

# Sector 54 Professional, Scientific & Technical Services in New Hampshire

a Labor Market Information Report

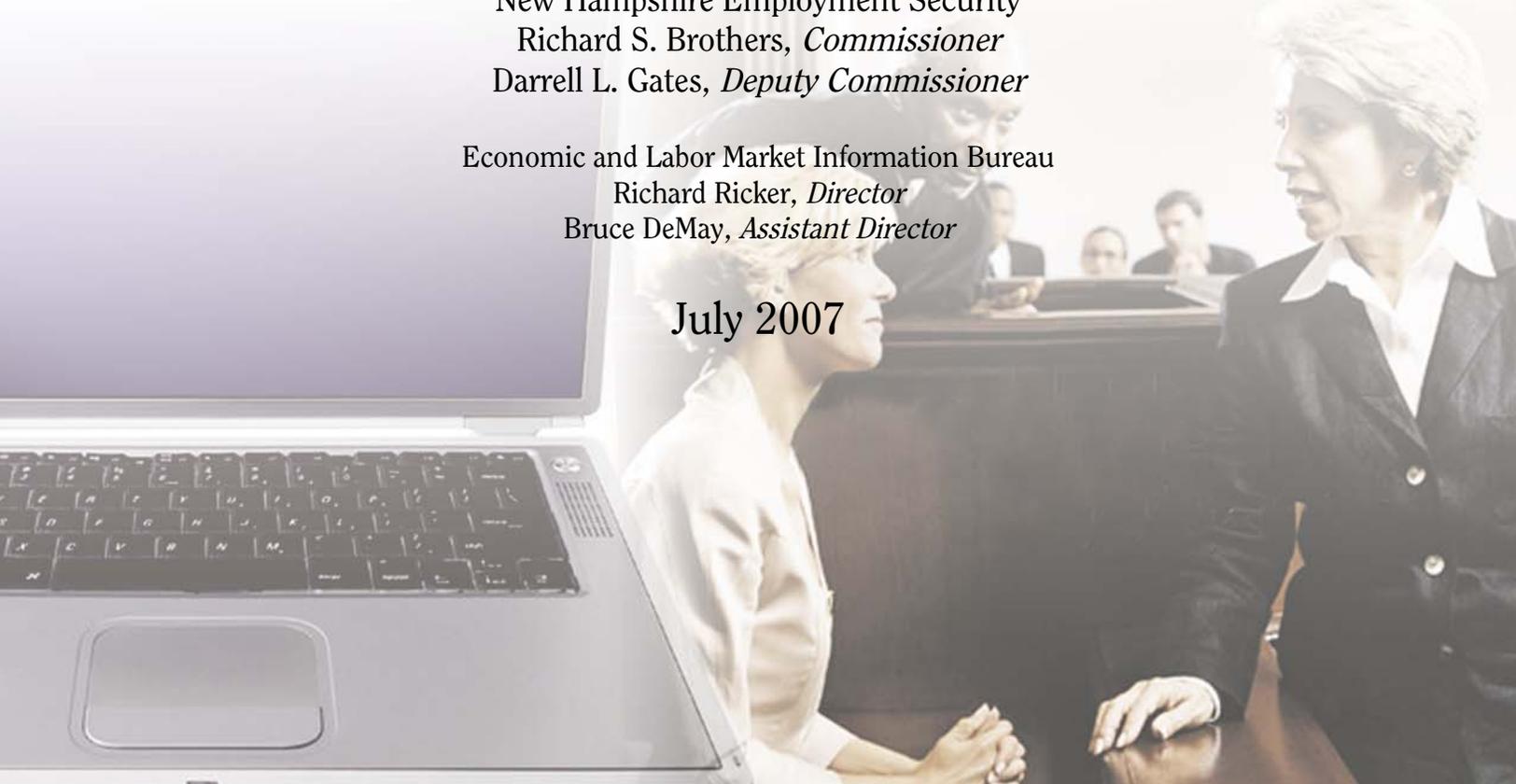


State of New Hampshire  
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New Hampshire Employment Security  
Richard S. Brothers, *Commissioner*  
Darrell L. Gates, *Deputy Commissioner*

Economic and Labor Market Information Bureau  
Richard Ricker, *Director*  
Bruce DeMay, *Assistant Director*

July 2007



## Sector 54 - Professional, Scientific & Technical Services in New Hampshire

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A lawyer, an architect, and an accountant are out fishing in a boat . . .

What do they have in common?

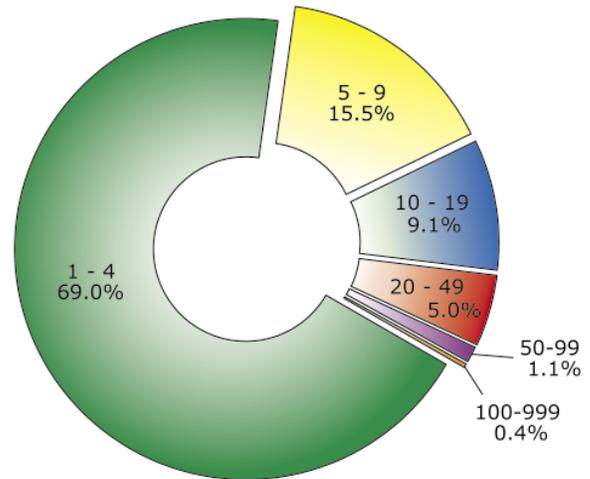
### NAICS Sector 54

Sector 54 is the industry group that ties these three diverse professions together. These are but a few of the many technically skilled occupations that are characteristic of this industry sector. It is called the *Professional, scientific and technical services* sector.

What differentiates Sector 54 from other industries is the highly specialized nature of its industry groups. These industry groups are defined by their human capital, the skills and knowledge of its workers. Rather than being dependent on the equipment or materials, these industries sell expertise. Specialties performed include:<sup>1</sup>

- ◆ legal advice and representation
- ◆ accounting, bookkeeping, and payroll services
- ◆ architectural services
- ◆ engineering, and specialized design services
- ◆ computer services
- ◆ consulting services
- ◆ research services
- ◆ advertising services
- ◆ photographic services
- ◆ translation and interpretation services
- ◆ veterinary services
- ◆ and other professional, scientific, and technical services

Sector 54 Percent of Firms by Size\*



\* Firms by size is a measure taken at a point in time. In New Hampshire it is done in March annually.

<sup>1</sup> Definition provided in North American Industry Classification System 2002, Department of Commerce, Office of Management and Budget. This sector excludes establishments primarily engaged in providing a range of day-to-day office administrative services, such as financial planning, billing and recordkeeping, personnel, and physical distribution and logistics. These establishments are classified in Sector 56, Administrative and Support and Waste Management and Remediation Services.

## Sector 54 - Professional, Scientific & Technical Services in New Hampshire

### Background

With the conversion to the North American Industry Classification System (NAICS), the industry definitions more closely represent what a business in a given location does. What used to be grouped together broadly as “service” industries are now more clearly defined; for example, engineering is now separated from management companies, and related types of services are grouped together.

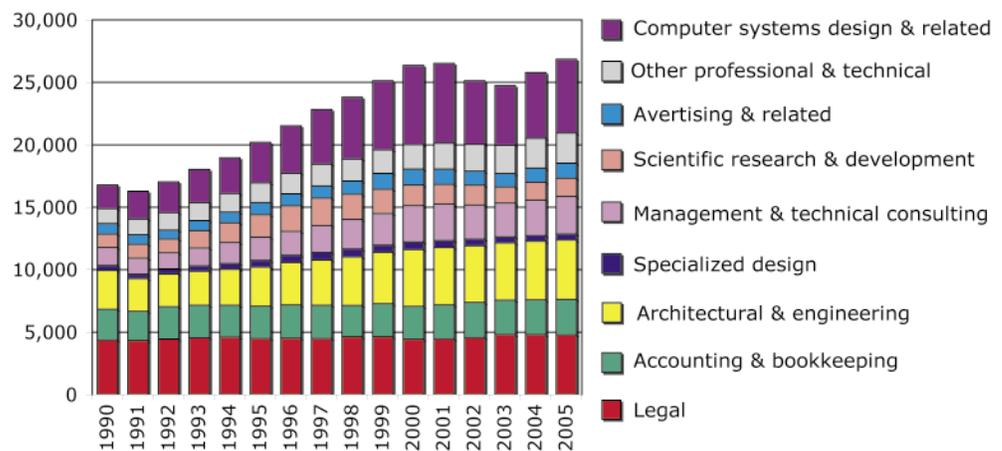
In 2005, New Hampshire’s Sector 54:

- ◆ had the fifth highest average weekly wage of \$1,204.41
  - ◆ was \$415.48 higher than the average for all other private industries in the state
- ◆ possessed 11.1 percent of private employing units
  - ◆ over 84 percent of those were firms with fewer than 10 employees, compared to 75 percent statewide
- ◆ employed 5.0 percent of private workers
- ◆ generated 7.6 percent of total private wages in the state

### Employment

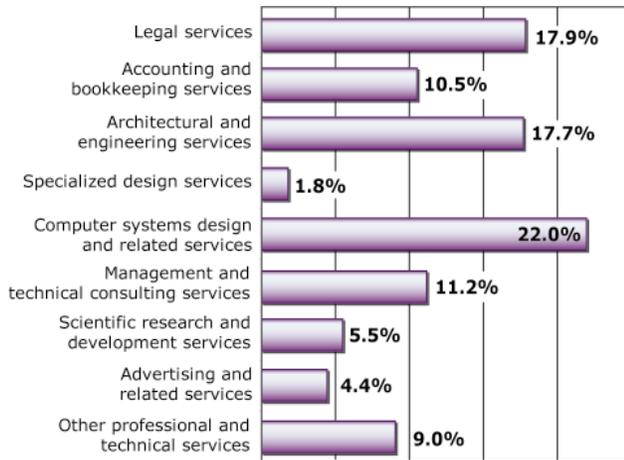
Employment in Sector 54, the *Professional, scientific, and technical services* industry, had steadily increased from 1990 to 2001. Sector 54 employed 16,771 workers in 1990. That level continued to grow through 2001 when it reached 26,517 people. Then the bottom fell out of the “.com” market which had employed a significant number of workers in the sector. Declines in *Computer systems design and related services* had pulled the sector’s employment down by 1,600 positions by 2003. Additional job reductions from related *Management and technical consulting services* (200 jobs) and *Scientific research and development services* (300 jobs) combined to drag the sector’s total employment down to 24,740 jobs that year. The economic slowdown and minimal employment gains for the next couple of years also contributed to the slow recovery. However, by 2005, employment in the sector hit a new high of 26,857 jobs.

Sector 54 Employment Trends



## Sector 54 - Professional, Scientific & Technical Services in New Hampshire

### Sector 54 Shares of 2005 Employment



Within Sector 54, the *Computer systems design and related services* industry group had the largest share of employment at 22.0 percent in 2005. *Legal services* and *Architectural and engineering services* followed that, vying for second largest share with 17.9 and 17.7 percent, respectively. *Management and technical consulting services* held the fourth largest employment share of 11.2 percent. *Accounting and bookkeeping services* also had a significant share of employment with 10.5 percent, followed by *Other professional and technical services* with 9.0 percent.

The last three groups had much smaller employment shares. *Scientific research and development services* had 5.5 percent of the sector's employment, and *Advertising and related services* had 4.4 percent. *Specialized design services*, the group that provides design services for anything not computer or architectural related, was the smallest employing industry group in the sector.

### Future employment

Jobs associated with Sector 54 are expected to grow at a rate of 26.1 percent from 2004 to 2014. That is 9.4 percentage points faster than the projected growth rate for the state overall. That also represents 6,726 new jobs within the sector by 2014.

Among the industry groups of the sector, *Management, scientific, and technical consulting services* is expected to add the most jobs, 1,527 workers, along with having the fastest growth rate of 53.5 percent by 2014. Only one industry group, *Architectural, engineering and related services*, is looking at an expected growth rate slower than that of the state, 15.1 percent. That is 1.6 percentage points slower than all industries.

### Projected Employment 2004-2014

NAICS Code	Industry	Employment		Change	
		2004 Estimated	2014 Projected	Net	Percent
54	Professional, Scientific, and Technical Services	25,772	32,498	6,726	26.1%
5411	Legal Services	4,816	5,807	991	20.6%
5412	Accounting, Tax Preparation, Bookkeeping, & Payroll Services	2,767	3,378	611	22.1%
5413	Architectural, Engineering, and Related Services	4,689	5,397	708	15.1%
5414	Specialized Design Services	458	600	142	31.0%
5415	Computer Systems Design and Related Services	5,246	6,546	1,300	24.8%
5416	Management, Scientific, and Technical Consulting Services	2,854	4,381	1,527	53.5%
5417	Scientific Research and Development Services	1,422	1,757	335	23.6%
5418	Advertising and Related Services	1,120	1,480	360	32.1%
5419	Other Professional, Scientific, and Technical Services	2,400	3,152	752	31.3%

## Sector 54 - Professional, Scientific & Technical Services in New Hampshire

### Wages

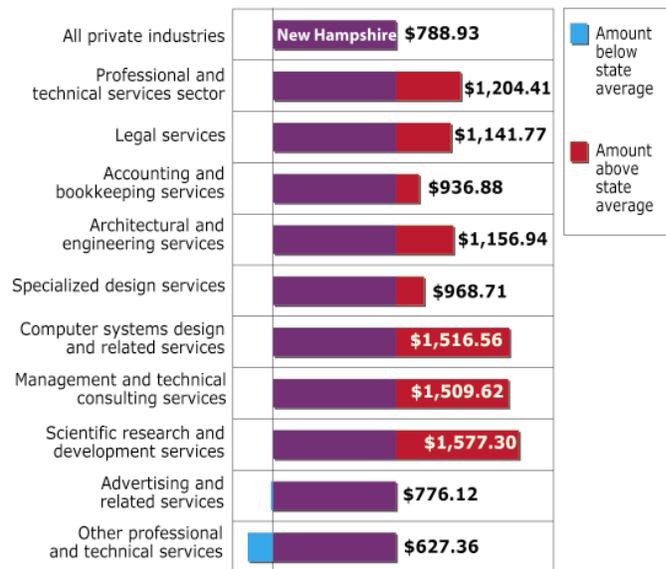
In 2005, the average weekly wages among the industries in Sector 54 reflect the specialties of the industry, with the more demanding specialties paying higher wages. The average weekly wage for the whole sector was \$1,204.41 in 2005. That surpassed the state average of \$788.93<sup>2</sup> by \$415.48, or 52.7 percent.

*Scientific research and development services*, an elite group that conducts original investigations and develops how those findings can be applied to situations, is the top paying industry group at \$1,577.30. The effect this has on the sector's average is tempered somewhat because in 2005 it employed only 1,475 of the sector's 26,857 people.

*Computer systems design and related services*, the largest employing industry group in the sector, held the second highest average weekly wage of \$1,516.56. Almost 22 percent of the people employed in Sector 54 were in this industry group. Very close to that wage level were the wages of the *Management and technical consulting services* industry group at \$1,509.62. That industry group employed almost 3,000 people by 2005.

*Architectural and engineering services* and *Legal services* each had an average weekly wage close to \$1,150, about \$50 shy of the average for the sector as a whole. Workers in *Specialized design services* and *Accounting and bookkeeping services* had average wages roughly \$150 higher than the average of all workers in New Hampshire.

### Sector 54 Average Weekly Wage Compared to All New Hampshire Private Industries



The occupational mix in the *Legal services* industry can explain the wages of the group. Over half of its workers are paid less than \$20 an hour, lessening the effect of the higher wage jobs. Additionally, many attorneys may be self employed, thus their count and associated wage levels are not included. The occupational mix in the other industry groups can help explain the wages being slightly muted.

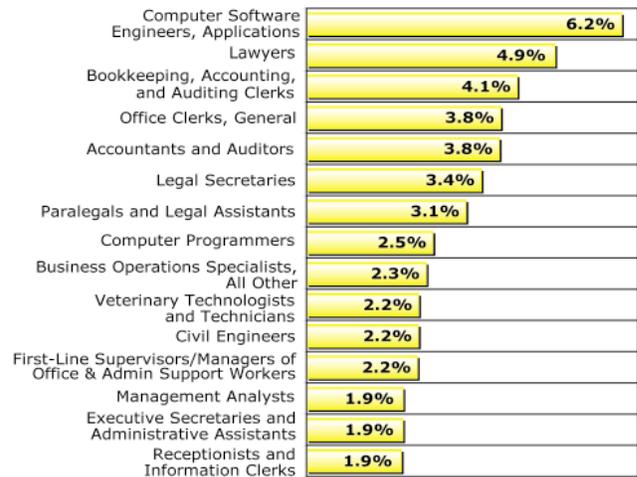
Only two industry groups, *Advertising and related services* and *Other professional and technical services* had average weekly wages lower than the 2005 average of \$788 for all private employment in the state.

<sup>2</sup> Average weekly wage for private covered workers in New Hampshire for 2005.

## Sector 54 - Professional, Scientific & Technical Services in New Hampshire

### Occupational staffing patterns

There is great diversity in the specialties of the services provided in Sector 54. Because of that, it is difficult to determine the type of job that is most prominent in the sector. Within the entire sector there is the same diversity of occupations based on the expertise they work in and the number employed in that specialty.



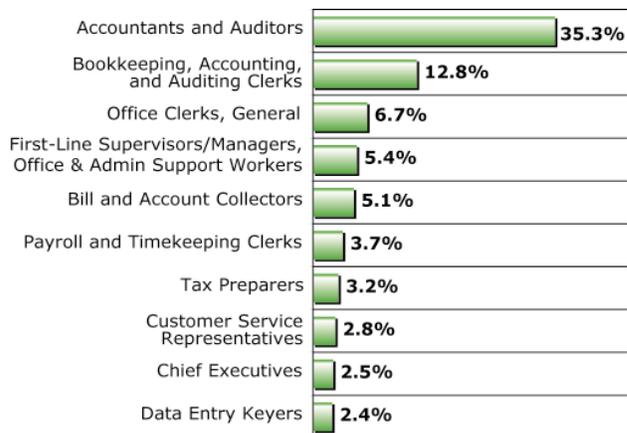
### Legal services (industry group 5411)

*Legal services* had the second highest employment level in 2005, with almost 4,800 workers, among the industry groups in the sector. Lawyers made up more than one-quarter of the jobs in this industry group. The next highest count of jobs were Legal Secretaries, accounting for almost another 20 percent of workers. Paralegals and Legal Assistants had the third highest concentration, 17.0 percent, of jobs in this industry group. The remaining occupations are primarily support jobs to make sure the offices run efficiently.



### Accounting, Tax Preparation, Bookkeeping, and Payroll (industry group 5412)

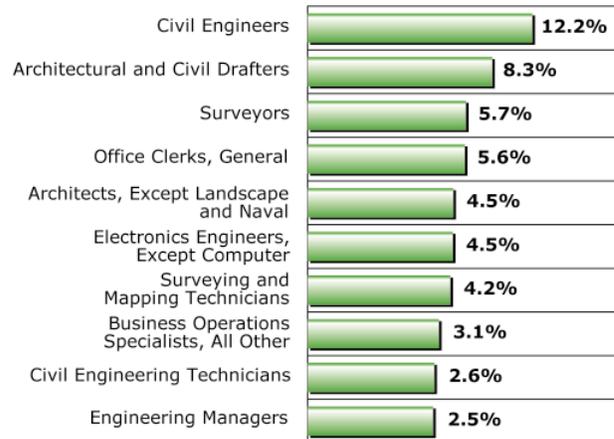
Just over 2,800 workers were in this industry group in 2005. Over 35 percent of those were Accountants and Auditors. Bookkeeping, Accounting, and Auditing Clerks followed far behind with 12.8 percent of the jobs. Although listed in the title of the industry group, Payroll and Timekeeping Clerks, along with Tax Preparers each had a mere three percent of the industry jobs.



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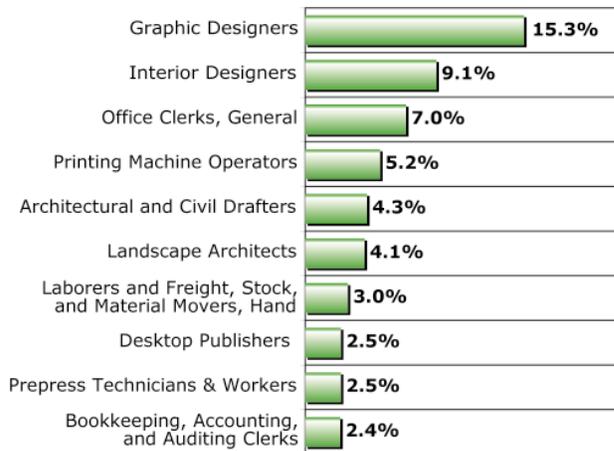
### Architectural and Engineering Services (industry group 5413)

In 2005, the top two occupations within the *Architectural and engineering services* industry group were Civil Engineers, with 12.2 percent, roughly 590 workers, and Architectural and Civil Drafters with 8.3 percent, or about 395 workers. Surveyors were next with 5.7 percent of this industry group's occupations. Similar to most of the other specialty industry groups in Sector 54, General Office Clerks are plentiful, with the fourth highest concentration of workers, 5.6 percent.



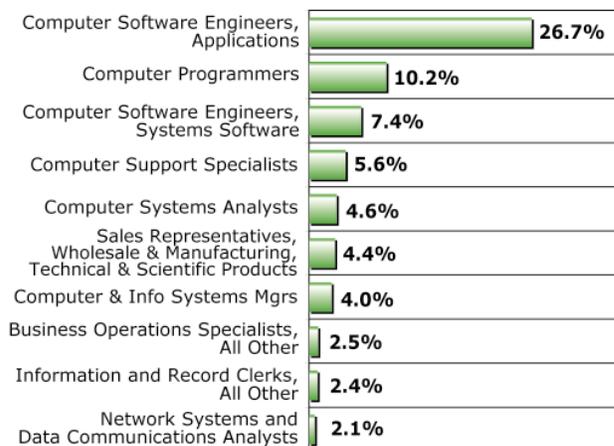
### Specialized Design Services (industry group 5414)

Fewer than 500 were employed in this specialized industry group in 2005, and just over 15 percent, or 75, of those are employed as Graphic Designers. Interior Designers, with 9.1 percent, held the next highest concentration in this industry group. An efficiently run office is imperative to keep business running smoothly and the value of General Office Clerks is evident as they hold the third highest concentration of jobs in the industry group.



### Computer Systems Design and Related Services (industry group 5415)

The growing dependence on electronic communications and services has made this one of the most expansive industry groups in Sector 54. Of the 5,900 workers in 2005 in this group, 1,575 were Computer Software Applications Engineers. This occupation is among the top five fastest growing occupations in New Hampshire according to the 2004 to 2014 Employment Projections. Seven of the ten occupations with the highest concentrations in this industry are computer oriented. These occupations with growing demand can help explain the higher wages of this group.



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### Management, Scientific, and Technical Consulting Services (industry group 5416)

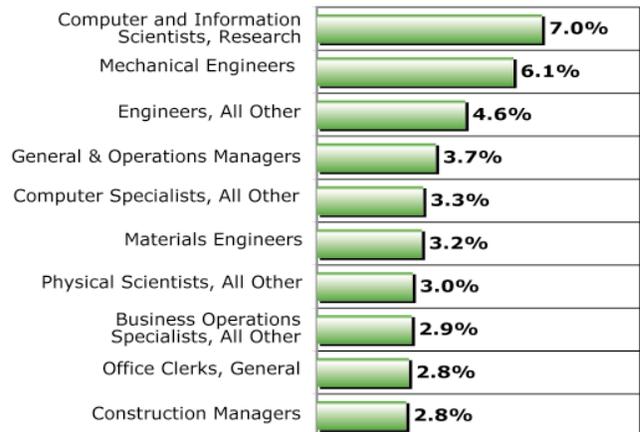
Roughly 3,000 workers were employed in this industry group in 2005. The services provided by this industry are universal in demand. Companies included in this industry group provide advice and assistance to businesses and other organizations on management issues, such as strategic and organizational planning; financial planning and budgeting; marketing objectives and policies; human resource policies, practices, and planning; production scheduling; and control planning.

The wide scope of expertise helps make this group among the fastest growing industry groups in Sector 54. The occupational concentrations in this group more closely resemble that of other business organizations. Management Analysts led the job concentration in this group with 13.8 percent of the 2005 industry group employment. Bookkeepers, Placement Specialists, and Sales Representatives are among other occupations with high concentrations in the group.



### Scientific Research and Development Services (industry group 5417)

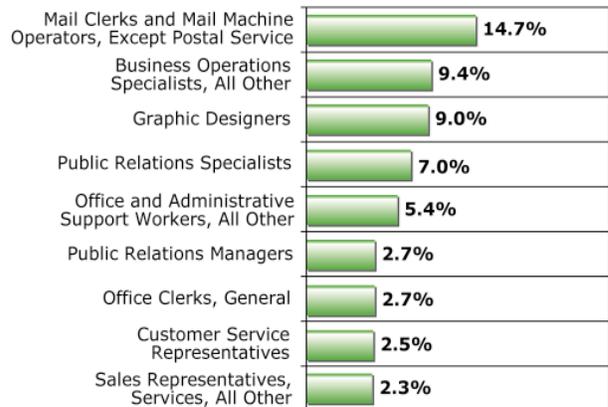
Computer and Information Research Scientists held 105 positions, 7.0 percent, of the employment of this industry group. Following with approximately 90 and 74 jobs each were Mechanical Engineers and All Other Engineers, 6.1 and 4.6 percent respectively. The remaining occupations held concentration levels close to three and four percent, representing between 45 and 60 jobs each.



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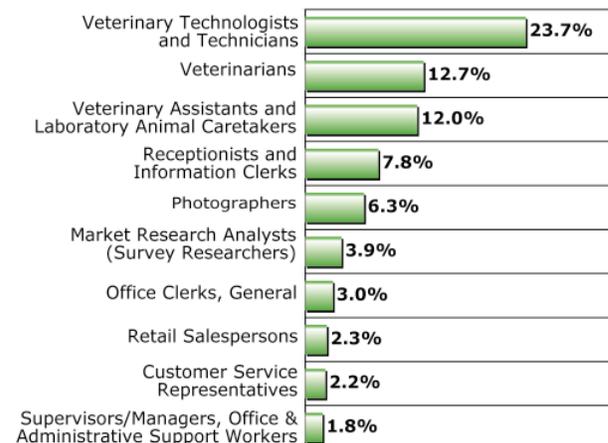
### Advertising and Related Services (industry group 5418)

The abundance of commercial flyers and advertising brochures in the mailbox on a daily basis helps provide an explanation why Mail Clerks and Mail Machine Operators had the highest concentration of jobs, 14.7 percent, in the advertising group in 2005. Two other jobs that were found frequently in this industry were Business Operations Specialists and Graphic Designers with 9.4 and 9.0 percent respectively. Their concentration levels were closely followed by that of Public Relations Specialists.



### Other Professional and Technical Services (industry group 5419)

This is the residual industry group that captures any expertise that isn't included as part of the other specialty groups. The occupation holding the largest employment concentration in the group is Veterinary Technologists and Technicians with 23.7 percent of the group's employment. That represents almost 580 jobs. The next two occupations are closely related, Veterinarians and Veterinary Assistants, and Laboratory Animal Caretakers. They have close to 300 jobs each with between 12 and 13 percent of the employment.



### In Closing

The increasing importance of research and development, and computer skills promises to continue. Employment in Sector 54 has been growing, and demand will cause that growth to persist. Although employment in Sector 54 dropped with the 2001 recession, it has regained the pre-recession level of over 26,800 workers. The 2004 to 2014 projections indicate another 6,700 workers will be added to the sector during that period.

Average wages among the industry groups in the sector, because of the specialties represented, tend to be higher compared to the statewide average of all industries. These wages only represent those workers covered by unemployment compensation, and do not include the self employed contractors.

## New Hampshire Employment Security Locations

### Berlin (752-5500)

151 Pleasant St., P.O. Box 159, 03570-0159

### Claremont (543-3111)

404 Washington St., P.O. Box 180, 03743-0180

### Concord (228-4100)

10 West St., P.O. Box 1140, 03302-1140

### Conway (447-5924)

518 White Mountain Highway, 03818-4205

### Keene (352-1904)

109 Key Rd., 03431-3926

### Laconia (524-3960)

426 Union Ave., Ste. 3, 03246-2894

### Lebanon (448-6340)

85 Mechanic St., 03766-1506

### Littleton (444-2971)

646 Union St., Ste. 100, 03561-5314

### Manchester (627-7841)

300 Hanover St., 03104-4957

### Nashua (882-5177)

6 Townsend West, 03063-1217

### Portsmouth (436-3702)

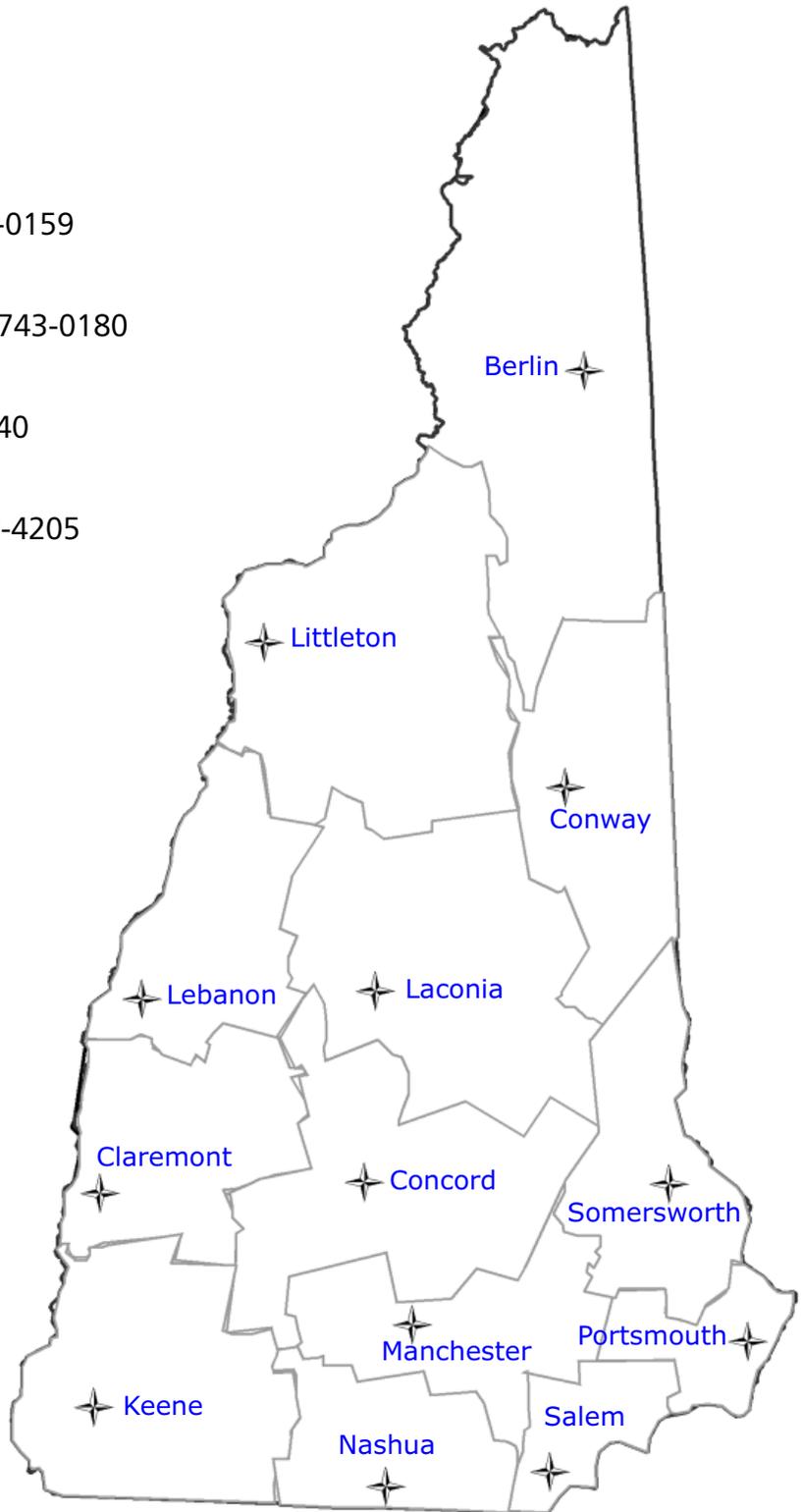
2000 Lafayette Rd., 03801-5673

### Salem (893-9185)

29 South Broadway, 03079-3026

### Somersworth (742-3600)

243 Rt. 108, 03878-1512



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