

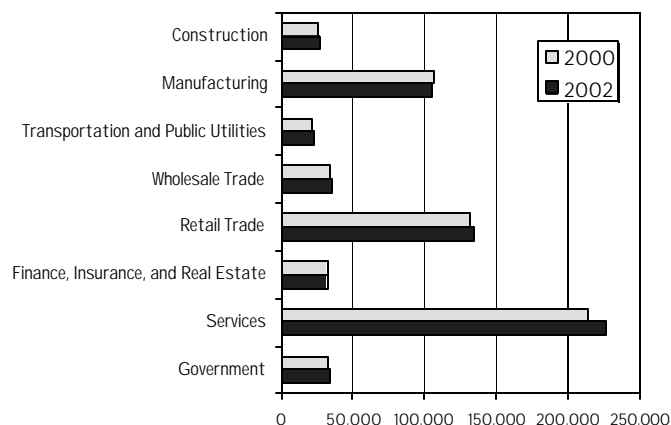
Short-term Projections, 2000-2002

Short-term projections attempt to identify current employment trends in New Hampshire's industries and occupations. The goal is to present timely information so that job seekers – new entrants and dislocated workers – may make informed decisions about job choices, and if necessary, enroll in short-term training. Projections can also be used by educational institutions to assist in developing training programs for occupations in demand. These forecasts should be used in conjunction with long-term projections (1998-2008) and other economic information published by ELM I.

Short-term projections are based on monthly employment data from the Covered Employment and Wages Program (ES-202) and historical trends of self-employed workers.

- ❖ Base period is second quarter 2000. Projections are for second quarter 2002. No projections have been made for intervening quarters.
- ❖ Industry projections are developed by using the Short Term Industry Forecasting System developed by America's Labor Market Information System (ALMIS).
- ❖ Occupational projections are created by applying Occupational Employment Statistics (OES) industry staffing patterns to industry projections.
- ❖ Short-term projections have not been made for railroad employment, federal postal service and agricultural employment.
- ❖ Forecasts of Health services and Educational services include public (government) employment in hospitals and schools.

Short-term Employment Projections by Major Industry Group



Industry Projections

Overview

Covered employment is projected to grow by 3.1 percent during the projection period. This will be well below the 5.9 percent growth from 1998 to 2000. Weakness in Manufacturing is expected to result in job losses throughout most industries in durable and nondurable goods. Modest losses are projected for Finance, insurance, and real estate, but all other major industry groups should gain jobs. Services alone will account for 64 percent of all jobs created in the projection period.

Construction

Employment in construction is dependent on economic conditions, population growth, and the level of interest rates. Construction is projected to add over 800 jobs, mostly in General building contractors. Special trade contractors are also projected to add jobs, but Heavy construction will show some weakness as jobs decrease by nearly 150.

Manufacturing

Weakening in manufacturing at the national level should cause a decrease in Manufacturing employment in the state. Layoffs in Electronics and other electrical equipment and Industrial machinery and equipment have already been felt. By the second quarter of 2002, job losses are projected to approach nearly 1,700, or 1.6 percent of total Manufacturing employment in 2000.

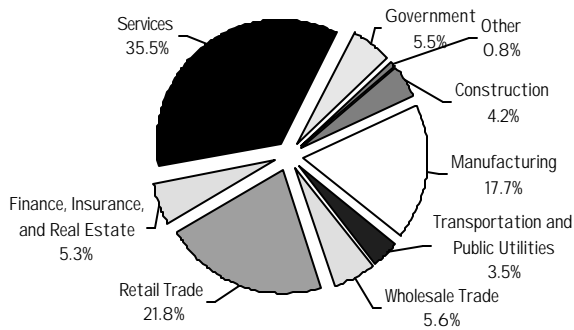
Manufacturing industries in New Hampshire generally sell most of their output outside of the state, making them vulnerable to national economic trends.

Manufacturing accounted for 17.7 percent of covered employment in the second quarter of 2000. By the second quarter of 2002, manufacturing's share of employment is projected to drop to 16.9 percent. In comparison, manufacturing accounted for 14.0 percent of U.S. employment in 2000.

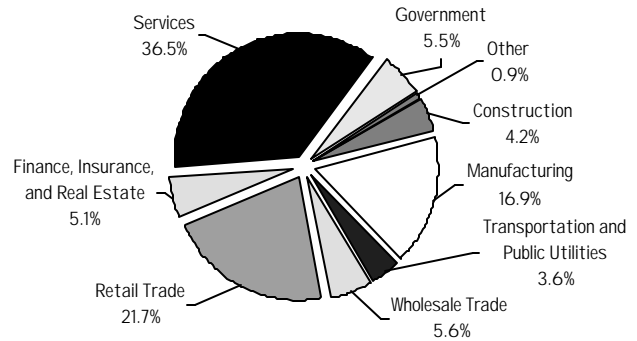
Durable goods

Over 70 percent of Manufacturing employment is in Durable goods and over one third of all Manufacturing jobs are concentrated in two Durable goods industries – Industrial machinery and equipment and Electronics and other electrical equipment. Combined, these industries are projected to lose about 1,200 jobs during the projection period. Large losses (832 jobs) are also projected for Instruments and

2000 Covered Employment



Projected 2002 Covered Employment



related products. On a positive note, job gains are expected in all other industries in this sector, except Furniture and fixtures.

Nondurable goods

Employment in nondurable goods is projected to decline by 1.8 percent, with a net loss of 536 jobs. More than half of employment in nondurable goods industries is in two industries – Printing and publishing and Rubber and miscellaneous plastic products. Printing and publishing employment is dependent on advertising revenues, which tend to fall in a slowing economy. Recent trends suggest that job losses will continue, with a net decrease of 101 jobs. Employment in Rubber and plastics will be stable, adding only 39 jobs.

Textile mill products are showing signs of declining, as are Paper and allied products and Apparel and other textile products. These are “old economy” industries that have been in a long-term slide that is expected to continue.

Four industries in this sector are projected to increase employment, but will add only 130 jobs in total.

Transportation and Public Utilities

Industries in this division include electric and gas utilities and communications service providers. Both have experienced mergers and structural changes in the past and more job losses are forecasted as restructuring continues.

Air transportation is the fastest growing industry in the state, with a projected rate of 11.7 percent by the second quarter of 2002. Increased passenger traffic at Manchester Airport and expanded flight schedules out of Pease Tradeport are contributing to the strong expected employment gains.

Wholesale Trade

Positive employment trends in both Durable and Nondurable goods make this the second-fastest

growing major industry group. Wholesale trade is a relatively small industry group (only five percent of total employment) but will account for nearly eight percent of new jobs in second quarter 2002.

Retail Trade

Retail trade will grow at a much slower rate than the previous two years, resulting in a projected growth rate of only 2.6 percent for the division.

Consumer confidence declined for five consecutive months before rebounding in March 2001. When consumer confidence is low, people buy less, which results in fewer people being hired in Retail trade. Store openings will continue, but may not be enough to make up for job losses due to store closings. Gains will come from existing stores adding employees to meet peak demands (Eating and drinking places during the summer season, for example).

All industries in Retail trade are projected to post gains in employment with the exception of Apparel and accessory stores. The largest industry in this sector is Eating and drinking places, which is projected to add 833 jobs in the projections period. The fastest growing industry is Building materials and garden supplies at 5.1 percent.

Employment in many Retail trade industries is seasonal, peaking in the last quarter of the year during the holiday shopping season. Employment levels would likely be higher than the second quarter employment listed here. This would likely be the case with General merchandise stores, Apparel and accessory stores, and Furniture and home furnishings stores.

Finance, Insurance, and Real Estate

Little change in employment is projected for this division. Growth will not be as high as previous years, when major financial services companies established operations in the state. Employment losses are expected for Depository institutions and Insurance carriers.

Security and commodity brokers will continue to add jobs, but not at the double-digit rates experienced in 1996 through 1998.

Services

Employment in Services is growing faster (5.9 percent) than any other major industry division.

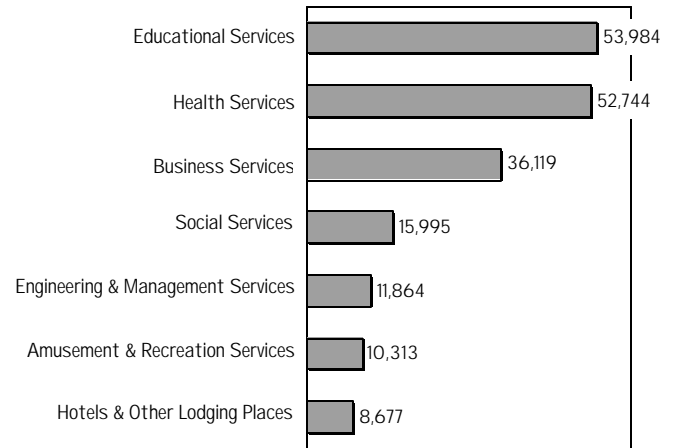
Services make up 35.5 percent of employment in New Hampshire; growth will increase the share to over 36 percent in 2002.

This division encompasses many industries – from the relatively low-paying Hotel and recreational services to the high-paying Legal services, Business services, and Engineering and management services.

Business services is an important driver of employment growth in the state and is one of the fastest growing major industry groups. A wide variety of industries fall under this classification – Advertising, Computer services, and Temporary help services.

Health care and Educational services account for 50 percent of Service employment and are growing faster than the state average. Other fast-growing service industries are Auto repair services (9.2 percent) and Amusement and recreational services (9.3 percent).

2000 Employment in Major Service Industries



Government

Government employment will grow at 2.0 percent over the two-year period. State and Local government are projected to grow 1.7 percent and 2.6 percent, respectively. Federal government employment will decline slightly. Federal government employment does not include workers that were temporarily employed by the Census Department in 2000.

Occupational Employment

Fastest Growing

Four of the top five fastest-growing jobs are computer-related. Workers in these jobs are employed in almost all industries. Most of the remaining fastest growing occupations are health or education related.

The fastest growing occupation, Computer scientists, all other, includes Internet developers, network administrators, and other relatively new jobs that do

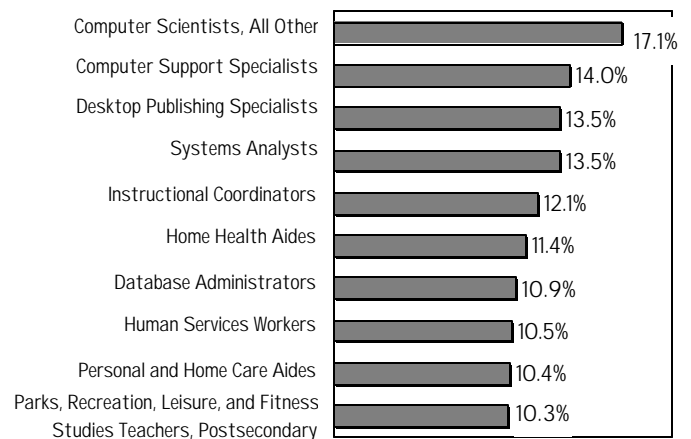
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Fastest Growing Occupations, 2000 to 2002

			Total Change		Training Code
	2000	2002	Number	Percent	
Computer Scientists, All Other	632	740	108	17.1%	05
Computer Support Specialists	2,091	2,383	292	14.0%	06
Desktop Publishing Specialists	171	194	23	13.5%	09
Systems Analysts	2,681	3,042	361	13.5%	05
Instructional Coordinators	331	371	40	12.1%	05
Home Health Aides	2,326	2,592	266	11.4%	11
Database Administrators	322	357	35	10.9%	05
Human Services Workers	2,505	2,769	264	10.5%	10
Personal and Home Care Aides	1,036	1,144	108	10.4%	11
Parks, Recreation, Leisure, and Fitness Studies Teachers, Postsecondary	68	75	7	10.3%	02
Computer Science Teachers, Postsecondary	88	97	9	10.2%	02
Physician Assistants	226	248	22	9.7%	05
Pruners	144	158	14	9.7%	11
Dietetic Technicians	103	113	10	9.7%	06
Cardiology Technologists	63	69	6	9.5%	06
Medical Assistants	828	906	78	9.4%	10
Residential Counselors	1,044	1,141	97	9.3%	05
Lawn Service Managers	205	224	19	9.3%	08

Note: Only occupations with base year employment > 50 are listed

Fastest Growing Occupations, 2000-2002



Short-term Industry Projections 2000 to 2002

SIC Code	Industry	2000	2002	Change	Rate of Growth
	TOTAL EMPLOYMENT	644,994	664,606	19,612	3.0%
	(includes self-employed and unpaid family workers)				
	TOTAL COVERED EMPLOYMENT	600,851	619,281	18,430	3.1%
07	Agricultural Services	4,657	5,061	404	8.7%
14	Nonmetallic Minerals, except Fuels	434	435	1	0.2%
15-17	Construction	25,370	26,177	807	3.2%
15	General Building Contractors	6,382	6,956	574	9.0%
16	Heavy Construction, excluding Buildings	2,619	2,474	(145)	-5.5%
17	Special Trade Contractors	16,369	16,747	378	2.3%
20-39	Manufacturing	106,243	104,559	(1,684)	-1.6%
	Durable Goods	75,756	74,608	(1,148)	-1.5%
24	Lumber and Wood Products	4,728	4,730	2	0.0%
25	Furniture and Fixtures	1,024	987	(37)	-3.6%
32	Stone, Clay, and Glass Products	2,494	2,691	197	7.9%
33	Primary Metal Industries	5,493	5,637	144	2.6%
34	Fabricated Metal Products	8,328	8,569	241	2.9%
35	Industrial Machinery and Equipment	16,763	16,103	(660)	-3.9%
36	Electronics and Other Electric Equipment	20,453	19,854	(599)	-2.9%
37	Transportation Equipment	3,270	3,549	279	8.5%
38	Instruments and Related Products	10,271	9,439	(832)	-8.1%
39	Miscellaneous Manufacturing	2,932	3,049	117	4.0%
	Nondurable Goods	30,487	29,951	(536)	-1.8%
20	Food and Kindred Products	2,823	2,875	52	1.8%
22	Textile Mill Products	2,512	2,245	(267)	-10.6%
23	Apparel and Other Textile Products	1,238	1,159	(79)	-6.4%
26	Paper and Allied Products	4,310	4,110	(200)	-4.6%
27	Printing and Publishing	7,353	7,252	(101)	-1.4%
28	Chemicals and Allied Products	1,465	1,497	32	2.2%
29	Petroleum and Coal Products	215	222	7	3.3%
30	Rubber and Miscellaneous Plastic Products	8,801	8,840	39	0.4%
31	Leather and Leather Products	1,770	1,751	(19)	-1.1%
40-49	Transportation and Public Utilities	21,183	21,988	805	3.8%
	(except Railroads, US Post Office, and Pipelines)				
41	Local and Interurban Passenger Transit	3,316	3,579	263	7.9%
42	Trucking and Warehousing	5,038	5,343	305	6.1%
44	Water Transportation	336	360	24	7.1%
45	Air Transportation	3,315	3,703	388	11.7%
47	Transportation Services	904	903	(1)	-0.1%
48	Communications	4,600	4,544	(56)	-1.2%
49	Electric, Gas, and Sanitary Services	3,674	3,556	(118)	-3.2%

Short-term Industry Projections (continued)
2000 to 2002

SIC Code	Industry	2000	2002	Change	Rate of Growth
50-51	Wholesale Trade	33,415	34,910	1,495	4.5%
50	Wholesale Trade - Durables	21,574	22,417	843	3.9%
51	Wholesale Trade - Non-Durables	11,841	12,493	652	5.5%
52-59	Retail Trade	130,997	134,401	3,404	2.6%
52	Building Materials and Garden Supplies	6,301	6,623	322	5.1%
53	General Merchandise Stores	16,699	17,177	478	2.9%
54	Food Stores	22,348	22,908	560	2.5%
55	Auto Dealers and Service Stations	14,255	14,597	342	2.4%
56	Apparel and Accessory Stores	5,709	5,604	(105)	-1.8%
57	Furniture and Home Furnishing Stores	5,999	6,182	183	3.1%
58	Eating and Drinking Places	39,052	39,885	833	2.1%
59	Miscellaneous Retail	20,634	21,425	791	3.8%
60-67	Finance, Insurance, Real Estate	31,692	31,663	(29)	-0.1%
60	Depository Institutions	6,882	6,641	(241)	-3.5%
61	Nondepository Institutions	1,553	1,601	48	3.1%
62	Security and Commodity Brokers	4,378	4,695	317	7.2%
63	Insurance Carriers	8,887	8,376	(511)	-5.7%
64	Insurance Agents, Brokers, and Service	3,958	4,142	184	4.6%
65	Real Estate	5,364	5,534	170	3.2%
67	Holding and Other Investment Offices	670	674	4	0.6%
70-87, 89	Services	213,583	226,141	12,558	5.9%
70	Hotels and Other Lodging Places	8,677	9,024	347	4.0%
72	Personal Services	6,277	6,528	251	4.0%
73	Business Services	36,119	38,969	2,850	7.9%
75	Auto Repair, Services, and Parking	5,543	6,051	508	9.2%
76	Miscellaneous Repair Shops	1,655	1,736	81	4.9%
78	Motion Pictures	1,815	1,885	70	3.9%
79	Amusement and Recreation Services	10,313	11,273	960	9.3%
80	Health Services	52,744	55,620	2,876	5.5%
81	Legal Services	4,135	4,166	31	0.7%
82	Educational Services	53,984	56,330	2,346	4.3%
83	Social Services	15,995	17,350	1,355	8.5%
84	Museums, Botanical, Zoological	520	522	2	0.4%
86	Membership Organizations	3,743	3,707	(36)	-1.0%
87	Engineering and Management Services	11,864	12,770	906	7.6%
89	Services, Not Elsewhere Classified	199	210	11	5.5%
	Government	33,277	33,946	669	2.0%
	Federal Government (excludes US Post Office)	2,909	2,893	(16)	-0.6%
	State Government (excludes Hospitals and Education)	11,721	11,920	199	1.7%
	Local Government (excludes Education)	18,647	19,133	486	2.6%
	Self-Employed and Unpaid Family Workers	44,143	45,325	1,182	2.7%

Occupations Adding the Most New Jobs, 2000-2002



Occupations Adding the Most New Jobs, 2000 to 2002

			Total Change		Training
	2000	2002	Number	Percent	Code
Retail Salespersons	27,837	28,684	847	3.0%	11
Cashiers	16,167	16,796	629	3.9%	11
General Managers and Top Executives	17,212	17,824	612	3.6%	04
Registered Nurses	11,194	11,730	536	4.8%	06
Teacher Aides, Paraprofessional	5,375	5,769	394	7.3%	11
General Office Clerks	10,413	10,804	391	3.8%	11
Light Truck Drivers	6,292	6,668	376	6.0%	11
Laborers, Landscape and Groundskeeping	5,172	5,541	369	7.1%	11
Systems Analysts	2,681	3,042	361	13.5%	05
Managers and Supervisors of Sales and Related Workers	14,900	15,259	359	2.4%	08
Secondary School Teachers	6,621	6,976	355	5.4%	05
Heavy Truck Drivers	6,522	6,855	333	5.1%	11
Nursing Aides, Orderlies, and Attendants	6,492	6,823	331	5.1%	11
Carpenters	5,107	5,405	298	5.8%	09
Computer Support Specialists	2,091	2,383	292	14.0%	06
Elementary School Teachers	8,657	8,948	291	3.4%	05
Reception and Information Clerks	6,212	6,490	278	4.5%	11
Home Health Aides	2,326	2,592	266	11.4%	11
Human Services Workers	2,505	2,769	264	10.5%	10
Waiters and Waitresses	10,653	10,909	256	2.4%	11

Continued from page 3

not fit existing OES descriptions.

Many of the occupations listed require only short- or moderate-term training. Others may require at least a bachelor's degree. Physician Assistants require licensing by the state of New Hampshire.

Biggest Gainers

More than half of the listed occupations require little training and can be used as an entry point into the workforce. In most cases, these jobs pay less than the average wage.

General managers and top executives require at least

Occupations Losing the Most Jobs, 2000 to 2002

	2000	2002	Jobs Lost
Bank Tellers	2,388	2,265	-123
Electrical and Electronic Assemblers	3,212	3,116	-96
Textile Machine Operators and Tenders	511	440	-71
Inspectors and Related Workers	3,057	2,990	-67
Electrical and Electronic Equipment Assemblers, Precision	2,156	2,097	-59
Production Inspectors, Testers, Graders, Sorters, Samplers, and Weighers	1,387	1,333	-54
Word Processors and Typists	1,206	1,164	-42
Sewing Machine Operators, Garment	498	459	-39
Machine Tool Cutting Operators and Tenders, Metal and Plastic	791	755	-36
Electrical and Electronic Engineering Technicians and Technologists	2,160	2,133	-27
Electromechanical Equipment Assemblers, Precision	604	577	-27
Insurance Underwriters	586	560	-26
Computer Operators, Except Peripheral Equipment	724	701	-23
Lathe and Turning Machine Tool Setters and Set-up Operators, Metal and Plastic	527	506	-21
First-line Supervisors of Production Workers	3,414	3,394	-20
Machinists	2,323	2,303	-20
Machine Feeders and Offbearers	1,195	1,175	-20
Announcers, Radio and Television	289	270	-19
Grinding, Lapping, and Buffing Tool Setters and Set-up Operators, Metal and Plastic	1,067	1,048	-19

a bachelor's degree plus experience in a related non-managerial position.

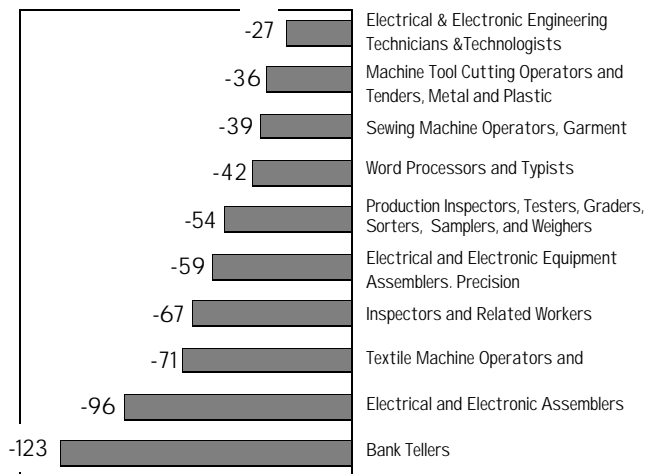
Secondary school teachers and systems analysts are projected to gain over 300 jobs in their respective occupations. These jobs require at least a bachelor's degree.

Systems analysts and Computer support specialists are expected to grow at a rate of over 10 percent.

Occupations Losing the Most Jobs

Even under strong economic conditions, it is inevitable that there will be jobs lost in some occupations. Job losses will continue to occur in the "old econo-

Occupations Losing the Most Jobs, 2000-2002



my" industries, particularly in Textile mill products. Textile machine operators and Sewing machine operators are projected to lose over 100 jobs in the projection period. Bank tellers are the leading job losers.

Job losses are also projected for assemblers and technicians employed by Electronics industry.

Annual Openings

Demand for employment comes from two sources: new jobs as a result of economic growth and the need to replace workers who leave the occupation because of retirement or other job changes. Job openings resulting from replacement needs generally exceed those resulting from growth.

Openings resulting from growth equal the total change in employment from the previous table divided by two (projections are for a two-year period). Total openings equal annual openings from growth plus openings from replacement. Replacement rates are based on national trends.

Occupations with the Most Annual Openings, 2000 to 2002

	Growth	Repl.	Total	Training Code
Retail Salespersons	424	1,061	1,485	11
Cashiers	315	913	1,228	11
Waiters and Waitresses	128	634	762	11
General Managers and Top Executives	306	270	576	04
Counter Attendants - Lunchroom, Coffee Shop, or Cafeteria	28	518	546	11
Combined Food Preparation and Service Workers	77	447	524	11
General Office Clerks	196	303	499	11
Food Preparation and Service Workers	93	397	490	11
Registered Nurses	268	160	428	06
Secondary School Teachers	178	200	378	05

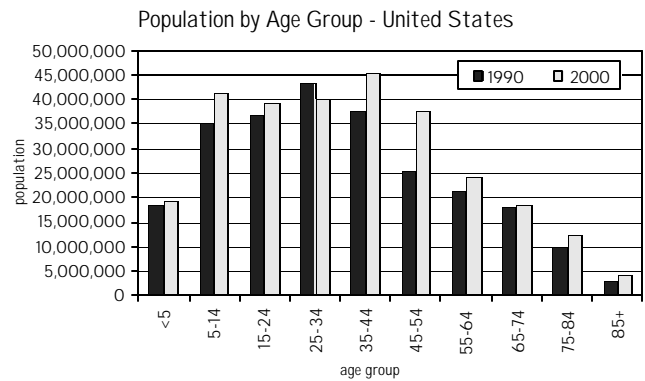
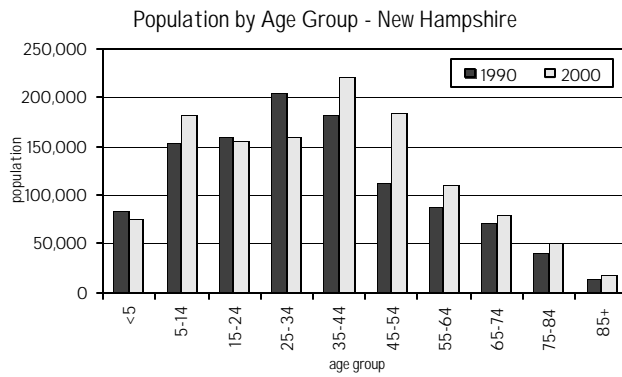
Training

Short-term projections can be used to identify occupations that will be in demand in the next year. Job seekers can use projections to pursue the training required for entering an occupation. Training codes are listed for occupations adding the most jobs, the fastest growing occupations, and occupations with the most annual openings.

Occupational Education and Training Categories and Codes

01. **First professional degree.** Completion of the academic program usually requires at least 6 years of full-time equivalent academic study, including college study prior to entering the professional degree program.
02. **Doctoral degree.** Completion of the degree program usually requires at least 3 years of full-time equivalent academic work beyond the bachelor's degree.
03. **Master's degree.** Completion of the degree program usually requires 1 or 2 years of full-time equivalent study beyond the bachelor's degree.
04. **Work experience, plus a bachelor's or higher degree.** Most occupations in this category are managerial occupations that require experience in a related nonmanagerial position
05. **Bachelor's degree.** Completion of the degree program generally requires at least 4 years but not more than 5 years of full-time equivalent academic work.
06. **Associate's degree.** Completion of the degree program usually requires at least 2 years of full-time equivalent academic work.
07. **Post-secondary vocational training.** Some programs last only a few weeks while others may last more than a year. In some occupations, a license is needed that requires passing an examination after completion of the training.
08. **Work experience.** Some occupations requiring work experience are supervisory or managerial occupations.
09. **Long-term on-the-job training.** This category includes formal and informal apprenticeships that may last up to 4 years and short-term intensive employer-sponsored training that workers must successfully complete. Individuals undergoing training are generally considered to be employed in the occupation.
10. **Moderate-term on-the-job training.** Occupations in which workers can develop the skills needed for average job performance after 1 to 12 months of combined on-the-job experience and informal training.
11. **Short-term on-the-job training.** Occupations in which workers generally can develop the skills needed for average job performance after a short demonstration or up to one month of on-the-job experience and instruction.

Population, Demographics, and Projections



The U.S. Census Bureau recently released demographic data on the United States and New Hampshire from the 2000 census. Census reports summarize data on age and sex distribution, race, national origin, household type, and household occupancy. Age distribution is of particular interest in developing industry and occupational projections, especially in long term forecasts).

It is evident that the baby boom generation is aging. The median age in the U.S. rose from 32.9 in 1990 to 35.3 in 2000. In other words, half of the population is over 35 years old. New Hampshire is getting even older - the median age rose from 32.8 in 1990 to 37.1 in 2000.

In New Hampshire, the largest population group is 35- to 44-year olds, making up 17.9 percent of the population. Ten years ago, the largest group

was the 25- to 34-year olds. The fastest growing group by far is the 45- to 54-year old group, which increased by 64.0 percent over 1990. Closely behind, the 55- to 59-year old age group increased by 40.2 percent. On the opposite end of the age scale, 10- to 14-year olds increased by 30 percent over the 1990 census.

There are other interesting differences between New Hampshire and the United States as a whole:

- ❖ The under 5-year old group declined by 10.5 percent in New Hampshire. This is in contrast to a 4.5 percent increase in the group nationwide.
- ❖ While the 45- to 54-year old group increased by 64.0 percent in New Hampshire, it only increased 49.4 percent nationwide.
- ❖ New Hampshire's population is growing slightly slower than the United States (11.4 percent compared to 13.2 percent).

Demographic Characteristics of New Hampshire

Age Group	1990	2000	Percent Change	% of Total 1990	% of Total 2000
<5	84,565	75,685	-10.5%	7.6%	6.1%
5-9*	80,641	88,537	9.8%	7.3%	7.2%
10-14*	71,725	93,255	30.0%	6.5%	7.5%
15-19	76,464	86,688	13.4%	6.9%	7.0%
20-24*	82,962	68,766	-17.1%	7.5%	5.6%
25-34	204,823	160,061	-21.9%	18.5%	13.0%
35-44	182,632	221,179	21.1%	16.5%	17.9%
45-54	112,215	183,986	64.0%	10.1%	14.9%
55-59	44,703	62,644	40.1%	4.0%	5.1%
60-64	43,493	46,995	8.1%	3.9%	3.8%
65-74	71,471	78,327	9.6%	6.4%	6.3%
75-84	40,272	51,412	27.7%	3.6%	4.2%
85+	13,286	18,231	37.2%	1.2%	1.5%

*5-year increments

What does this mean for occupational demand in the future? An aging population will demand more health services, social services, and recreational services. The rapidly growing 10- to 14-year old population will need more teachers and other occupations in Educational services.

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