



New Hampshire
Economic Development

FY 2016-17 Strategic Plan
November 2016 Update

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What is the Division of Economic Development?

The New Hampshire Division of Economic Development is one of four divisions in the Department of Resources and Economic Development. The Division of Economic Development offers a variety of programs to support the growth of New Hampshire companies and to facilitate the relocation of new companies into the state.

As illustrated by the table to the right, the vast majority of our resources are invested in retention and expansion activities that support the growth of existing New Hampshire businesses.

The Division’s budget is approximately \$19 million, 77% of which is federal funds, mostly for the Office of Workforce Opportunity. Approximately \$2.4 million in state general fund dollars was provided in the FY 2016 state budget for economic development; \$2.6 million in FY 2017. See the next page for a functional summary of the Division’s budget.

Program Focus Areas

	Retention	Expansion	Recruitment
Business Recruitment		X	X
International Commerce	X	X	
Government Contracting	X	X	
Regional Resource Specialists	X	X	
Job Training Fund	X	X	
Workforce Opportunity	X	X	
Broadband	X	X	
Small Business Development Center*	X	X	
Innovation Research Center*	X	X	

*The Division provides funding to these partner organizations, but these are not programs housed in the Division.

Budget Overview – Division of Economic Development

	Approximate Budget	Source of funding	Staff	Use of Funds
Business Recruitment	\$400,000	100% state	2 business development managers	staff, marketing, travel
International Commerce	\$270,000	100% state	3 trade specialists	staff, travel, training sessions for businesses
Government Contracting	\$380,000	50% federal 50% state	3 contracting specialists	staff, travel, training sessions for businesses
Regional Resource Specialists	\$650,000	40% federal 60% state	5 resource specialists	staff
Job Training Fund	\$2,800,000	unemployment taxes	1 administrator plus support staff for job training grants and WorkReadyNH program	Approx \$1 million in grants for businesses and contract with CCSNH for WorkReadyNH
Workforce Opportunity	\$13,500,000	100% federal	3 administrators who oversee contracts with service providers	reemployment services for NH residents
Broadband	\$120,000	100% state	1 broadband specialist	Staff
Small Business Development Center	\$315,000	100% state	This is the state match for SBDC, which also receives approximately \$600,000 in federal funding and \$300,000 in private sector contributions	small business advisors
Innovation Research Center	\$275,000	100% state		grants to businesses for research & development
Approximate Total*	\$18,710,000			

Economic Development Advisory Council

The Economic Development Advisory Council (EDAC) is a 26-member volunteer committee. Each member is nominated by the Commissioner of the Department of Resources and Economic Development and appointed by the Governor. The EDAC's primary role is to assist the Division of Economic Development with strategic planning. EDAC member terms are for three years. RSA 12-A:22-a defines the industry sectors that must be represented on the EDAC and stipulates that every county in the state must be represented. The following is the list of members as of September 2016.

- Zenagui Brahim, NH Manufacturing Extension Partnership
- Kendall Buck, NH Homebuilders Association
- Dean Christon, NH Housing Finance Authority
- Patrick Clark, Plexxi
- Jamie Coughlin, New Venture Incubator Programs, Dartmouth College
- Eric Crainich, Design Standards Corporation
- Kathy Eneguess, Magalloway Consultants
- Phil Ferneau, Borealis Ventures
- Senator Jeanie Forrester
- Judy Gove, NH Electric Cooperative
- Jeff Hayes, Lakes Region Planning Commission
- Stephen Heavener, Capital Regional Development Council
- Chris Hodgdon, Comcast
- Representative Naida Kaen
- Daniel Lee, Plymouth State University
- Carmen Lorentz, NH Division of Economic Development
- Mark MacKenzie
- Patrick McDermott, Hinckley Allen
- David Mullen, Pease Development Authority
- Jayne O'Connor, White Mountains Attractions
- Eric Proulx, Tanger Outlet Center
- Tim Sink, Greater Concord Chamber of Commerce, CHAIR
- Phil Suter, Greater Keene Chamber of Commerce

Background

In accordance with RSA 12-A:62-66, this document lays out a strategic plan for the New Hampshire Division of Economic Development. Appendix I provides an overview of the requirements of the RSA and how this plan addresses those requirements.

This plan covers the 2016-17 biennium and will be reviewed on an annual basis, with major revisions occurring in alignment with the budget development process. The intention is for the strategic plan to inform the division's budget requests and for the biennial budget to support the efforts outlined in the plan.

This plan was created with significant input and support by the Economic Development Advisory Council (EDAC).

The planning process included a survey of local and regional economic development organizations, analysis of industry cluster and demographic data, discussions with partner organizations, and several planning and brainstorming sessions with staff and with the EDAC. All data collection, analysis, and writing was done internally by division staff.

Vision 2016-17

The planning process resulted in the following vision statement, which captures what the division will strive to achieve over the 2016-17 biennium.

The New Hampshire Division of Economic Development is the lead economic development organization in New Hampshire, and its responsive staff provide timely expertise, offer effective programs, and build creative partnerships that are highly valued by local, regional, and statewide partners.

Key Industries

The industry cluster analysis resulted in the identification of 11 key industries, shown at right. The first five are key advanced manufacturing sectors, listed from largest to smallest in terms of number of jobs. Those five, plus numbers six and seven are key industries for out-of-state recruitment *and* for in-state business retention and expansion efforts. The last four clusters are areas of focus primarily for retention and expansion. See pages 19-46 for detailed overviews of each cluster.

1. Complex Electronics
2. Metal Manufacturing
3. Machinery Manufacturing
4. Life Sciences Manufacturing & Research
5. Composites & Advanced Textiles
6. Business & Financial Services
7. Information Technology & Telecommunications
8. Arts, Entertainment & Visitor Industries
9. Food & Beverage
10. Education & Knowledge Creation
11. Forest & Wood Products

Goals & Objectives

The Division of Economic Development will focus on four major goals over the course of the 2016-17 biennium. These goals were developed based on a survey of economic development practitioners across the state, input from the Economic Development Advisory Council, and two staff planning sessions.

Goal 1: Focus our programs on New Hampshire's key industries.

Objectives for FY 16-17:

- Create and deploy an out-of-state business attraction marketing campaign focused on key industries #1-7.
- Target outreach for business retention & expansion programs based on key industries in each region of the state.

Goal 2: Provide tools that are valuable to local and regional partners.

Objectives for FY 16-17:

- Market availability of new data tool (EMSI) for use in local planning, grant writing, and economic impact studies.
- Establish a site selection website for New Hampshire to enhance business recruitment efforts.
- Market the availability of the site selection website for use by local and regional economic development organizations.

Goal 3: Build partnerships that have a meaningful impact on workforce development.

Objectives for FY 16-17:

- Create a process and toolkit to establish sector partnerships, formal collaborations where businesses convene on a regular basis to identify shared hiring, training, and employee retention needs.
- Launch sector partnerships for manufacturing, healthcare, IT, and hospitality.

Goal 4: Address the need for an economic development strategy for New Hampshire.

Objectives for FY 16-17:

- Identify funding sources for a planning process that:
 - Incorporates planning that has already been done.
 - Mobilizes partners and resources around key issues/industries in each region.
 - Focuses on actions the state can reasonably achieve.
 - Integrates/coordinates actions of local, regional, and statewide economic development entities.
 - Creates a sustainable structure that will allow for a statewide economic development plan to be updated on a regular basis.
- If sufficient funding is secured, procure an economic development consultant to facilitate the planning process.

Metrics by Program

In addition to the goals and objectives for the division as a whole, we established detailed metrics for each of the programs offered by the division. The following pages describe each of our programs and list the metrics that we will use to measure the output of our work.

We will report on our metrics each year in a written annual report and will use an input-output model to provide an estimate of the impact of our work on the state's economy, including:

- Number of jobs created and retained.
- Payroll associated with the jobs created and retained.
- Business Enterprise Tax revenue associated with the jobs created and retained.

Business Recruitment

The business recruitment team develops long-term relationships with real estate brokers, site consultants, and decision makers of companies that may have an interest in locating or expanding their business in New Hampshire. Most companies that we work with take two to five years to move through the cycle of becoming interested in New Hampshire to actually opening a location here.

In fiscal years 2012-15, we had extremely limited marketing and travel funds to support business recruitment. As a result, our leads and successes have primarily come from companies in New England and Eastern Canada. Our primary goal going forward is to expand our market reach and increase lead pipeline.

To do this, we will participate in trade shows and host events for decision makers in our key industries (industries #1-7 on page 6). We will also create a site selection website that enables site consultants and CEOs to quickly research communities and properties of interest, including the ability to analyze key labor force, demographic, and industry data.

Metrics:

- ✓ **# companies that relocate to / expand in New Hampshire**
 - # Employees
 - Capital investment
 - Real estate taxes
 - Square footage
 - % in key industries

- ✓ **Site selection website analytics**
(who is using the site and where are they from?)

- ✓ **Trade show results**
 - # decision makers exposed to NH brand
 - # one-on-one interactions
 - # actionable leads

- ✓ **# meetings & contacts with decision makers**
(and what % of these are in key industries)

International Commerce

The Office of International Commerce (OIC) assists New Hampshire companies in becoming more competitive in the global marketplace. OIC's primary activities include:

- Conducting market research for businesses to help them identify promising markets.
- Providing group training and one-on-one assistance with technical issues in exporting.
- Facilitating participation of NH companies in trade shows and trade missions, and hosting foreign trade delegations that come to NH.
- Serving as administrator for the NH Aerospace and Defense Export Consortium.
- Providing matching grants to support international business development activities by NH companies.
- Pursuing grants and private partnerships to fund export promotion and foreign direct investment activities.

Metrics:

- ✓ **# active clients and # new clients (and % in key industries)**
- ✓ **# hours counseling businesses**
- ✓ **# people who attended trainings & events**
- ✓ **# companies who participated in trade activities**
- ✓ **\$ value of international sales obtained by active clients**
- ✓ **\$ grant funding obtained**

Government Contracting

The Government Contracting Assistance Center (GovCon), formerly the NH Procurement Technical Assistance Program, is a cooperative program of the Division of Economic Development and the US Department of Defense, Defense Logistics Agency.

GovCon provides specialized assistance for contracting and subcontracting opportunities with the Department of Defense, other federal agencies, and state and local governments. Specifically, they:

- Provide one-on-one business counseling.
- Conduct group training sessions.
- Facilitate the participation of NH companies in matchmaker events with government agencies and prime contractors.
- Participate in various outreach events to educate the business community about government contracting opportunities.

Metrics:

- ✓ **# active clients and # new clients (and % in key industries)**
- ✓ **# hours counseling businesses**
- ✓ **# people who attended trainings & events**
- ✓ **\$ value of government contracts obtained by active clients**

Regional Resource Specialists

The regional resource specialists help New Hampshire businesses and communities succeed by matching them with services and programs that address their economic development needs.

- Target outreach to small companies in our key industries that may not have the staff capacity to find and access services that may help them grow.
- Act as a consultant for businesses to identify their primary barriers to growth and provide recommendations/introductions to services/programs that can help.
- Participate in the creation of industry partnerships to address workforce needs.
- Facilitate rapid response sessions to assist workers and companies experiencing a reduction in force.
- Assist local planning and economic development initiatives by providing data resources.

Metrics:

- ✓ **# businesses & communities assisted**
- ✓ **# new businesses assisted (starting in FY 2017)**
- ✓ **% of businesses assisted in key industries (starting in FY 2017)**
- ✓ **# industry partnerships for workforce development that our specialists are actively involved in (and % in key industries)**
- ✓ **# EMSI data analysis projects completed**
- ✓ **# rapid response sessions facilitated**

Job Training Fund

The Job Training Fund provides funding for the NH Job Training Grant program and for WorkReadyNH.

The Job Training Grants program provides 1:1 matching grants to New Hampshire companies to promote investment in skills development for the state's workforce. Any employer who pays unemployment insurance tax is eligible to apply. Approximately \$1 million is available each fiscal year.

One goal for the Job Training Grant program is to expand outreach to new companies in key industries across the state.

The WorkReadyNH program provides assessment, instruction and credentialing in key skill areas identified by employers as essential to workplace success. Graduates earn two nationally recognized credentials to add to their resume. WorkReadyNH is currently offered at four of New Hampshire's community colleges.

Metrics:

- ✓ **\$ value of job training grants awarded**
- ✓ **# workers trained by industry sector**
- ✓ **# companies assisted (% new companies and % in key industries)**
- ✓ **\$ value of investments in worker training leveraged**
- ✓ **# of WorkReadyNH participants and graduates per year**

Workforce Opportunity

The Office of Workforce Opportunity (OWO) administers all of the federal Workforce Innovation and Opportunity Act (WIOA) funds for New Hampshire. These funds are used to deliver a variety of re-employment services through a network of 12 NH Works Centers statewide. WIOA services are available to eligible low-income and unemployed residents of New Hampshire.

As part of its administrative responsibilities, OWO is charged with maintaining a state workforce plan and making sure that New Hampshire complies with WIOA requirements. Most recently, this includes creating a plan to encourage industry sector partnerships that address specific workforce needs in key industries.

Metrics:

- ✓ **# individuals assisted**
 - ✓ Youth
 - ✓ Adults
 - ✓ Dislocated workers

- ✓ **# companies involved in Sector Partnerships**

Broadband Planning & Development

The Broadband program coordinates state telecommunications and broadband policy, planning, and expansion initiatives to promote affordable and accessible broadband for all businesses and residents of the state.

- Provide technical assistance with telecommunications needs in recruiting high technology companies to the state.
- Serve as a resource for local communities and state policy makers.
- Seek resources such as grants from government and nonprofit entities to promote broadband planning and development initiatives throughout the state.

Metrics:

- ✓ **# technical assistance projects completed**
 - For businesses
 - For communities
- ✓ **# outreach events to educate communities and policymakers**

Partnerships

The division maintains partnerships with outside entities that provide critical economic development services. The division provides direct funding for the NH Small Business Development Center (SBDC) and the NH Innovation Research Center (IRC), and provides in-kind match (staff salaries) for the NH Manufacturing Extension Partnership (MEP).

- SBDC provides long-term business advising and support free of charge to New Hampshire small businesses.
- IRC provides translational research funding and training for New Hampshire companies to enable them to test and refine a product idea and seek venture capital or federal research funding to take the product to market.
- MEP works with small- and medium-sized manufacturers to identify and implement advanced manufacturing and management technologies to increase efficiency and enhance profitability. MEP also plays a leadership role in workforce development for the manufacturing sector.

Metrics:

✓ SBDC

- hours of advising
- # clients
- # jobs created
- # at-risk jobs retained
- # new businesses created
- \$ in capital formation obtained/created

✓ IRC

- # and \$ value of grants awarded
- # trainings conducted

✓ MEP

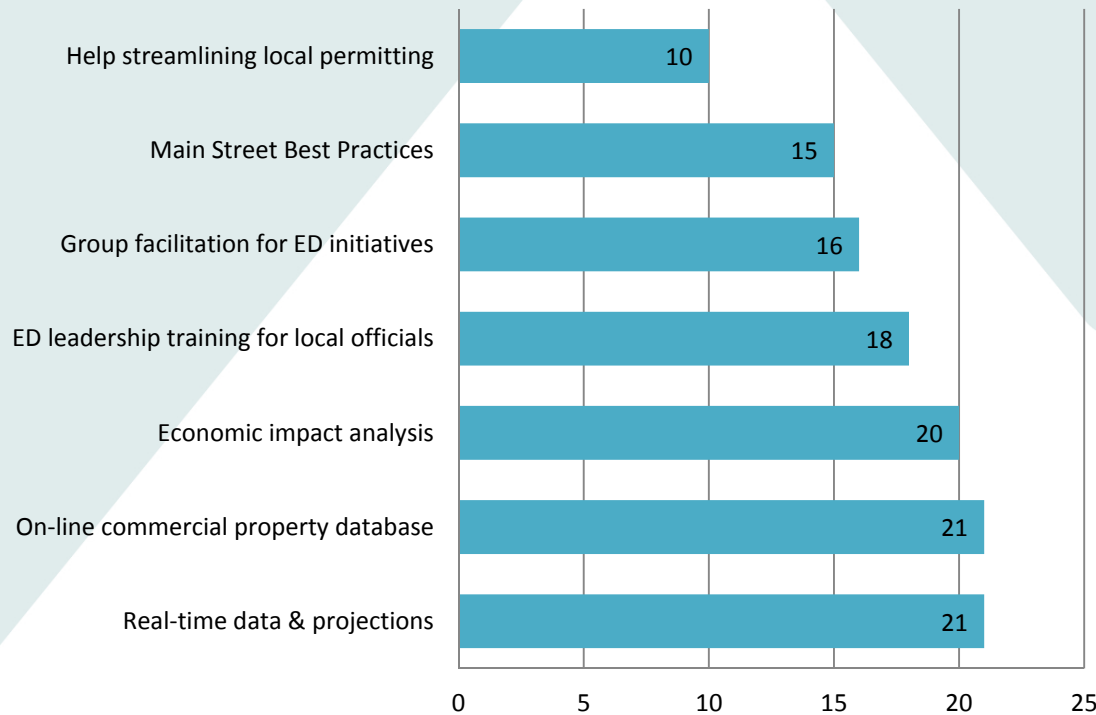
- # active clients

Background Data

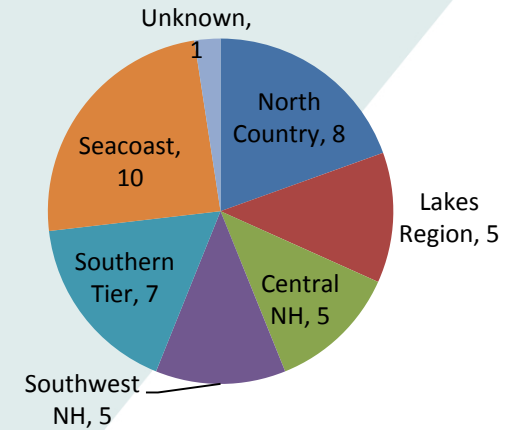
Background Data: Survey Results

In April 2014, we sent a brief survey to 135 local and regional economic developers across New Hampshire, asking about the type of work their organization does and what tools would be most useful to them. We received 41 responses (30% response rate).

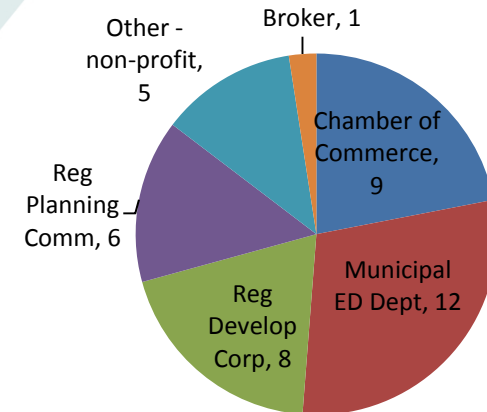
Q: What tools would be most useful?



Respondents by region



Respondents by type of organization



Background Data: Industry Cluster Analysis

The Division of Economic Development, in conjunction with the Economic Development Advisory Council, used data and analysis provided by EMSI (www.economicmodeling.com) to identify key industries that would be the focus of the division's programs.

For purposes of this analysis, we divided the state into the following regions. See Appendix II for a list of zip codes included in each region.

1. Great North Woods
2. White Mountains
3. Upper Valley
4. Lakes Region
5. Central
6. Southwest
7. Southern Tier
8. Seacoast

EMSI provides a set of 20 pre-defined industry clusters which group together businesses who use similar inputs and workforce skills and/or produce related products and services.

We examined all of the 20 pre-defined clusters, plus two that we created (Life Sciences and Food & Beverage), in each of the eight regions. See the next page for a list of all 22 of the clusters we examined.

In the end, we narrowed it down to 11 clusters using the following criteria:

- The concentration of employment is above the national average. This indicates that we offer a strong workforce and other possible advantages for the cluster.
- A cluster is highly concentrated and is projected to grow more slowly or decline more quickly than the national rate. This indicates that economic development resources should be deployed to change the trend.
- The concentration of employment is significantly lower than the national average in a sector that may impact our ability to retain and recruit young talent.

The following list shows all 22 industry clusters that were examined as part of this analysis.

- Advanced Materials
- Apparel & Textiles
- Arts, Entertainment, Recreation & Visitor Industries
- Business & Financials Services
- Chemicals
- Computer & Electronic Product Manufacturing
- Defense & Security
- Education & Knowledge Creation
- Electrical Equipment, Appliances & Component Manufacturing
- Energy
- Food & Beverage
- Fabricated Metal Product Manufacturing
- Forest & Wood Products
- Glass & Ceramics
- Information Technology & Telecommunications
- Life Sciences Manufacturing & Research
- Machinery Manufacturing
- Mining
- Primary Metal Manufacturing
- Printing & Publishing
- Transportation & Logistics
- Transportation Equipment Manufacturing

In the end, we narrowed it down to 11 clusters, or key industries, using the criteria defined on the previous page.

1. Complex Electronics
2. Metal Manufacturing
3. Machinery Manufacturing
4. Life Sciences Manufacturing & Research
5. Composites & Advanced Textiles
6. Business & Financial Services
7. Information Technology & Telecommunications
8. Arts, Entertainment & Visitor Industries
9. Food & Beverage
10. Education & Knowledge Creation
11. Forest & Wood Products

The first five are key advanced manufacturing sectors, listed from largest to smallest in terms of number of jobs. Those five, plus numbers six and seven are key industries for out-of-state recruitment *and* for in-state business retention and expansion efforts. The last four clusters are areas of focus primarily for retention and expansion. The following pages provide a detailed overview of each cluster.

This table shows where the key industries are of regional significance.

		Great North Woods	White Mountains	Upper Valley	Lakes Region	Central	Southwest	Southern Tier	Seacoast
1	Complex Electronics: Computer & Electronic Product Mfg				*			*	*
1	Complex Electronics: Electrical Equip, Appliance & Component Mfg		*	*		*		*	*
2	Metal Manufacturing: Fabricated Metal Products			*	*	*	*	*	
2	Metal Manufacturing: Primary Metal		*	*	*			*	
3	Machinery Manufacturing		*	*		*	*	*	
4	Life Sciences Manufacturing & Research			*			*	*	*
5	Composites & Advanced Textiles					*	*	*	*
6	Business & Financial Services							*	*
7	Information Technology & Telecommunications							*	*
8	Art, Entertainment & Visitor Industries	*	*	*	*				
9	Food & Beverage	*	*	*	*	*	*	*	*
10	Education & Knowledge Creation			*			*	*	*
11	Forest & Wood Products	*	*				*		

#1 Complex Electronics: Computer & Electronic Product Manufacturing

14,847 Jobs (2016)

211% above National average

-6.7% change (2016-21)

Nation: -5.9%

264 Establishments (2015)

\$108,698 Ave. Earnings (2016)

Nation: \$128,043

*Of Regional Significance:
Seacoast, Southern Tier, Lakes Region*

Sampling of industries in this cluster:

- Computer Storage Device Mfg
- Semiconductor & Related Device Mfg
- Electronic Connector Mfg
- Bare Printed Circuit Board Mfg
- Analytical Lab Instrument Mfg
- Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System & Instrument Mfg
- Printed Circuit Assembly

Sampling of occupations in this cluster:

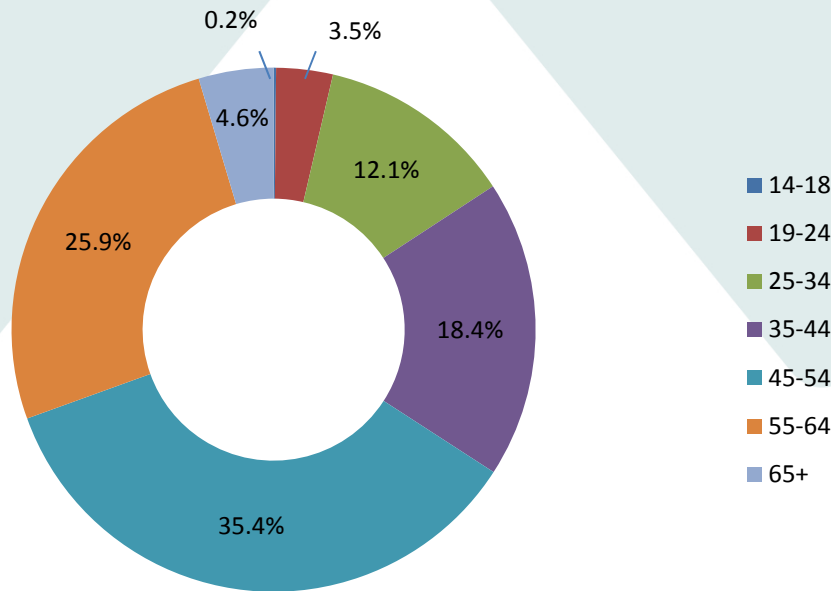
- Electrical and Electronic Equipment Assemblers
- Inspectors, Testers, Sorters, Samplers, and Weighers
- Team Assemblers
- Electrical and Electronics Engineering Technicians
- Electromechanical Equipment Assemblers
- Software Developers
- Electrical Engineers
- Industrial Engineers
- Mechanical Engineers

Data Source: EMSI

Complex Electronics: *Computer & Electronic Product Manufacturing continued*

Workforce Characteristics

Age Distribution of Workforce



31% of the workforce in this cluster is 55 or older.

Gender Breakdown:
65% male
35% female

#1 Complex Electronics: *Electrical Equip, Appliance & Component Mfg*

4,107 Jobs (2016)

133% above National average

-9.1% change (2016-21)

Nation: -4.2%

58 Establishments (2015)

\$89,475 Ave. Earnings (2016)

Nation: \$86,533

*Of Regional Significance:
Seacoast, Southern Tier, Central, White
Mountains, Upper Valley*

Sampling of industries in this cluster:

- Electric Lamp Bulb & Part Mfg
- Lighting Fixture Mfg
- Fiber Optic Cable Mfg
- Transformer Mfg
- Relay & Industrial Control Mfg
- Motor & Generator Mfg
- Current-Carrying Wiring Device Mfg
- Communication & Energy Wire Mfg

Sampling of occupations in this cluster:

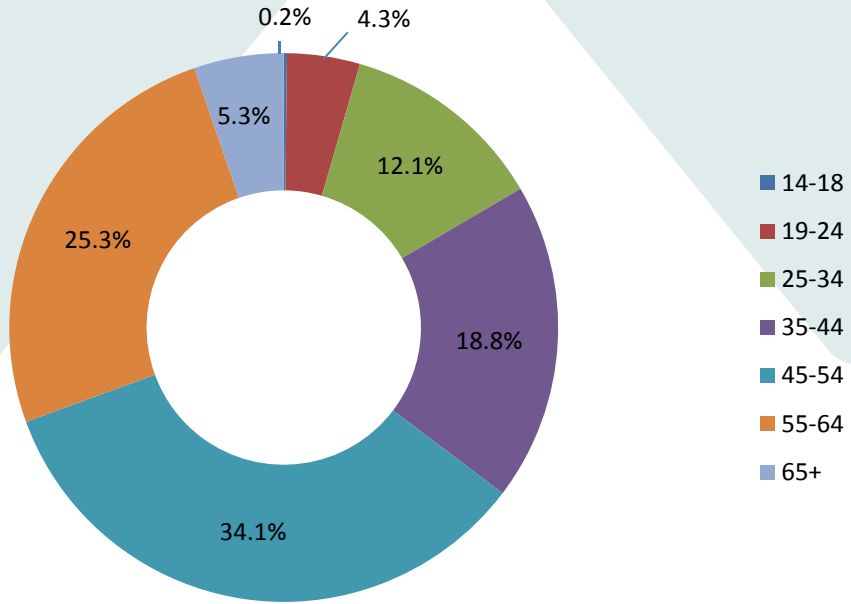
- Electrical and Electronic Equipment Assemblers
- Team Assemblers
- Inspectors, Testers, Sorters, Samplers, and Weighers
- Electromechanical Equipment Assemblers
- Multiple Machine Tool Setters, Operators, and Tenders
- Production Supervisors
- Electrical Engineers
- Industrial Machinery Mechanics

Data Source: EMSI

Complex Electronics: *Electrical Equip, Appliance & Component Mfg* continued

Workforce Characteristics

Age Distribution of Workforce



31% of the workforce in this cluster is 55 or older.

Gender Breakdown:
67% male
33% female

#2 Metal Manufacturing: *Fabricated Metal Products*

9,680 Jobs (2016)

51% above National average

3.4% change (2016-21)

Nation: 1.9%

393 Establishments (2015)

\$67,202 Ave. Earnings (2016)

Nation: \$64,177

Of Regional Significance:

*Southern Tier, Southwest, Central, Lakes
Region, Upper Valley*

Sampling of industries in this cluster:

- Machine Shops
- Ball and Roller Bearing Mfg
- Sheet Metal Work Mfg
- Metal & Valve Pipe Fitting Mfg
- Metal Stamping
- Precision Turned Products
- Valve & Hose Fitting Mfg
- Bolt, Nut, Screw, Rivet & Washer Mfg
- Power Boiler & Heat Exchanger Mfg
- Fabricated Structural Metal Mfg

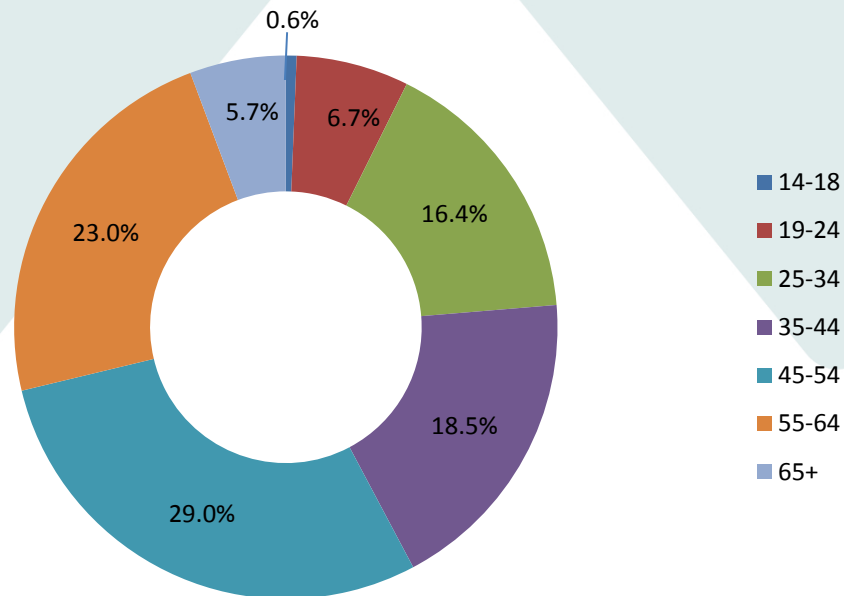
Sampling of occupations in this cluster:

- Machinists
- Computer-Controlled Machine Tool Operators
- Team Assemblers
- Inspectors, Testers, Sorters, Samplers, and Weighers
- Welders, Cutters, Solderers, and Brazers
- Production Supervisors
- Multiple Machine Tool Setters, Operators, and Tenders
- General Operations Managers
- Cutting, Punching, and Press Machine Setters, Operators, and Tenders
- Structural Metal Fabricators and Fitters

Metal Manufacturing: *Fabricated Metal Products* continued

Workforce Characteristics

Age Distribution of Workforce



29% of the workforce in this cluster is 55 or older.

Gender Breakdown:
77% male
23% female

#2 Metal Manufacturing: *Primary Metal*

2,444 Jobs (2016)

42% above National average

-5.9% change (2016-21)

Nation: -2.1%

36 Establishments (2015)

\$69,299 Ave. Earnings (2016)

Nation: \$78,836

*Of Regional Significance:
Southern Tier, Lakes Region, White
Mountains, Upper Valley*

Sampling of industries in this cluster:

- Iron, Steel, Aluminum Foundries
- Aluminum Foundries
- Copper Rolling, Drawing, Extruding, and Alloying
- Iron & Steel Pipe & Tube Mfg
- Secondary Smelting, Refining and Alloying
- Nonferrous Metal Smelting & Refining

Sampling of occupations in this cluster:

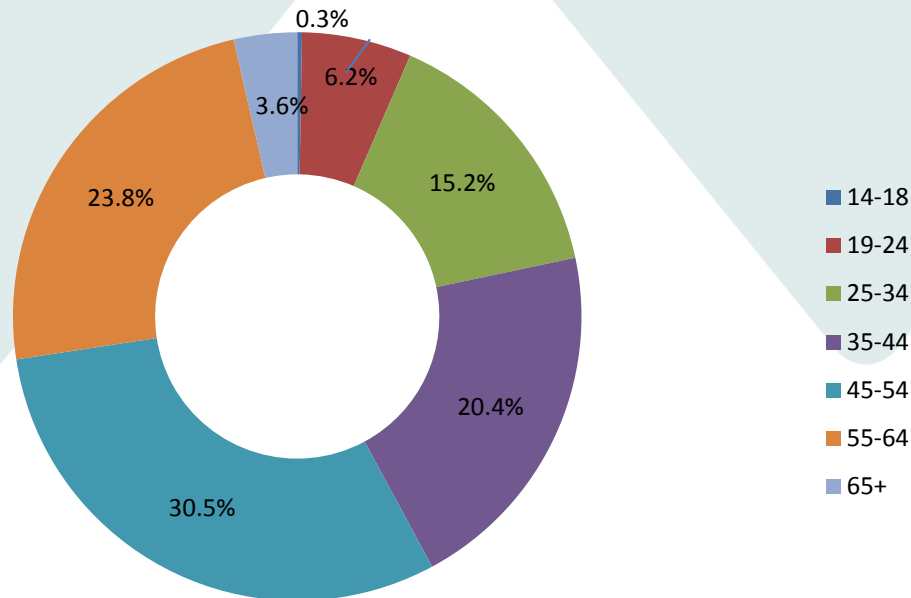
- Foundry Mold and Coremakers
- Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders
- Inspectors, Testers, Sorters, Samplers, and Weighers
- Industrial Machinery Mechanics
- Production Supervisors
- Extruding and Drawing Machine Setters, Operators, and Tenders
- Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders
- Computer-Controlled Machine Tool Operators

Data Source: EMSI

Metal Manufacturing: *Primary Metal*

Workforce Characteristics

Age Distribution of Workforce



27% of the workforce in this cluster is 55 or older.

Gender Breakdown:

77% male

23% female

#3 Machinery Manufacturing

6,772 Jobs (2016)

36% above National average

-2.1% change (2016-21)

Nation: 0.8%

164 Establishments (2015)

\$83,277 Ave. Earnings (2016)

Nation: \$81,212

Of Regional Significance:

***Southern Tier, Southwest, Central,
White Mountains, Upper Valley***

Sampling of industries in this cluster:

- Optical Instrument & Lens Mfg
- Machine Tool Mfg
- Printing Machinery & Equip Mfg
- Commercial & Industrial Equip Mfg
- Sawmill, Woodworking, and Paper Machinery Mfg
- Cutting Tool & Machine Tool Accessory Mfg
- Special Die & Tool, Die Set, Jig, and Fixture Mfg
- Food Product Machinery Mfg
- Semiconductor Machinery Mfg

Sampling of occupations in this cluster:

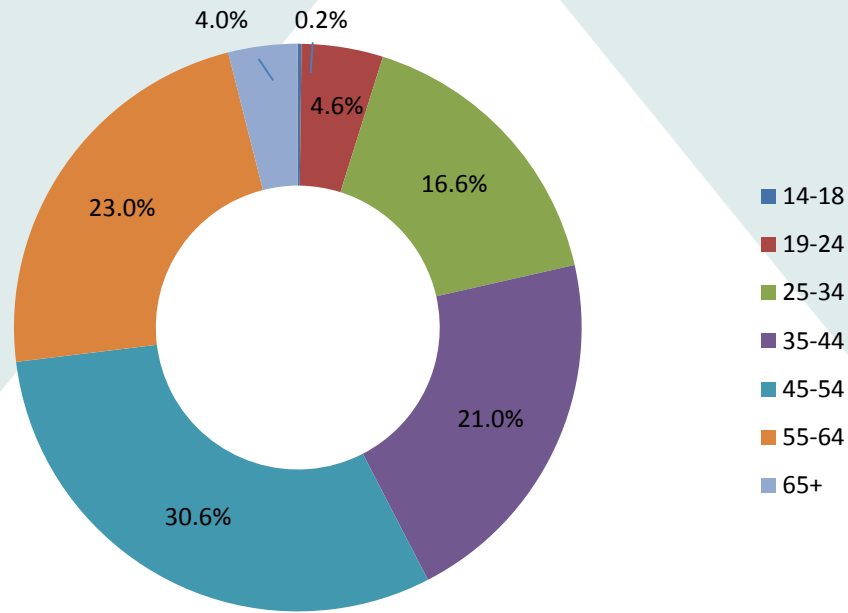
- Team Assemblers
- Machinists
- Computer-Controlled Machine Tool Operators
- Mechanical & Industrial Engineers
- Production Supervisors
- Electromechanical Equipment Assemblers
- Welders, Cutters, Solderers, and Brazers
- Inspectors, Testers, Sorters, Samplers, and Weighers
- General Operations Managers
- Industrial Machinery Mechanics
- Tool and Die Makers

Data Source: EMSI

Machinery Manufacturing continued

Workforce Characteristics

Age Distribution of Workforce



27% of the workforce in this cluster is 55 or older.

Gender Breakdown:
72% male
28% female

#4 Life Sciences Manufacturing & Research

6,799 Jobs (2016)

10% above National average

3.6% change (2016-21)

Nation: 4.8%

287 Establishments (2015)

\$100,486 Ave. Earnings (2016)

Nation: \$137,971

Of Regional Significance:

***Seacoast, Southern Tier, Southwest,
Upper Valley***

Sampling of industries in this cluster:

- Optical Instrument & Lens Mfg
- R&D in Physical, Engineering & Life Sciences
- Surgical Appliance & Supplies Mfg
- Surgical & Medical Instrument Mfg
- Biological Product Mfg
- Pharmaceutical Mfg
- Ophthalmic Goods Mfg
- Dental Equipment & Supplies Mfg

Sampling of occupations in this cluster:

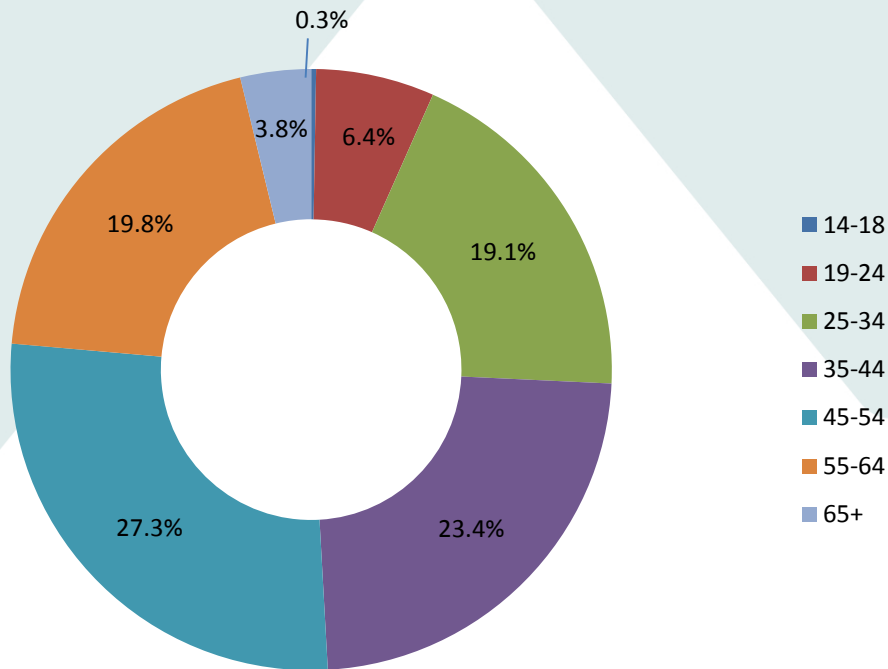
- Team Assemblers
- Inspectors, Testers, Sorters, Samplers, and Weighers
- Mechanical Engineers
- Managers & Supervisors
- Ophthalmic Laboratory Technicians
- Medical Scientists
- Dental Laboratory Technicians
- Electromechanical Equipment Assemblers
- Industrial Engineers
- Business Operations Specialists
- Chemists
- Software Developers
- Biological Technicians

Data Source: EMSI

Life Sciences Manufacturing & Research continued

Workforce Characteristics

Age Distribution of Workforce



24% of the workforce in this cluster is 55 or older.

Gender Breakdown:
59% male
41% female

#5 Composites & Advanced Textiles

6,905 Jobs (2016)

31% above National average

10.1% change (2016-21)

Nation: -6%

387 Establishments (2015)

\$55,899 Ave. Earnings (2016)

Nation: \$53,982

*Of Regional Significance:
Seacoast, Southern Tier,
Central, Southwest*

Sampling of industries in this cluster:

- Fastener, Button, Needle, and Pin Manufacturing
- Fabric Coating Mills
- Nonwoven Fabric Mills
- Broadwoven Fabric Mills
- Other Cut and Sew Apparel Manufacturing
- Outdoor Advertising
- Commercial Screen Printing
- Graphic Design
- Textile Bag & Canvas Mills
- Abrasive Product Mfg.

Sampling of occupations in this cluster:

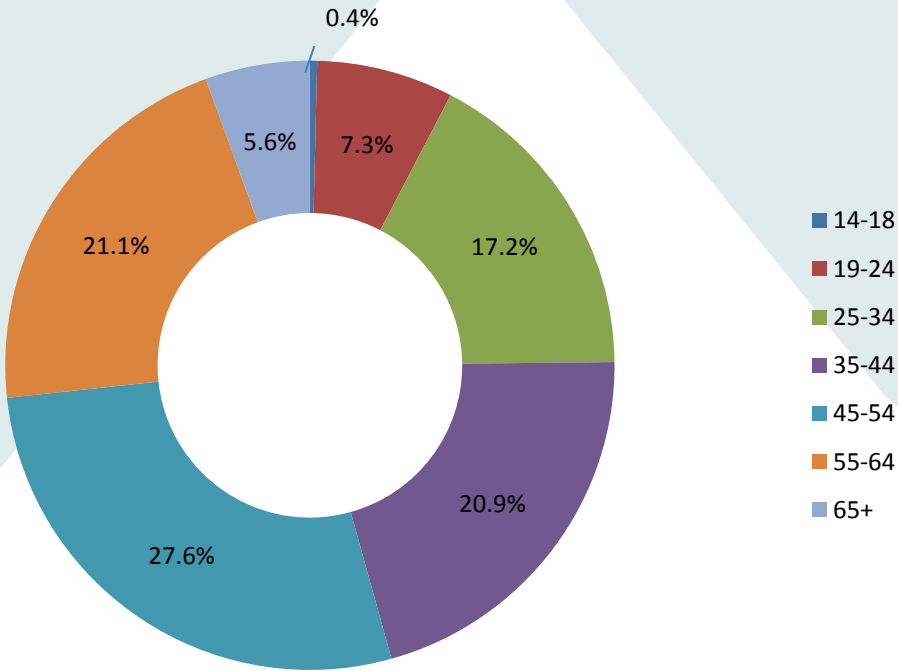
- Graphic Designer
- Sewing Machine Operator
- Textile, Knitting and Weaving Machine Setters, Operators and Tenders
- Advertising Sales Agents
- Printing Press Operators
- Inspectors, Testers, Sorters, Samplers, Weighers
- Production Supervisors
- Industrial Machinery Mechanics
- Assemblers and Fabricators

Data Source: EMSI

Composites & Advanced Textiles continued

Workforce Characteristics

Age Distribution of Workforce



27% of the workforce in this cluster is 55 or older.

Gender Breakdown:
54% male
46% female

#6 Business & Financial Services

68,861 Jobs (2016)

1% above National average

6.9% change (2016-21)

Nation: 6.6%

8,822 Establishments (2015)

\$100,857 Ave. Earnings (2016)

Nation: \$102,919

*Of Regional Significance in:
Seacoast, Southern Tier*

Sampling of industries in this cluster:

- Engineering Services
- Insurance Agencies
- Human Resources Consulting
- Marketing & Advertising
- Lawyers
- Investment Advice
- Payroll Services
- Scientific & Technical Consulting
- Architectural Services
- Testing Laboratories
- CPAs

Sampling of occupations in this cluster:

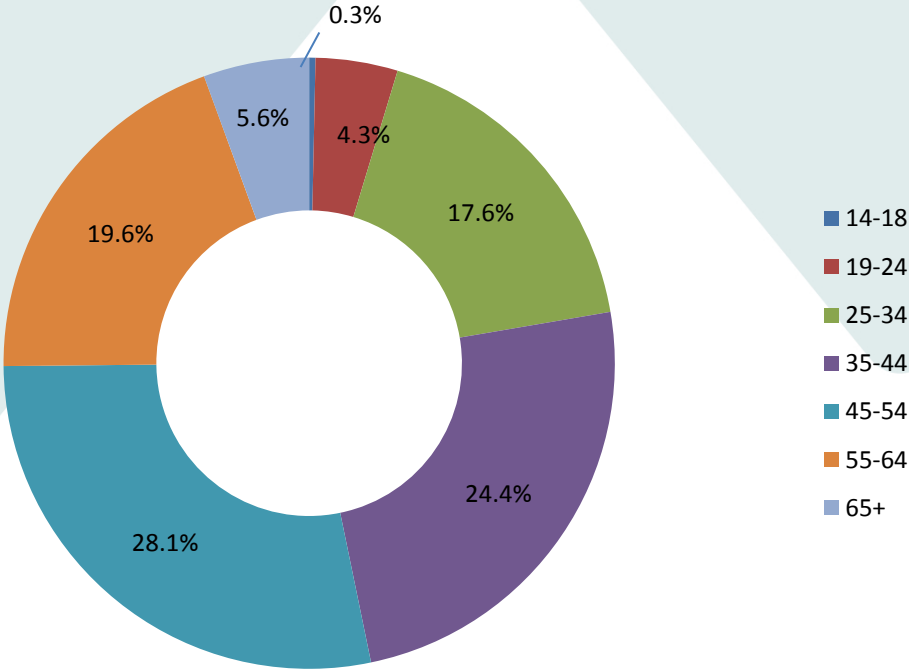
- Accountants and Auditors
- Insurance Sales Agents
- Customer Service Representatives
- Management Analysts
- Software Developers
- Office Clerks & Administrative Assistants
- Lawyers
- Securities, Commodities, and Financial Services Sales Agents
- General and Operations Managers
- Computer Systems Analysts
- First-Line Supervisors
- Claims Adjusters

Data Source: EMSI

Business & Financial Services continued

Workforce Characteristics

Age Distribution of Workforce



25% of the workforce in this cluster is 55 or older.

Gender Breakdown:
52% male
48% female

#7 Information Technology & Telecommunications

40,533 Jobs (2016)

32% above National average

2.3% change (2016-21)

Nation: 5.0%

3,850 Establishments (2015)

\$106,110 Ave. Earnings (2016)

Nation: \$113,900

*Of Regional Significance in:
Seacoast, Southern Tier*

Sampling of industries in this cluster:

- Computer Systems Design
- Software Publishers
- Data Processing, Hosting & Related Services
- Wiring Installation Contractors
- Wired Telecommunications Carriers
- Overlap with Advanced Electronics & Machinery Mfg
- Overlap with Business Services

Sampling of occupations in this cluster:

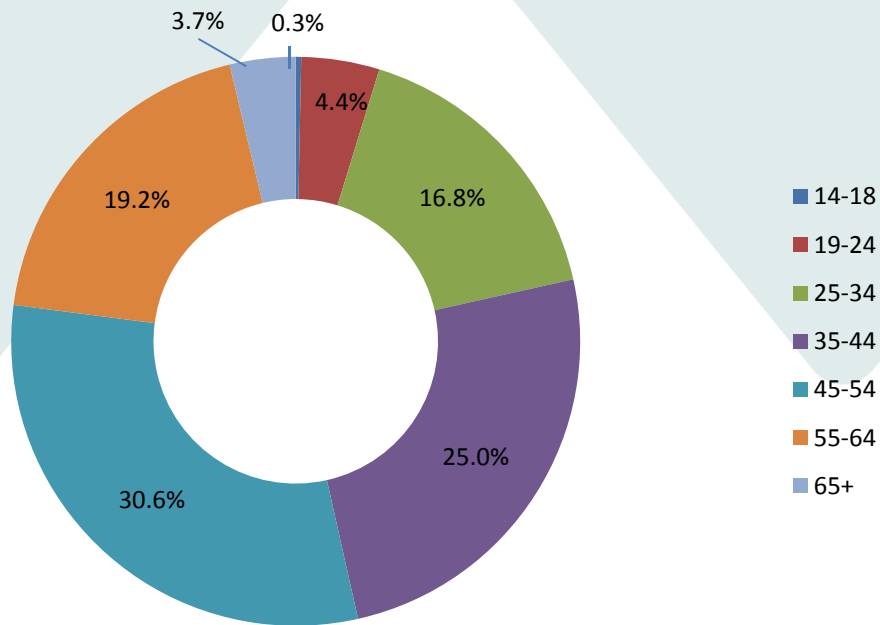
- Software Developers
- Electricians
- Electrical and Electronic Equipment Assemblers
- Computer Systems Analysts
- Computer Programmers
- Computer User Support Specialists
- Telecommunications Equipment Installers and Repairers
- Sales & Customer Service Representatives
- General Operations Managers
- Computer and Information Systems Managers
- Business Operations Specialists
- Network and Computer Systems Administrators

Data Source: EMSI

Information Technology & Telecommunications continued

Workforce Characteristics

Age Distribution of Workforce



23% of the workforce in this cluster is 55 or older.

Gender Breakdown:
69% male
31% female

#8 Arts, Entertainment & Visitor Industries

26,500 Jobs (2016)

2% above National average

3.9% change (2016-21)

Nation: 4.2%

1,713 Establishments (2015)

\$31,984 Ave. Earnings (2016)

Nation: \$44,206

*Of Regional Significance:
Lakes Region, Great North Woods,
White Mountains,
Upper Valley*

Sampling of industries in this cluster:

- Hotels, Inns, Bed & Breakfasts
- Golf Courses
- Ski Areas
- Summer Camps
- Amusement & Theme Parks
- Theater Companies
- Sports Teams & Clubs
- Arcades
- Movie & Drive-In Theaters
- Marinas
- Historical Sites
- Scenic & Sightseeing Transportation

Sampling of occupations in this cluster:

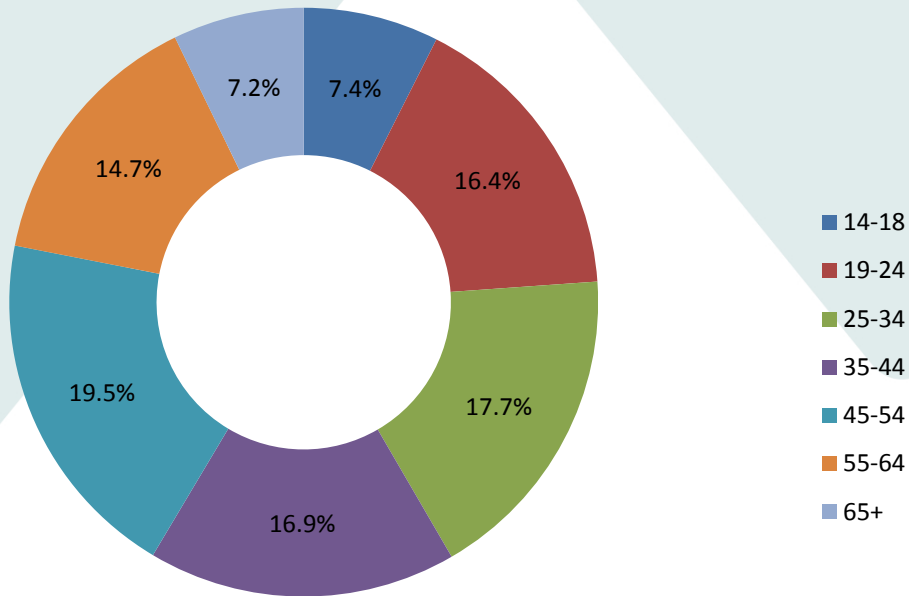
- Small Business Owners
- Wait Staff, Bartenders
- Fitness Trainers and Aerobics Instructors
- Hotel, Motel, and Resort Desk Clerks
- Landscaping and Groundskeeping Workers
- Amusement and Recreation Attendants
- Cashiers
- Maintenance and Repair Workers
- Recreation Workers
- General and Operations Managers

Data Source: EMSI

Arts, Entertainment & Visitor Industries continued

Workforce Characteristics

Age Distribution of Workforce



22% of the workforce in this cluster is 55 or older.

Gender Breakdown:
49% male
51% female

#9 Food & Beverage

54,825 Jobs (2016)

17% *below* National average

3.7% change (2016-21)

Nation: 4.8%

3,240 Establishments (2015)

\$26,358 Ave. Earnings (2016)

Nation: \$27,218

*Of Regional Significance:
Important to grow this industry
statewide to help with retention &
attraction of young talent.*

Sampling of industries in this cluster:

- Restaurants & Bars
- Farms (Vegetable, Animal, Dairy)
- Specialty Food Stores
- Breweries, Wineries, Distilleries
- Fruit & Vegetable Markets
- Support Activities for Animal Production
- Fishing
- Food Processing / Manufacturing

Sampling of occupations in this cluster:

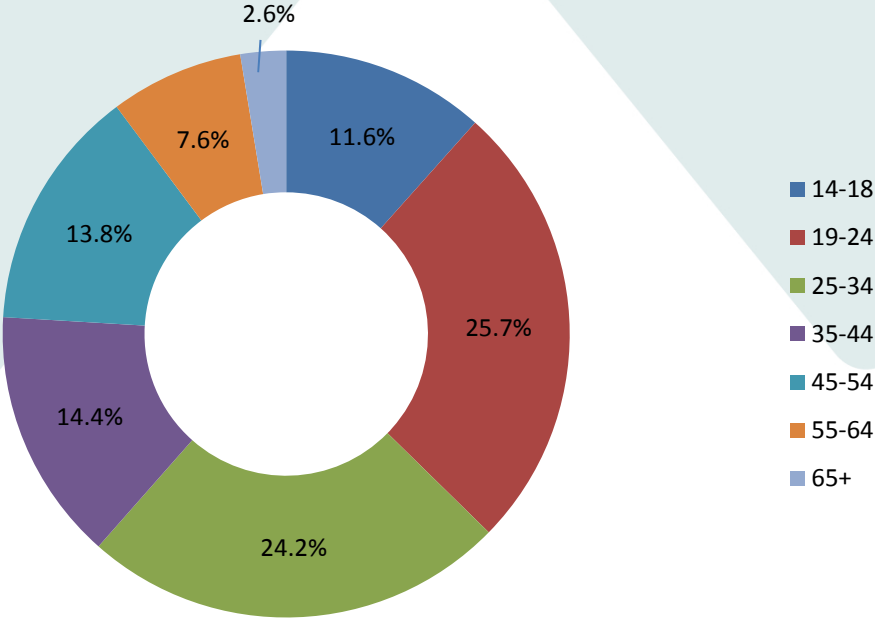
- Small Business Owners
- Wait Staff, Bartenders, Hosts
- Chefs, Cooks, Food Preparation Workers
- Supervisors, Managers
- Farmers
- Truck Drivers, Delivery People
- Bakers
- Food Batchmakers
- Sales Representatives

Data Source: EMSI

Food & Beverage continued

Workforce Characteristics

Age Distribution of Workforce



10% of the workforce in this cluster is 55 or older.

Gender Breakdown:
47% male
53% female

#10 Education & Knowledge Creation

31,279 Jobs (2016)

6% above National average

0.5% change (2016-21)

Nation: 5.9%

953 Establishments (2015)

\$59,033 Ave. Earnings (2016)

Nation: \$60,464

*Of Regional Significance:
Seacoast, Southern Tier,
Southwest, Upper Valley*

Sampling of industries in this cluster:

- Colleges, Universities, Professional Schools
- Newspaper Publishers
- Sports & Recreation Instruction
- Educational Support Services
- Fine Arts Schools
- Periodical Publishers
- Professional & Management Development Training
- Internet Publishing & Broadcasting & Web Search Portals
- Exam Preparation & Tutoring
- Flight Training

Note: does not include primary & secondary education

Sampling of occupations in this cluster:

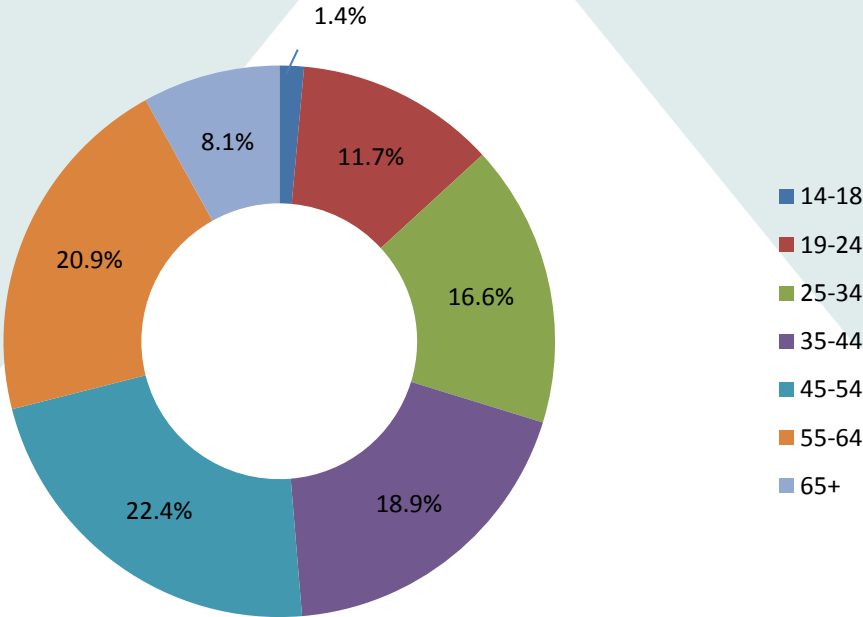
- Postsecondary Teachers
- Teachers and Instructors
- Office Clerks
- Secretaries and Administrative Assistants
- Janitors and Cleaners
- Office and Administrative Support Workers
- Self-Enrichment Education Teachers
- Education Administrators, Postsecondary
- Coaches and Scouts
- Teacher Assistants

Data Source: EMSI

Education & Knowledge Creation continued

Workforce Characteristics

Age Distribution of Workforce



29% of the workforce in this cluster is 55 or older.

Gender Breakdown:
43% male
57% female

#11 Forest & Wood Products

9,912 Jobs (2016)

6% *below* National average

-9.7% change (2016-21)

Nation: -6.1%

764 Establishments (2015)

\$52,468 Ave. Earnings (2016)

Nation: \$54,345

*Of Regional Significance:
Southwest, White Mountains,
Great North Woods*

Sampling of industries in this cluster:

- Contractors (roofing, siding, finish carpentry, framing)
- Logging
- Sawmills
- Lumber, Plywood, Millwork and Wood Panel Wholesalers
- Cabinet & Countertop Mfg
- Paper Mills
- Paper Bag and Coated/Treated Paper Mfg
- Prefabricated Wood Building Mfg
- Adhesive Mfg
- Wood Furniture Mfg
- Custom Woodwork/Millwork Mfg

Sampling of occupations in this cluster:

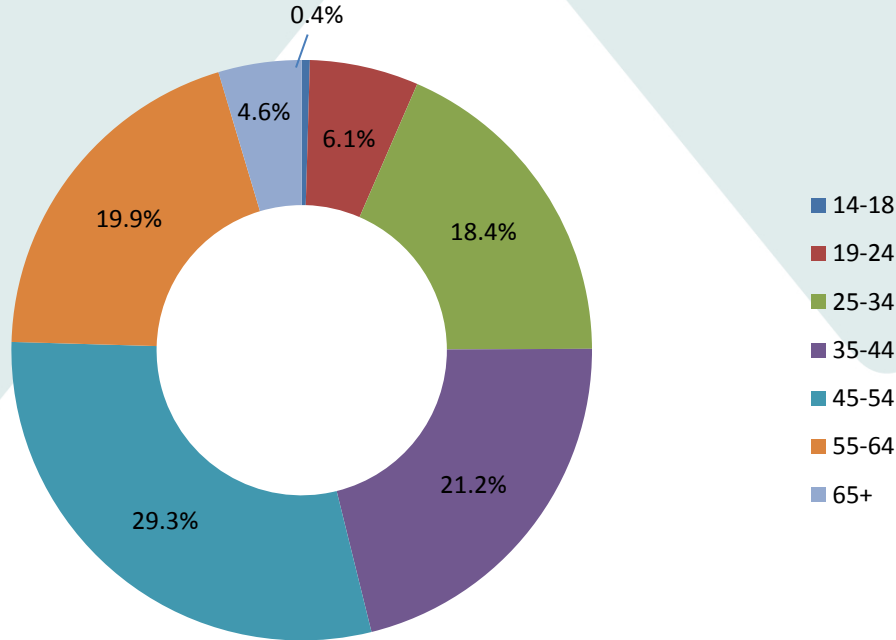
- Small business owner
- Carpenters
- Construction Laborers
- Logging Equipment Operators
- Woodworking and Sawing Machine Setters, Operators, and Tenders
- Cabinetmakers and Bench Carpenters
- Heavy and Tractor-Trailer Truck Drivers
- First-Line Supervisors of Construction Trades
- Roofers
- Sales Representatives
- Painters

Data Source: EMSI

Forest & Wood Products continued

Workforce Characteristics

Age Distribution of Workforce



25% of the workforce in this cluster is 55 or older.

Gender Breakdown:
86% male
14% female

Appendix I

RSA 12-A:65 Content of the Economic Development Strategy and Plan

1. The following, as a minimum, shall be considered in constructing the economic development strategy and plan:

Section	Text of RSA	Comments
a	<i>Consideration of the entire state.</i>	EDAC members have broad geographic representation. The survey of local and regional economic developers obtained direct input from across the state. The industry cluster analysis was conducted on a regional basis to ensure that all regions were considered.
b	<i>An analysis, led by the economic development advisory council, relative to business and industry, of New Hampshire strengths and advantages, and how they will be leveraged; analysis of weaknesses and obstacles, and suggestions on how to remedy or mitigate them; identification of opportunities and how to take advantage and benefit from them; and identification of threats and how to meet and deter them. The analysis, where appropriate, should suggest ownership of its various elements.</i>	The EDAC worked with staff to develop the four overarching goals based on an analysis of strengths, weaknesses, opportunities, and threats that the division faces in achieving its mission to support business growth in the state. Since this is a strategic plan for the division, the analysis was focused on the division's existing programs and how the division could offer new tools or programs to address weaknesses and opportunities. The EDAC is highly supportive of the division playing a leadership role in a comprehensive economic development strategy for the state, should adequate funding for such an effort be secured. Such a strategy would include a much broader SWOT analysis that goes beyond the division's programs.
c	<i>A needs forecast, based on research from both existing and targeted business and industry, that identifies issues and suggested initiatives so as to strengthen New Hampshire as a business and industry destination and to reinforce retention.</i>	The industry cluster analysis identifies key industries that the division will focus its business attraction marketing and outreach efforts on and also identifies key industries to focus its programs on for business retention purposes.

- d *Identification of economic, demographic, and other trends which may have both short-term and long-term influence on the economy of the state.*
- The industry cluster analysis includes employment and workforce demographic trends data for the state's key industries.
- e *The identification of business sectors that are of strategic importance to the state's economy and to the state's global business image, and development of specific strategies to promote the development of such sectors; and an analysis of new industries that can be targeted in New Hampshire and the rationale for their identification.*
- The industry cluster analysis identifies business sectors of strategic importance to the state's economy or those that are worthy of support due to their growth potential.
- f *Identification of how economic development ideas, advice, and information from relevant entities throughout the state will be solicited to strengthen strategies and plans; and how potential partners for the implementation of the strategies and plans, including, without limitation, the United States Commerce Department, local governments, regional planning commissions, regional economic development corporations, chambers of commerce, business associations, investors and other relevant entities will be integrated and engaged. Other states should also be studied to build an understanding of best practices that may be emulated.*
- For this first iteration of the division's strategic plan, we conducted a survey of local and regional economic development organizations (chambers of commerce, regional development corporations, regional planning commissions, town & city economic development staff, real estate brokers, and others). Going forward, this type of survey will be done every year to solicit ideas and information from relevant entities throughout the state to inform the annual updates of the division's strategic plan.
- g *Innovative programs to position and market the state to aid business recruitment and retention.*
- The industry cluster analysis resulted in a list of seven industries for the division to focus its business recruitment efforts on. During FY 16, we are developing a strategic marketing plan with the support of DRED's advertising agency to reach out to decision makers in these target industries. In FY 16, we have already participated in major trade shows within our target industries as per the objectives listed on page 10 Business Recruitment.

h *Economic performance metrics, to include the previous 3 fiscal years and objectives for the 2 years covered by the plan. Such metrics shall be contained in a state economic dashboard and updated regularly.*

The division now publishes an annual Economic Review that includes a wide variety of economic performance indicators. These are broad indicators that measure the health of New Hampshire's economy. The metrics defined in this plan relate directly to the division's programs and are not necessarily tied to broad economic metrics, which are influenced by many factors outside of our control.

i *Inter-department agreements with selected state agencies recognizing their role in economic development strategies, plans, and programs.*

The division has written agreements with the NH Innovation Research Center, the NH Small Business Development Center, and the NH Manufacturing Extension Partnership. These are important partners in providing a healthy ecosystem of support for New Hampshire's small businesses as outlined on page 17 Partnerships.

j *Identification of how the state will petition for and receive moneys, such as grants, to be used for economic development activities.*

The division regularly assesses and pursues federal grants and other funding opportunities to support its programs. We are somewhat limited in our ability to pursue additional federal grants because most require state match and our staff are already maxed out on matching their time for existing federal funding sources.

k *Consideration of how workforce education and training in cooperation with the university system, the community college system, private colleges and universities, and other workforce training organizations will be leveraged and enhanced.*

Goal #3 on page 8 addresses this component.

l *Provisions for export growth and how relationships will be fostered with New Hampshire's export-related service providers and with the Commerce Department's International Trade Administration; and provisions to improve the state's image as a destination for foreign business investment and location with overseas entities.*

m *Identification of a division liaison to communicate needs to the general court for the benefit of economic development.*

n *Provision to identify and carry out other economic development activities that the governor or the commissioner of the department of resources and economic development may request.*

The Office of International Commerce within the division has well-established relationships with the US Department of Commerce and other export-related service providers. We are currently exploring grant and partnership opportunities to develop a foreign direct investment (FDI) strategy for New Hampshire. If progress is made on securing resources to support FDI planning, then specific research and strategies will be developed for FDI and included in future updates of this plan.

The division's deputy director already serves in this role.

Goal #4 (to address the need for a state economic development strategy) addresses this component.

Appendix II - Regions

This document lists the zip codes used to create each of the eight regions the Division of Economic Development used for the industry cluster and demographic analysis in its FY 2016-17 strategic plan.

1. Great North Woods

03282 Wentworth
03570 Berlin
03575 Bretton Woods
03576 Colebrook
03579 Errol
03581 Gorham
03582 Groveton
03583 Jefferson
03584 Lancaster
03588 Milan
03592 Pittsburg
03593 Randolph
03597 West Stewartstown
03598 Whitefield

2. White Mountains

03215 Waterville Valley
03223 Campton
03251 Lincoln
03262 North Woodstock
03264 Plymouth
03266 Rumney
03279 Warren
03282 Wentworth
03285 Thornton
03293 Woodstock

03561 Littleton
03574 Bethlehem
03580 Franconia
03585 Lisbon
03586 Sugar Hill
03740 Bath
03765 Haverhill
03771 Monroe
03774 North Haverhill
03785 Woodsville
03812 Bartlett
03813 Center Conway
03818 Conway
03832 Eaton Center
03846 Jackson
03849 Madison
03860 North Conway

3. Upper Valley

03240 Grafton
03255 Newbury
03257 New London
03280 Washington
03284 Springfield
03287 Wilmot
03601 Acworth
03603 Charlestown

03605 Lempster
03607 South Acworth
03741 Canaan
03743 Claremont
03745 Cornish
03746 Cornish Flat
03748 Enfield
03749 Enfield Center
03752 Goshen
03753 Grantham
03754 Guild
03755 Hanover
03756 Lebanon
03766 Lebanon
03768 Lyme
03769 Lyme Center
03777 Orford
03779 Piermont
03781 Plainfield
03782 Sunapee
03784 West Lebanon

4. Lakes Region

03216 Andover
03217 Ashland
03218 Barnstead
03220 Belmont
03222 Bristol
03226 Center Harbor
03227 Center Sandwich
03230 Danbury
03231 East Andover
03235 Franklin

03237 Gilmanston
03241 Hebron
03243 Hill
03245 Holderness
03246 Laconia
03247 Laconia
03249 Gilford
03253 Meredith
03254 Moultonborough
03256 New Hampton
03259 North Sandwich
03269 Sanbornton
03276 Tilton
03298 Tilton
03299 Tilton
03809 Alton
03810 Alton Bay
03814 Center Ossipee
03816 Center Tuftonboro
03836 Freedom
03837 Gilmanston Iron Works
03864 Ossipee
03882 Effingham
03883 South Tamworth
03886 Tamworth
03890 West Ossipee
03894 Wolfeboro
03896 Wolfeboro Falls

5. Central

03037 Deerfield
03046 Dunbarton
03221 Bradford

03224 Canterbury
03229 Contoocook
03234 Epsom
03242 Henniker
03244 Hillsborough
03258 Chichester
03260 North Sutton
03263 Pittsfield
03268 Salisbury
03273 South Sutton
03275 Suncook
03278 Warner
03301 Concord
03302 Concord
03303 Concord
03304 Bow
03305 Concord
03307 Loudon

6. Southwest

03047 Greenfield
03048 Greenville
03071 New Ipswich
03084 Temple
03431 Keene
03435 Keene
03440 Antrim
03442 Bennington
03443 Chesterfield
03444 Dublin
03445 Sullivan
03446 Swanzey
03447 Fitzwilliam

03448 Gilsum
03449 Hancock
03450 Harrisville
03451 Hinsdale
03452 Jaffrey
03455 Marlborough
03456 Marlow
03457 Nelson
03458 Peterborough
03461 Rindge
03464 Stoddard
03465 Troy
03467 Westmoreland
03468 West Peterborough
03469 West Swanzey
03470 Winchester
03602 Alstead
03608 Walpole
03609 North Walpole

7. Southern Tier

03031 Amherst
03032 Auburn
03033 Brookline
03034 Candia
03036 Chester
03037 Deerfield
03038 Derry
03040 East Candia
03043 Frankestown
03045 Goffstown
03049 Hollis
03051 Hudson

03052 Litchfield
03053 Londonderry
03054 Merrimack
03055 Milford
03057 Mont Vernon
03060 Nashua
03061 Nashua
03062 Nashua
03063 Nashua
03064 Nashua
03070 New Boston
03076 Pelham
03077 Raymond
03082 Lyndeborough
03086 Wilton
03087 Windham
03101 Manchester
03102 Manchester
03103 Manchester
03104 Manchester
03105 Manchester
03106 Hooksett
03108 Manchester
03109 Manchester
03110 Bedford
03111 Manchester
03281 Weare

8. Seacoast

03042 Epping
03044 Fremont
03073 North Salem
03261 Northwood

03290 Nottingham
03291 West Nottingham
03801 Portsmouth
03802 Portsmouth
03803 Portsmouth
03804 Portsmouth
03811 Atkinson
03815 Center Strafford
03819 Danville
03820 Dover
03821 Dover
03822 Dover
03823 Madbury
03824 Durham
03825 Barrington
03827 East Kingston
03830 East Wakefield
03833 Exeter
03840 Greenland
03841 Hampstead
03842 Hampton
03843 Hampton
03844 Hampton Falls
03848 Kingston
03851 Milton
03852 Milton Mills
03854 New Castle
03855 New Durham
03856 Newfields
03857 Newmarket
03858 Newton
03859 Newton Junction
03861 Lee
03862 North Hampton

03865 Plaistow
03866 Rochester
03867 Rochester
03868 Rochester
03869 Rollinsford
03870 Rye
03871 Rye Beach
03873 Sandown
03874 Seabrook
03878 Somersworth
03884 Strafford
03885 Stratham