

New Hampshire Economic Outlook
New England Economic Partnership
May 31, 2012

Executive Summary

New Hampshire continues its slow, steady emergence from the Great Recession, having fared better than most of the rest of the country. The state's unemployment rate stood at 5 percent in April 2012, well below the 8.1 national rate. Job growth in the recovery remains slow. New Hampshire had 650,000 nonfarm jobs in 2008, as the recession began taking hold, and the state will not see that many jobs again until the second quarter of 2014.

Meanwhile, a more long-term trend stands to have a profound impact on New Hampshire's economy. The state has experienced net domestic out-migration in the last four years, a break from the traditional trend of net in-migration. New residents have provided the state with a highly educated workforce, because the educational attainment of people moving into New Hampshire had typically been higher than those moving out. This change in the direction of migration has broader implications for future economic growth, because an educated labor force is the foundation of New Hampshire's competitive advantage over other states.

As in many other parts of the country, New Hampshire's economy is also grappling with the so-called "skills gap," or the supposed mismatch between employers' labor needs and skill levels among the labor force. But from a public policy perspective, there is very little actual data that frames this issue. It is not clear whether unemployment is high because workers lack the necessary skills, or because employers are reluctant to hire in a still weakened economy. While there may never be a perfect match between the needs of employers and the skill sets in the labor force, public policy does attempt to close the gap, through subsidizing employer job training and helping the unemployed acquire new skills to return to the work force.

Highlights of the May 2012 Forecast

- New Hampshire manufacturing jobs will increase only slightly from 2011 to 2016, at a 0.4% average increase each year.
- Private service producing jobs will increase by 1.6% annually in the forecast period, with the fastest rate of growth in professional and business services, followed by the leisure and hospitality industry.
- New Hampshire construction jobs will increase 2.3% annually, as housing permits increase from the current annual rate of 2,200 per year to the historic norm of 5,000 per year. This forecast assumes that New Hampshire will once again see positive domestic migration, but at lower rates than in the beginning of the last decade.

NEEP Forecast Summary Comparisons
Average Annual Rates of Growth May 2012 Forecast

	<u>Actual</u> 2001-2006	<u>Actual</u> 2006-2011	<u>Forecast</u> 2011-2016
Gross State Product			
GSP-New Hampshire	2.3	0.4	3.4
GSP-New England	1.6	1.0	2.8
GDP-United States	2.7	0.5	3.1
Total Non-Farm Jobs			
Jobs-New Hampshire	0.5	-0.5	1.6
Jobs-New England	-0.1	-0.5	1.2
Jobs-United States	0.6	-0.7	2.0

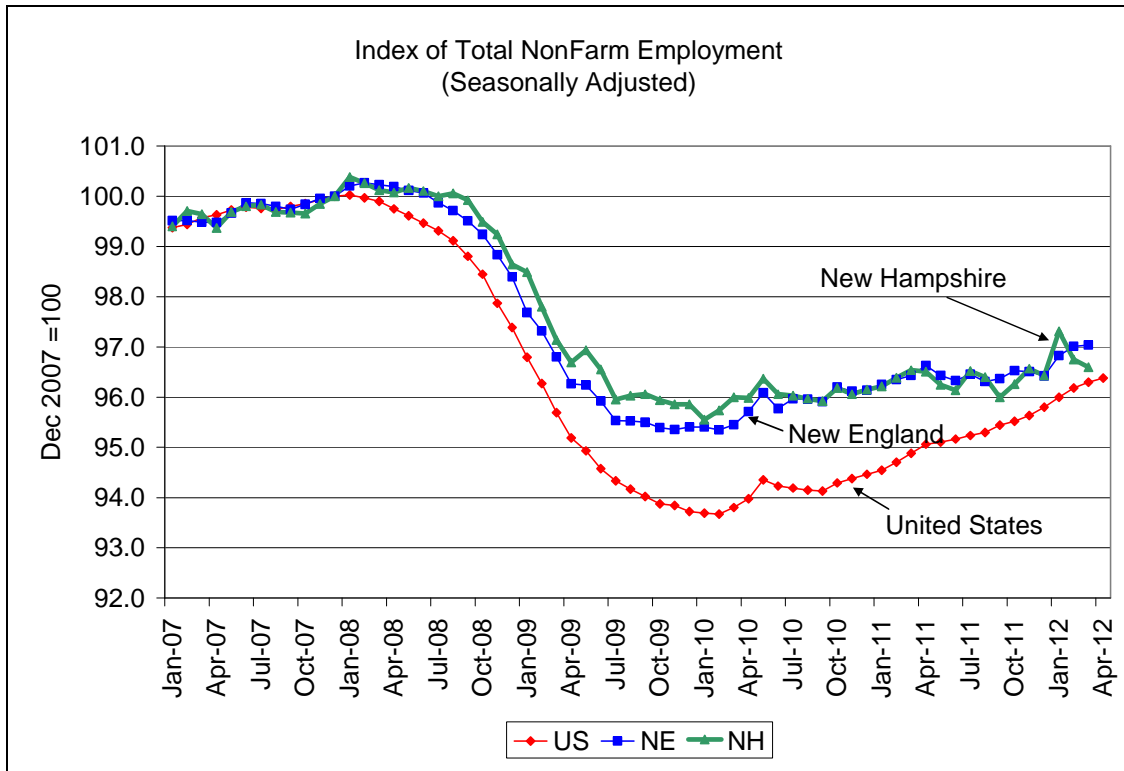
Current Conditions

New Hampshire was listed as the second healthiest state in the country, according to “A Call to Action for Individuals and Their Communities”, by the Trust for America’s Health. The report released in December 2011 looked at various health indicators, including obesity, smoking rates, children in poverty, violent crime and immunization of children. In the 2010 report New Hampshire ranked third, and in the 2011 report Vermont ranked first as the healthiest state in the country. While the study looked at dozens of well being, quality, and public health indicators, the study did not examine the cost of health care.

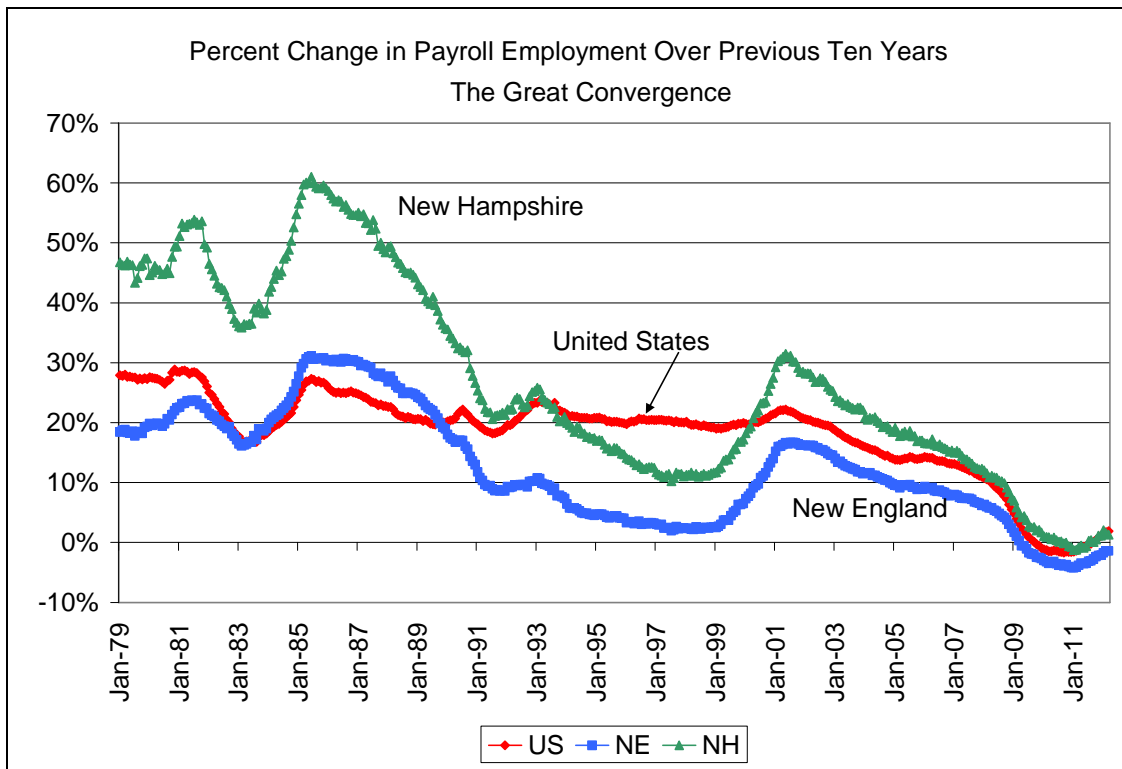
A survey on state small business climates ranked New Hampshire eighth best among the states, and New Hampshire was the only New England state in the top ten states. The two month survey of 6,000 small business owners around the country was done by Thumbtack.com and sponsored by the Kaufmann Foundation. Thumbtack noted a surprising result, “small businesses care almost twice as much about licensing regulations as they do about tax rates when rating the business-friendliness of their state or local government.” New Hampshire scored an “A” on licensing, and an “A” rating overall.

In January 2012 the Tax Foundation’s annual State Business Climate Index ranked New Hampshire’s tax structure 6th best among the states, due to the lack of one or more of the major taxes considered in the study. New Hampshire does not have a broad based sales or personal income tax, which raises New Hampshire’s ranking in the State Business Climate Index. However New Hampshire ranks near the bottom of the listing when it comes to business taxes, 46th out of the 50 states. This is because the state’s corporate tax rate is one of the highest among the states.

The following chart shows employment in New Hampshire, New England, and the United States indexed to the month of December 2007, the official start of the Great Recession. For the United States, an index value of 94.0 means that the national job base declined by 6% since the beginning of the recession. The chart shows that the New England job base declined by 4.5% (an index value of 95.5). New Hampshire's job base declined by about 4.0%, but has recovered somewhat – as of March 2012 both New England and New Hampshire still have 3% fewer jobs than in December 2007.



In prior recoveries New Hampshire's rate of job growth often substantially outstripped employment expansion in New England and the nation. That above average performance is illustrated in the following chart, which shows the ten year percent change in employment for New Hampshire, New England and the United States, for each month in the last three decades. In July of 1985, for example, the New Hampshire employment base was 60% higher than in July 1975, while New England grew 30% and the US grew about 27% in the same ten year period. But more recent employment growth data shows less difference in job growth, and at slower rates for all three regions, with New Hampshire growing closer to the regional and national average. In June 2001 the New Hampshire job base was about 30% higher than ten years earlier, compared to 16% increase in New England and a 22% increase in the United States. Also in the last ten years each region has seen a precipitous decline in the rate of job creation, as the United States has fallen below its 20% job growth in ten years historical rate. This convergence in employment growth has become more pronounced, with the most recent data showing little difference between New Hampshire, New England and the United States as of March 2012.



Manufacturing

Granite State manufacturing jobs declined at a 3.2% annual rate in the last five years (2006 to 2011). In the forecast period, New Hampshire manufacturing jobs will increase only slightly, at a 0.4% average increase each year. However, it is expected that Granite State manufacturing output will continue to increase much faster in the forecast period than the increase in jobs, as was also the case in the past five years.

BAE Systems of Nashua announced the layoff of 50 New Hampshire employees in March 2012. The defense contractor's Electronic Systems group sustained the workforce reduction, even as BAE said it had put a strategy in place to build markets and grow the business. BAE is the largest manufacturing employer in the city and in the state. BAE Systems estimates that its \$491 million in direct payroll and 4,515 employees around the state created a total economic impact of \$586 million in 2011. The company noted that BAE Systems suppliers are located in 60 different cities and towns around New Hampshire. BAE Systems employees also contributed \$2.4 million in cash and in-kind services to area civic, charitable and educational institutions in 2011.

Some manufacturing companies are expanding. Enterasys Computer is returning to New Hampshire from Andover, Massachusetts, and locating in Salem, New Hampshire. The global hardware, software and communication services company, which was a division of New Hampshire-based Cabletron ten years ago, will move 540 jobs to Salem by January

2013. The company has said it may hire an additional 80 employees once it arrives in New Hampshire.

Atrium Medical of Hudson, New Hampshire is considering relocating to Merrimack, New Hampshire, and building a new office, warehouse, research and manufacturing complex near the Nashua city line. That would enable the company to expand from its current workforce of 480 in Hudson to nearly 700 workers at a new facility in Merrimack. Atrium Medical manufactures more than 2.7 million sterile medical products used in cardiac cath-labs and operating rooms.

Webster Valve, Inc. is building a new 30,000 square foot building in Franklin as a result of transferring some operations back from plants in China. The company makes valves and other water-control products, and employs about 6,000 people at 70 facilities around the world.

Samson Manufacturing Corp, a precision tool company specializing in firearms accessories, has moved from Massachusetts to Keene, New Hampshire. The company has already hired five new employees and expects to add another 20 jobs over the next two years.

In a bit of bad news, R.R. Donnelley, a printing plant in Manchester, will be closing later this year, leaving 150 people without jobs. The company had to give 60 days notice of closing in order to comply with New Hampshire's Worker Adjustment and Retraining Notification (WARN) act.

Private Services

In April the US Treasury Department released a report showing that New Hampshire banks increased their small business lending by \$91.7 million since receiving capital through the Small Business Lending Fund. The \$4 billion Obama administration program encourages community banks to increase small business lending.

In another survey sponsored by the New Hampshire Bankers Association, local businesses say they are increasingly optimistic about economic growth and their ability to add jobs, and report that New Hampshire banks are meeting their credit needs. New Hampshire business owners surveyed said the top challenges facing them are economic uncertainty, a decline in consumer spending, and the cost of health care. Access to credit was low on the list of concerns, and was cited as a challenge less frequently than federal and state regulation, personnel costs and taxes. More than half of the 400 businesses surveyed expect growth in sales and revenue, and about one third expect to hire this year and next.

Liberty Energy NH has said it will move 60 jobs to New Hampshire if it is successful in acquiring National Grid's electric and gas business in New Hampshire. The decision on whether Liberty Energy NH is capable of operating the facilities rests with New Hampshire's Public Utilities Commission.

Commercial development around the southern part of the Manchester-Boston Regional Airport may be stalled without more commercial development money. With the completion of the airport access road from the Everett Turnpike to the airport, the 1,000 acre tract around Pettengill Road in Londonderry is now accessible. The site has a potential to host about 4 million square feet of commercial-industrial space, which could host 4,000 to 5,000 jobs. While the engineering plans have been developed and the required permits obtained by the town of Londonderry, the town says that more funds will be needed to develop the property.

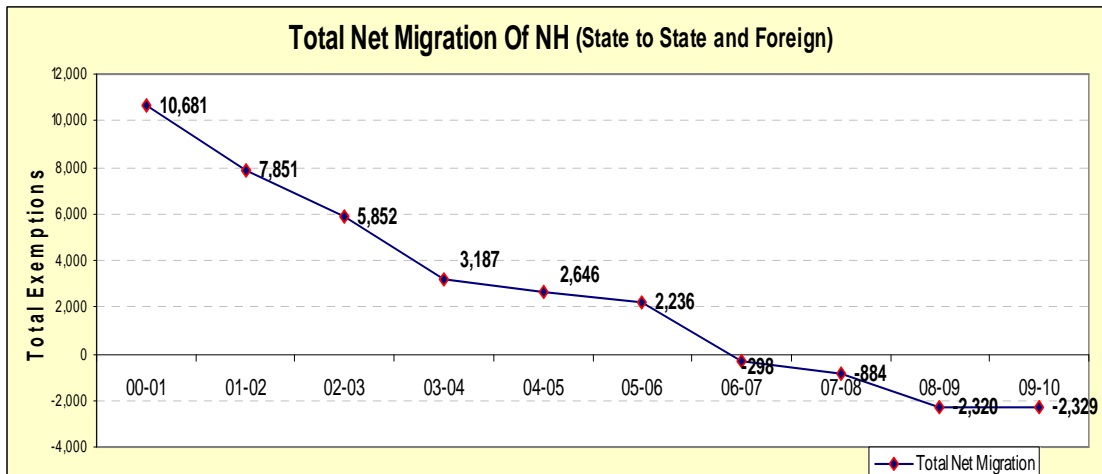
Private service producing jobs grew at an annual rate of only 0.1% over the last five years (2006 to 2011). The rate of growth will increase to 1.6% annually in the forecast period. The fastest rate of growth (3.6%) will occur in professional and business services, followed by 3.1% annual growth in leisure and hospitality jobs, and 3.0% average annual growth in education and health services jobs from 2011 to 2016.

Construction and Real Estate

Domestic net migration into New Hampshire was slowing, even before the Great Recession began in late 2007. The data on the following chart summarizes net migration of New Hampshire, based on the Census Bureau's analysis of Internal Revenue Service tax returns.¹ Net migration into New Hampshire dropped from almost 11,000 in 2001 to about 2,220 by 2005. For the last four years, the state has experienced net out migration.

The change in New Hampshire's migration patterns in the last decade actually occurred in two unique waves. First, from 2000 to 2005 net migration from New Hampshire to South Atlantic states (like North Carolina, South Carolina and Florida) increased dramatically, while New Hampshire still gained about 10,000 net new residents a year from Massachusetts. After the year 2006 migration from Massachusetts slowed to less than 2,000 annually, while migration to the South Atlantic states continued, leading to net out migration from New Hampshire in the last four years.

¹ "Source: IRS State-to-State Migration Files. For a description of the technique used to develop this data and a discussion of the strengths and limitations of the data:
<http://www.irs.gov/taxstats/article/0,,id=213802,00.html>



Housing permit data indicates that building activity in New Hampshire and New England has reached its lowest level in decades. Construction employment in New Hampshire declined at an annual rate of 5.7% in the last five years, compared to the New England average 5.4% annual decline. Growth in New Hampshire construction jobs will be moderate in the five years of the forecast period (2.3% annual growth), as housing permits increase from the current annual rate of 2,200 per year to a more normal 6,000 per year.

Government

The Community College System of New Hampshire has received a \$19.9 million federal grant to train the advanced manufacturing workforce. The US Department of Labor grant is focused on building American workforce capacity so that more jobs are not lost overseas. Companies in the area, including Albany International, have been looking for new employees but reported they were not able to find the skill sets that they needed locally. The college, which abandoned their Computer Numerical Control (CNC) machining program a few years ago due to the expense of the program, will hopefully reinstate the program for precision manufacturing, project management and team building.

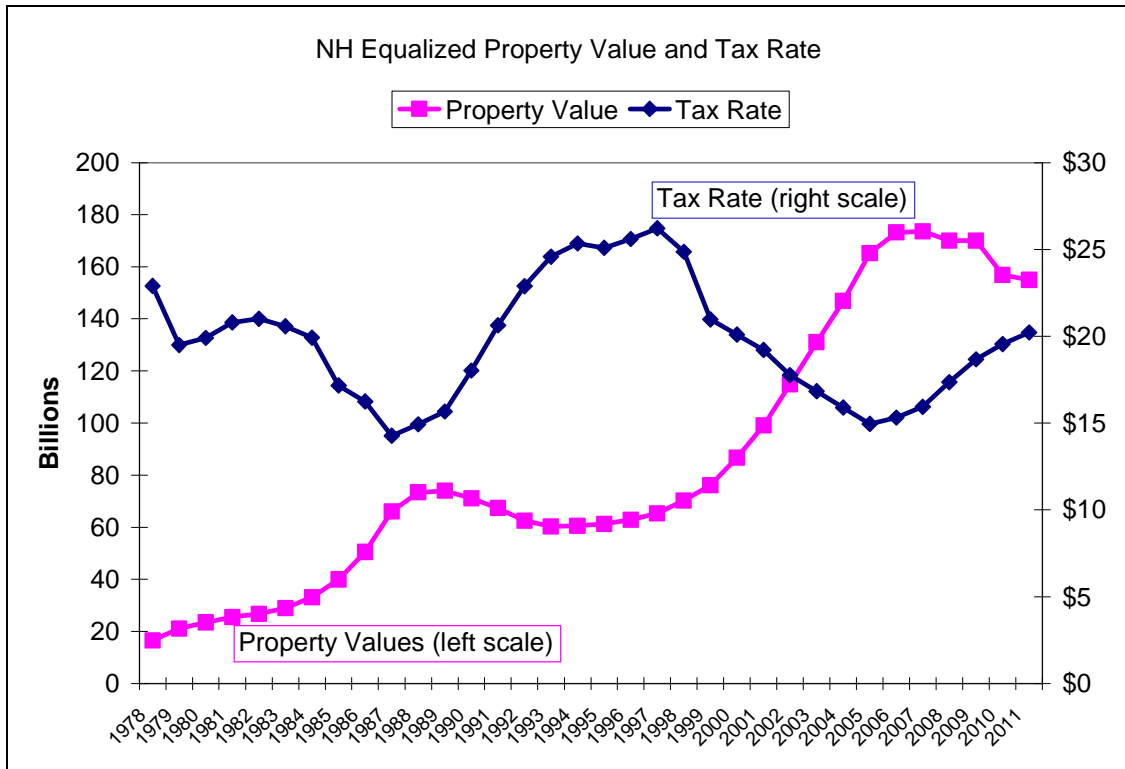
The Nashua Regional Planning Commission received a \$3.3 million grant for the New Hampshire Sustainable Communities Initiative. The grant is intended to increase the capacity of the nine regional planning commissions in New Hampshire so that those groups can create sustainable regional plans, which would then be coordinated into an overall state strategy.

New Hampshire must pay back \$35 million in federal Medicaid funds that were sent to the state in 2004, because the Federal government ruled that the state did not appropriately disperse those funds to reimburse hospitals under the state disproportionate share agreement. The state will make quarterly payments over the next two years, sending a total of \$35.8 million back the federal government.

New Hampshire state revenues will likely come in about \$30 million less than expected by June of 2012, which is the end of the state fiscal year. The underperformance in revenue is due almost entirely to shortfalls in two revenue sources. First, the state expected over \$90 million in Medicaid Enhancement Tax Revenue this year, but has so far collected \$57 million from the state's hospitals. The state's reduction in disproportionate share payments back to hospitals prompted the hospitals to recalculate and reduce their tax liability by about \$50 million over two years. Second, state lawmakers reduced the tobacco tax by ten cents this year, expecting to make up the revenue reduction in increased sales of tobacco products. In fact, New Hampshire tobacco sales have continued the downward trend of decreasing every year.

Inflation adjusted spending per person in New Hampshire's cities and town increased by 1.9% annually from 2001 to 2007. But from 2007 to 2011 the rate of inflation adjusted spending per person declined by 0.3% per year. Local governments are struggling to hold the line on spending, but tight budgets and reduced help from the state may be starting to take their toll. Towns like Milford, Candia and Amherst have reported having particularly tough budget years. Goffstown is worried about the smaller towns of New Boston and Dunbarton pulling their students out of Goffstown's middle and high schools, which could increase Goffstown's tax rate by as much as \$0.45 per \$1,000, according to the school district.

The problem for New Hampshire's cities, towns and school districts is shown on the following chart. About 60% of local government activity is funded by the property tax in New Hampshire. When property values rise quickly, as happened in New Hampshire in the 1980's and the early part of the last decade, property tax rates decline. However steady, or even declining, property values will translate into rising property tax rates, putting more strain on local finance.



Conference Theme: Skills and People Matching: Where are the Jobs?

Economists are now arguing whether continued high unemployment stems from cyclical or structural factors. If it's a cyclical problem, high unemployment is caused by a lack of demand, which means unemployment will drop as the business cycle turns up and the economy improves. If current joblessness is due to structural causes, however, that means a skills gap (among other things) stands in the way of more economic growth.

The skills gap can be defined as the mismatch between the quality of the labor force, and the skill sets required by employers. Anecdotal examples of the skills gap are found in manufacturing companies saying they cannot find enough qualified workers to grow their business, unemployed workers saying their own skills are no longer in demand, longer duration of unemployment for workers who have lost jobs, and new entrants to the labor force, like college students, not being able to find a job.

Regarding the skill/labor market mismatch there is very little actual data that succinctly frames the issue. We know that while the unemployment rate has improved, it is still higher than the historical average. But it is not clear whether unemployment is high because workers lack the necessary skills, or because many employers are reluctant to hire in a still weakened economy because of low demand.

The New Hampshire Department of Employment Security examined the statistics on the unemployed in New Hampshire as of March 2012. The department found that persons with lower levels of educational attainment claim a larger share of the unemployed

(relative to their representative size in the overall population). This goes along with other data which shows that the higher the level of education attainment, the lower the unemployment rate for that group.

Construction workers, food preparation, farming, maintenance, and transportation workers all have disproportionately higher shares of unemployment, relative to the number of people now employed in those occupations. Although these are relatively low skilled occupations, the high shares of unemployment for these workers could more likely mean a lack of demand in those industries, rather than that those workers have the wrong skill sets. For example, the New Hampshire construction industry lost about 6,000 jobs in the Great Recession, and only one third of those jobs have come back as of March 2012.

Occupational groups that are under represented in the ranks of the unemployed are workers formerly employed in community and social services, health care professionals, business and financial, and computer and mathematical occupations. Most of these are higher skilled occupations, again suggesting that education is inversely correlated with unemployment.

The Department of Employment Security did look at skills in demand specifically, by examining online job listings and summarizing the top 15 skills advertised in each listing. It's an interesting list. Customer service, writing, sales and communication skills seem to be at the top of every list for every occupation in demand, from health care and office jobs to business, financial and even production occupations.

Employers consider job training an investment that they make in their own workforce, which will ultimately improve the business and increase revenue. Like a loan made to a homeowner by a bank, a business makes an investment in employee training now, hoping to recover that investment in the future. The risk to the employer is that the current employee may decide to leave the firm, taking the employer's 'training investment' to a competitor.

Likewise a worker has to make decisions about how much training to pursue on his or her own. Do I go back to college, or tech school, after long searches in the job market? Even if I have a job, should I take classes in the evenings to get more training, or another degree?

Getting more training or a college degree is an expensive undertaking. Other studies have shown that student debt levels are high, and New Hampshire graduates have some of the highest debt levels in the country². But sometimes going to college may not help with a career path, unless one pursues the right subjects. As shown in the next table, the number of graduates from New Hampshire colleges has increased since 1995. But the portion of those students graduating with degrees in science, technology, engineering and math (the so-called STEM fields) has remained more or less constant. It is the STEM

² "Student Debt and the Class of 2010", November 2011, <http://projectonstudentdebt.org/files/pub/classof2010.pdf>

degrees that are most in demand by employers, and that pay better wages, yet only 17% of New Hampshire college students graduate with STEM degrees.

BACHELOR'S DEGREES GRANTED BY NEW HAMPSHIRE COLLEGES AND UNIVERSITIES					
By Selected Instructional Program	1995	2005	2011	95 to 05 Change	05 to 11 Change
Computer/ Information Sciences	150	279	155	129	-124
Education	602	451	457	-151	6
Engineering	291	284	463	-7	179
English Lang & Literature	462	442	429	-20	-13
Liberal Arts & Sciences	181	165	154	-16	-11
Biological & Biomedical Sciences	415	274	398	-141	124
Psychology	500	629	715	129	86
Social Sciences & History	1,029	1,133	1,276	104	143
Health Professions	420	334	583	-86	249
Business Mgmt & Sciences	1,687	1,826	2,079	139	253
All Others	1,685	2,308	2,774	623	466
Total	7,395	8,125	9,483	730	1,358
STEM	1,276	1,171	1,599	-105	428
Non STEM degrees	6,119	6,954	7,884	835	930
STEM % of Total	17.3%	14.4%	16.9%		

New Hampshire students graduating with a Masters Degree are only slightly more likely to finish with a STEM degree, as shown on the following table.

MASTER'S DEGREES GRANTED BY NH COLLEGES AND UNIVERSITIES					
	1995	2005	2011	95 to 05 Change	05 to 11 Change
Natural Res/ Conservation	103	78	98	-25	20
Computer/ Information Sciences	71	78	91	7	13
Education	561	788	1,046	227	258
Engineering	78	97	198	19	101
Legal Professions	43	31	11	-12	-20
English Language & Literature	44	56	56	12	0
Liberal Arts & Sciences	43	48	45	5	-3
Psychology	82	78	45	-4	-33
Public Administration	79	53	96	-26	43
Health Professions	118	283	406	165	123
Business Mgmt & Sciences	897	978	1,270	81	292
All Others	143	183	304	40	121
Total	2,262	2,751	3,666	489	915
STEM	267	458	695	191	148
Non STEM degrees	1,995	2,293	2,971	298	429
STEM % of Total	11.8%	16.6%	19.0%		

As a matter of policy to address the perceived skills gap, state and Federal resources are directed to job training, and to extending loans to businesses so that they can train their existing work force. New Hampshire directs Federal dollars (through the Workforce

Opportunity Council and the Department of Employment Security) to provide training assistance to workers who have lost their jobs and state grants to employers who want to train their existing workers (in that case the employer must match at least 100% of the amount of the grant with their own resources).

In another example of public investment in job training, the Regional Economic Development Center of Southern New Hampshire will be building a business training center in Raymond, New Hampshire. The center is expected to train displaced manufacturing workers in skills for technology related businesses and provide resources to local businesses to help them expand.

Also there is a recent initiative by the New Hampshire Community College System to train and find jobs for “middle skill” workers (workers with high levels of training, but not necessarily having a college degree or better). The Community College System has also received grants from the US Department of Labor to train workers in advanced manufacturing industries. About one third of the students graduating with an Associates Degree in New Hampshire have a STEM degree, as shown on the following table.

ASSOCIATE DEGREES GRANTED BY NEW HAMPSHIRE COLLEGES AND UNIVERSITIES					
By Selected Instructional Program	1995	2005	2011	95 to 05 Change	05 to 11 Change
Computer/ Information Services	118	149	112	31	-37
Education	105	68	122	-37	54
Engineering Technology	182	131	106	-51	-25
Family & Consumer Sciences	73	50	15	-23	-35
Legal Professions	161	109	44	-52	-65
Liberal Arts & Sciences	550	307	405	-243	98
Security & Protect Services	286	328	264	42	-64
Mechanic & Repair Technology	99	89	94	-10	5
Health Professions	827	821	873	-6	52
Business Mgt and Sciences	1,245	799	606	-446	-193
All Other	431	647	421	216	-226
Total	4,077	3,498	3,062	-579	-436
STEM	1,127	1,101	1,091	-26	-10
Non STEM degrees	2,950	2,397	1,971	-553	-426
STEM % of Total	27.6%	31.5%	35.6%		

One would expect that there will never be a “perfect match” between the needs of employers, and the skill sets in the labor force. But public policy can attempt to close the gap, through subsidizing employer job training and helping the unemployed acquire new training to return to the work force.

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