet over the next 100 years, as most coastal states now do, such actions will become necessary. Yet the uncertainty of the risk and its distance in time makes it difficult to take action now. However, early action is the key to reducing the cost of preparing for these increased risks. Over the course of 100 or even 35 years, many of the buildings and facilities at risk will require renovation, reconstruction and replacement whether the seas rise or not. Implementing new design and construction standards now, which assume additional flood elevation to account for sea level rise, will help reduce and stretch out any additional costs of preparation. Guidance from state agencies such as OEP, NHDOT and the NHDES - Coastal Program, as well as assistance from the RPC will be important to help these communities begin to prepare.

## Seacoast Advantage - Quality of Life

The demographic and economic “headwinds” that are faced both as a state and region are cause for concern about future economic growth. Unlike in the past when circumstances nearly guaranteed healthy economic growth, there is no such guarantee in the future. A combination of circumstances as discussed in this chapter including slowing population growth, shrinking workforce, aging population, high energy prices and a backlog of needed infrastructure investment, mean that future economic success will require, to quote the BIA’s Economic Strategy, “a well thought-out strategic economic plan coupled with thoughtful, intentional decision-making about public investments.”

There are reasons to believe that the RPC and seacoast region more broadly will fair better than the state as a whole despite these headwinds – provided we protect the assets that set us apart.

Some evidence for this is seen in the fact that job growth in the RPC region since 2005 has been significantly stronger than in the state overall and rebounded faster after the recession. (Table ED-4) There are several factors that contribute to this, as described in the “State of the Economy” analysis of the 2014 CEDS:

- stronger labor force growth and labor force participation,
- faster growth in the core working age cohort (25-64),
- relatively higher in-migration than the rest of the state, and
- increasing entrepreneurial activity and an environment attractive to young, creative and entrepreneurial workers

Perhaps the most important asset the region has in creating this economic advantage is a less tangible one: an overall appeal and quality of life from amenities the region offers – including a rich mix of historic, cultural and natural assets, and a location that is accessible to and from attractions like Boston, the ocean and the White Mountains. This high quality of life attracts people, especially those that have discretion about where they live, including young, creative and entrepreneurial workers as well as higher income retirees.

These factors may be leveraged to maintain economic growth in the midst of the other headwinds. But they must also be protected to attract economic development and in-migration. Planning matters in this context. To the extent that these assets or the character of the region are diminished from poorly planned and poorly designed development or from inadequate investment in our communities and schools, then we will lose this advantage.

## Recommendations and Implementation

The recommendations made in this chapter are organized roughly according to the goals presented earlier in the chapter. Where identified, specific actions to be taken are included below each recommendation. An important mechanism for implementing economic development policy in the region is the Priority Project List of the REDC’s CEDS, which is divided into short, intermediate and long range projects. The projects identified represent initiatives and infrastructure that have been evaluated through the CEDS process as important for the future economic development of the region. Also included is an implementation table which identifies both the primary party responsible for the implementation action, the timeframe within which the action should be taken.

## Recommendation 1

Fund, **maintain, upgrade and expand the region's infrastructure** (transportation, sewer, water, energy, telecommunications and broadband) to address current and future needs of the region.

### Actions

- Encourage future development expansion in locations already served by adequate infrastructure.
- Utilize cooperative and coordinated regional approaches in addressing infrastructure needs.
- Ensure that modern asset management principles, including life cycle cost accounting, is used in setting user fees to maintain & replace infrastructure.
- Work with state and federal policy makers to seek full funding of revolving loan programs for the region's water and wastewater facility upgrades.
- Undertake a feasibility study of connecting and consolidating multiple small water systems in the Southern Rockingham region.
- Update the Southern New Hampshire Water Supply study to evaluate adequacy of water supply sources through 2040.
- Promote changes at the Federal and State levels that ensure competition among internet service providers or that redefines broadband infrastructure as a public utility.
- Work with communities and appropriate state and federal agencies to facilitate development of broadband access to underserved pockets of the region.

## Recommendation 2

Develop service models and governing capacity to enable municipalities to share and consolidate municipal services where efficiencies and outcomes would be improved

### Actions

- Pursue regional cooperation in planning for infrastructure and financing.
- Identify services where interest and potential benefits for cooperation are highest.
- Develop capacity within the RPC to facilitate regional cooperation and services sharing.
- Facilitate cooperative regional approaches in addressing water quality infrastructure needs, including development of shared planning and implementation components of MS4 permit requirements.

## Recommendation 3

Develop the skills and education in the workforce at all levels (high school, vocational/technical, **community college, university**) to match the needs of the region's employers

### Actions

- Use the model of the advanced manufacturing partnership (AMPed) to establish active collaboration between educational institutions and companies with specific workforce needs
- Target the specific employee skill sets and training most needed by the industries and industry clusters developing in the region.
- Support the REDC efforts and those of educational institutions in regional workforce development, including funding to address retaining of displaced workers

## Recommendation 4

**Protect the region's high quality of life and cultural** and natural amenities

### Actions

- Enact policies and incentives that favor redevelopment of existing developed land (i.e. 'brownfields') over the development on previously undeveloped land ('greenfields') and around existing town centers, or other development nodes.
- Address water quality impairments in the region by working collaboratively on a watershed basis to address both point and non-point pollution sources.
- Protect, through easements and other means, the remaining forest and agricultural resources in the region to support the resurgent agricultural economy.
- Encourage and assist communities in the identification and preservation of their natural and historic resources.
- **Leverage the region's** amenities and overall high quality of environment to recruit new businesses, tourism and a skilled, educated labor force.

## Recommendation 5

Eliminate unnecessary barriers to the development of workforce-affordable housing in all parts of the region.

### Actions

- Work with communities to ensure that their land use polices create realistic opportunities for private development of workforce-affordable housing.
- Create collaboration among employers, housing and development entities, banks and private developers to ensure adequate access to financing for workforce housing development.
- **Ensure that adequate workforce housing opportunities exist in proximity to the region's major** employment centers.
- Include commuting distances and transportation costs in policies, programs related to housing affordability.

## Recommendation 6

**Take "no-regrets" actions beginning immediately to reduce future vulnerabilities and costs** associated with climate change.

### Actions

- Develop detailed assessments regarding specific vulnerabilities related to climate change and guidance to communities to plan for increased flood risk and extreme weather
- Develop and implement updated, zoning, building and infrastructure design standards to improve general resiliency to natural hazards and account for increased flood risk, especially in areas vulnerable to sea level rise.
- Establish business continuity plans to better cope with service disruptions resulting from natural disasters.
- Periodically reassess climate change assumptions to determine if greater or lessor actions may be needed to reduce vulnerabilities.

### Recommendation 7

Implement regional strategies for transportation, land use and the built environment that improve energy efficiency, increase cost effective renewable energy production and utilization.

#### Actions

- Provide guidance and technical assistance to municipalities to retrofit energy conservation measures in municipal buildings, infrastructure and other facilities to reduce costs and energy consumption.
- Promote effective utilization of available RGGI and Renewable Energy funds to municipalities and business to subsidize investments in energy conservation measures.
- Expand natural gas distribution systems and access to services in the more densely developed areas of the region.

### Recommendation 8

Coordinate state, regional and local infrastructure and development project priorities to maximize funding & investment opportunities.

#### Actions

- **Utilize existing CEDS, MPO TIP and other similar processes to identify and prioritize the region's top development project priorities.**
- Facilitate joint economic development efforts between communities.

### Recommendation 9

Work with communities, service providers the University of New Hampshire and the state and Federal government to ensure adequate broadband access and capacity to meet the future needs of all users in the region.

#### Actions

- Develop a service map for the region which includes information from private providers.
- Encourage competition among broadband providers.
- Support legislation that will allow municipalities to develop public broadband access services where private provider service is inadequate or too costly.
- Include broadband service continuity in hazard mitigation and recovery/response planning and ensure the broadband network is sufficiently resilient and redundant to serve in times of crisis.
- Improve broadband access in underserved areas by improving cable service area buildout through cable service agreement negotiations.
- Promote the installation of broadband conduit when construction occurs in roadway rights of way.
- Simplify the process to allow pole attachments.
- Support programs that provide internet access to underserved populations
- Identify and use financing mechanisms to improve broadband access.
- Develop local master plan chapters that address broadband service and needs.

## CEDS Priority List

A key component of the REDC Comprehensive Economic Development Strategy (CEDS) is a list of priority projects for the region. This project list is the means through which the CEDS is implemented. It is updated annually and includes projects and programs that support CEDS goals and objectives for economic development in the region. It includes primarily infrastructure projects, but also contains planning studies and programmatic elements. While development of the CEDS is funded by the U.S. Department of Commerce, Economic



Development Administration (EDA), the priority project list is intended to cover major projects with any funding source, whether local, state or federal. The CEDS priority projects are included here in the RPC regional plan to ensure consistency. Table ED-6 below and accompanying Map (ED-8) include the current CEDS priority projects that are within the RPC region.

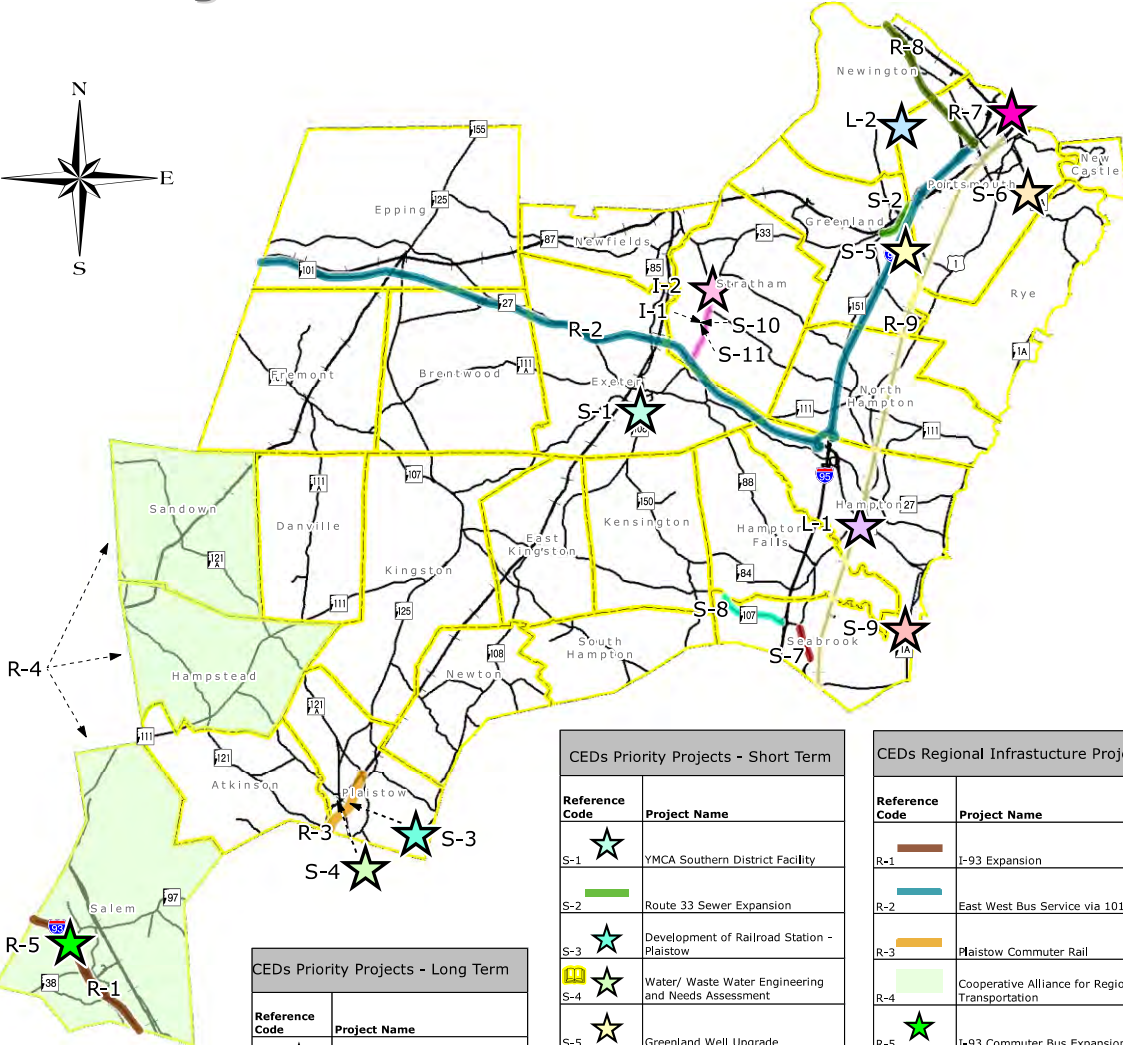
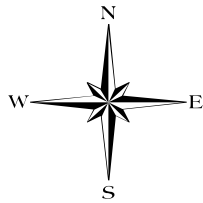
Table ED-5 - 2014 CEDS Priority Projects for the RPC Region

1 = Economic Development		4 = Workforce Development				
2 = Infrastructure Development		5 = Workforce Housing				
3 = Regional Cooperation		6 = Environmental Preservation				
Map ID	Project Name & Proponent	Project Description	Estimated Cost	Possible Funding Source	Start Date	Goals
Short Term (0 - 24 Months to Completion)						
S=1	YMCA Exeter Project Exeter/Southern District YMCA	Demolition of abandoned asbestos contaminated building, cleanup of site, construction of 30K YMCA in 2 phases.	Phase 1: \$4 million; Phase 2: \$2 million	Private, YMCA fundraising, Tax credit	Ongoing	1, 6
S-2	Route 33 Sewer Expansion - Greenland	Extend Portsmouth municipal sewer from its existing location, through the commercial/industrial zone of Greenland along Route 33 and sections of Portsmouth Ave and Ocean Road.	\$14 million	Local, Private, EDA	2014	2, 3, 6
S-3	Commuter Rail Extension - Plaistow	Feasibility Study for extending Boston commuter rail service to Plaistow, including constructing station and layover facility.	\$8.4 million	EDA, CMAQ, Local, MBTA, Brownfields	Ongoing	1, 2, 3, 4
S-4	Water/Waste Water Engineering & Needs Assessment - Plaistow	Update a comprehensive engineering and needs assessment report from the 1970's addressing water supply and wastewater treatment.	\$150,000	EPA, USDA, State, Local	2014	2, 6
S-5	Greenland Well Upgrade - Portsmouth	Upgrades at Greenland Well to improve reliability & efficiency of region's water source.	\$1 million	Municipal Bonding	2014	2, 3, 6
S-6	Route 1A/Sagamore Bridge Replacement - Portsmouth	Replacement of outdated bridge that carries loads well in excess beyond designed limits.	\$5 million	State Funding secured	2013	2, 3, 4
S-7	Route 1 Expansion South of Route 107 - Seabrook	Widening main road through Seabrook business district for improved traffic flow.	\$1.5 million	Private, businesses, State DOT, local	2013	1, 2, 3

S-8	Route 107 West to (of I-95) Development Master Plan - Seabrook	Plan to evaluate & analyze the feasibility for the highest & best future development of Route 107 in Seabrook west of the interchange with I-95.	\$50-60,000 for study only	Public funding, Private developers	2013	1, 2
S-9	Replacement of Harbor Seawall - Seabrook	Repair and restore approximately 550 linear feet of failing seawall abutting the Seabrook/Hampton Harbor.	\$1.2 million	Local, Private, EDA2014	1, 2, 3, 6	
S-10	Stratham Gateway Project - Stratham	Upgrade water lines in business corridor for job growth.	\$1 million	EDA, Local, Private	2013	2, 6
S-11A	Well Development/Testing/Permitting (Water System Phase I) - Stratham	Complete analysis of 2 potential well sites, construct production well, test water quality/quantity, seek NH DES permits to use as water supply for Route 108 commercial corridor/town Center.	\$150,000	Local, state, Coastal	Ongoing	1, 2, 3, 6
S-11B	Water System Treatment/Storage/Distribution Design (Water System Phase II) - Stratham	After Phase I completed: design a water supply treatment, storage and distribution system for 108 corridor/Town Center. May be a multi-jurisdictional project with Exeter.	\$400,000	TIF, State revolving funds, Bonds, Local	Ongoing	1, 2, 3, 6
S-11C	Waste Water Disposal/Testing/Permitting (Waste Water System Phase I) - Stratham	Evaluation and testing of potential site for waste water discharge for Rt. 108 commercial Corridor/Town Center; obtain DES permits.	\$175,000	Local, State, Coastal	Ongoing	1, 2, 3, 5, 6
Region-wide	REDC Revolving Loan Fund REDC/Region-wide	Establishment of an EDA RLF to supplement existing loan funds. The money will be used to make loans to new & existing businesses across the region.	\$500K - \$1 million	50% RLF EDA grant 50% TBD	2014	1
<b>Intermediate Projects (2 - 4 Years to Completion)</b>						
I-1A	Sewer Collection/Treatment/Disposal Design (Waste Water System Phase II) - Stratham	After Phase I completed: design a sewer collection, treatment and disposal system for 108 corridor/Town Center. May be a multi-jurisdictional project with Exeter.	\$600,000	TIF, State Revolving Funds, Bonds, Local	2015-2017	1, 2, 3, 5, 6
I-1B	Water Supply System Construction (Water System Phase III) - Stratham	After Phase II construct water system for 108 corridor/Town Center. Maybe a multi-jurisdictional project with the Town of Exeter.	\$7.5 million	TIF, State Revolving Funds, Bonds, Local	2015-2017	1, 2, 3, 6

I-1C	Waste Water System Construction (Waste Water System Phase III) - Stratham	After Phas II completed - construct waste water system for 108 corridor/Town Center. May be a multi-jurisdictional project with Exeter.	\$6 million	TIF, State Revolving Funds, Bonds, Local	2015	1, 2, 3, 5, 6
I-2	Stratham Town Center Project - Stratham	Infrastructure Improvements and Master Plan study aimed at increasing development potential, future job growth and housing needs.	\$90,000	Local - municipal	Ongoing	1, 2
Long Term Projects (5+ Years to Completion)						
L-1	Hampton Intermodal Transportation Center - Rockingham Planning Commission with Hampton	Development of an intermodal transportation center at the Route 1 - Highway 101 interchange - constructing new center with park and ride facility and multi-user transportation participants.	Center: \$35.4 million; Road reconfiguration: \$19 million; reconfiguration: \$19 million	Federal Highway programs (CMAQ), state DOT, Brownfields	Study: Ongoing Construction: Unknown	1, 2, 3, 6
L-2	Regional Biosolids/Septage Treatment Facility - Portsmouth	Design and construction of a regional biosolid/septage treatment and energy recovery facility .	\$6-7 million	Private, user fees, local, State/Fed grants, EPA, EDA	2015-2017	1, 2, 3, 6

# CEDs Priority and Regional Infrastructure Projects RPC Region



RPC Towns  
 State Roads  
 Railroad

CEDs Priority Projects - Long Term	
Reference Code	Project Name
L-1	Hampton Intermodal Transportation Center
L-2	Regional Biosolids/ Septage Treatment Facility

CEDs Priority Projects - Intermediate	
Reference Code	Project Name
I-1	Sewer Collection/ Treatment/ Disposal Design and Construction (Water System Phase 2 and 3)
I-2	Stratham Town Center Project

CEDs Priority Projects - Short Term	
Reference Code	Project Name
S-1	YMCA Southern District Facility
S-2	Route 33 Sewer Expansion
S-3	Development of Railroad Station - Plaistow
S-4	Water/ Waste Water Engineering and Needs Assessment
S-5	Greenland Well Upgrade
S-6	Route 1A/ Sagamore Bridge Replacement
S-7	Route 1 Expansion South of Route 107
S-8	Route 107 Development West of I-95 Master Plan
S-9	Replacement of Harbor Seawall
S-10	Stratham Gateway Project
S-11a	Well Development/ Testing/ Permitting (Water System Phase 1)
S-11b	Water System Treatment/ Storage/ Distribution Design (Water System Phase 2)
S-11c	Waste Water Disposal/ Testing/ Permitting (Water System Phase 3)

CEDs Regional Infrastructure Projects	
Reference Code	Project Name
R-1	I-93 Expansion
R-2	East West Bus Service via 101
R-3	Plaistow Commuter Rail
R-4	Cooperative Alliance for Regional Transportation
R-5	I-93 Commuter Bus Expansion
R-7	Sarah Long Bridge
R-8	Spaulding Turnpike Project
R-9	East Coast Greenway

\* Denotes Study or Planning Project



Document Path: P:\regional\_projects\Regional Planning Program\_GSP\GIS\docs\developmental\CEDs\_Regional\_Priority\_Projects.mxd

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Comprehensive Economic Development Strategy, Rockingham Economic Development Center of Southern New Hampshire, June, 2013

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Strategic Economic Development Plan for New Hampshire, Business and Industry Association of New Hampshire, November 2013

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“**From Tailwind to Headwind: New Hampshire’s Shifting Economic Trends**”, NH Center for Public Policy Research, September 2012

“Regionalization, New England Style”, Evan Richert, Maine Center for Economic Policy, 2003

“**Towns and Taxes: Growing Delemma,**” N. Peirce, C. Johnson, The New England Futures Project, 2010

## MAPS

ED-1 CEDS region

ED-2 Ratio of Jobs to Households - 2013

ED-3 Average Unemployment Rates 2012-13

ED-4 Equalized Full Value Tax Rates - 2012

ED-5 Proportion of NoEDesidential Assessed Value - 2012

ED-6 **BTOP “Middle Mile” Fiber Optic Network**

ED-7 Broadband Availability at Community Anchor Institutions

ED-8 Broadband Availability in the RPC Region

ED-9 Maximum Advertised Download Speed

ED-10 Service Provider Competition

ED-11 CEDS Priority Projects in RPC Region