# New Hampshire's Employment is Projected to Increase 1.5 Percent by Second Quarter 2004

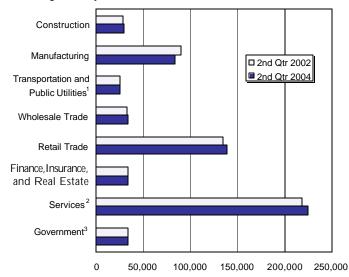
## **Industry Projections**

#### Overview

New Hampshire is starting to recover from the economic slowdown. Total employment (Private, Government, plus Self-employed) in the state is projected to grow 1.5 percent by second quarter 2004. This is larger than the increase of 0.2 percent experienced between second quarter 2000 and second quarter 2002. Manufacturing is projected to continue its downward swing in employment. The projected growth in Services will more than absorb the loss in Manufacturing. Almost all industries, Government, and Self-employed are projected to gain employment. The only exceptions are Manufacturing and Transportation and public utilities.

There are a few reasons for the optimistic outlook. The first one is a quick end of the war in the Middle East. During a war businesses and consumers are concerned with what kind of impact the war could have on them and the length of the war.

# **Short-term Employment Projections by Major Industry Group**



 $^{\rm 1}$  Includes U.S Postal Service  $^{\rm 2}$  Includes Government hospitals and schools  $^{\rm 3}$  Excludes U.S. Post Office, hospitals and schools

Uncertain times like a war tend to cause people to be more cautious with their spending. Stable oil prices will also contribute to the optimism. With low oil prices consumers will have more money to spend elsewhere. More people will feel confident traveling with the expected low gas prices. Another reason for the optimism is the continued low interest rates. More people are able to make larger purchases with the lower financing rates, which will continue to stimulate the economy.

#### Construction

Employment in Construction has been booming and the trend is projected to continue. With low interest rates, many people were able to build a home or refinance their existing home. By second quarter 2004 employment is forecasted to increase 5.2 percent. This is almost half of the growth in Construction employment between second quarter 2000 and second quarter 2002. Two of Construction's industries, Special trade contractors and General building contractors, are expected to add jobs, of which Special trade contractors should account for nearly four out of five added jobs. However, not all Construction is expected to grow. Heavy construction, excluding buildings, is forecasted to lose 60 jobs.

#### Manufacturing

The good news is decreases in Manufacturing employment have started to slow down. Between second quarter 2000 and second quarter 2002 Manufacturing lost over 16,600 employees, down nearly 16 percent. By second quarter 2004 employment in Manufacturing is projected to decline more than six percent, a loss of nearly 5,500 jobs. During the projection period only six industries are projected to gain employment. Combined, these six industries are projected to add over 300 jobs. These jobs will only absorb five percent of the total number of jobs that Manufacturing is projected to lose by second quarter 2004. Employment in Manufacturing accounted for 13.9 percent of

Short-term projections attempt to forecast the employment situation two years from the base period by analyzing current trends. Both industries and occupations are forecasted to allow job seekers, dislocated workers, new entrants, training providers, etc. an opportunity to make informed decisions using timely information. Other publications published by the Economic and Labor Market Information Bureau should be used in conjunction with short-term and/or long-term projections (2000-2010) to help determine occupational trends.

the state's total employment. By second quarter 2004 the share is expected to drop to 12.8 percent.

#### **Durable Goods**

Employment in Durable goods currently accounts for 70 percent of Manufacturing employment. Durable goods will continue to have the most impact on the decrease in Manufacturing, with a projected loss of over seven percent. Within Durable goods, Electronics and other electrical equipment and Industrial machinery and equipment have had a tough couple of years. Over the next two years, employment in these two industries is projected to decrease over 1,000 jobs each

Only two industries in Durable goods are projected to add employment by second quarter 2004. Stone, clay, and glass products had leveled off by second quarter 2002, and by second quarter 2004 is projected to increase by 31 jobs, a gain of 1.2 percent. Miscellaneous manufacturing is projected to add 33 jobs, up 1.3 percent by second quarter 2004.

#### Nondurable Goods

Employment in Nondurable goods is projected to drop almost four percent, over 900 jobs. Within Nondurable goods, Leather and leather products is expected to decrease the fastest, as 234 jobs or almost 20 percent of the workforce is reduced. Rubber and miscellaneous plastic products is projected to lose the most jobs, dropping 314 employees.

On a positive note, four industries are projected to add a total of 247 jobs by second quarter 2004. Printing and publishing is projected to have the highest Nondurable goods employment increase, adding 115 jobs. Much of this can be attributed to the expected increase in newspaper advertising. As the economy improves and businesses feel more certain about the future they will have more jobs that need to be filled. They will then take out want ads in their local newspapers. Employment in Chemicals and allied products and Food and kindred products are expected to add 82 and 47 jobs, respectively.

#### Transportation and Public Utilities

Employment in Transportation and public utilities is projected to have a minimal loss of 17 jobs, a drop of 0.1 percent. This major group saw minimal changes between second quarter 2000 and second quarter 2002.

Communications is projected to lose the most employees, nearly 200, a drop of over four percent. Although Transportation services is a small portion of Transportation and public utilities' total employment, it is expected to decrease the fastest, 17 percent, a projected decline of 141 jobs. Much of this decrease can be attributed to the drop in Travel agencies. When times are uncertain fewer people make major travel plans. The expected loss may also be attributed to the increase in internet based companies that offer cheaper travel plans online, removing the need to have travel agents involved at all. A minimal loss is also projected in U.S. Postal Service, with a decrease of 0.2 percent.

Air transportation is projected to add the largest number of employees, 175, up 5.3 percent from second quarter 2002. Manchester Airport has been expanding and is expected to continue to expand. Combined, Trucking and warehousing and Local and interurban passenger transit are expected to add 157 jobs.

#### Wholesale Trade

Despite the drop of over 460 workers between second quarter 2000 and second quarter 2002, Wholesale trade is optimistically projected to add over 1,100 employees. As the economy recovers, it is expected that consumer and business spending will improve. Wholesale trade accounts for just over five percent of total employment in New Hampshire.

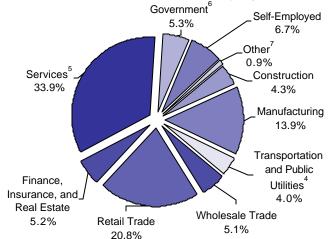
Durable goods accounted for 64 percent of the employment in Wholesale trade. By second quarter 2004 employment is expected to reach 21,854, a gain of 651 jobs. Nondurable goods is forecasted to add 450 jobs, bringing the expected total to 12,197.

#### **Retail Trade**

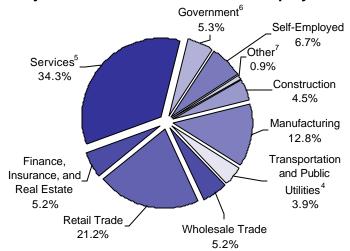
New England's Consumer Confidence Index rose to 85.3 in May 2003, up over 18 points from April 2003. The U.S. Consumer Confidence Index grew to 83.8 in May 2003. In the last two months the U.S. Consumer Confidence saw increases, while the prior four months each reported a decrease. The Consumer Confidence Index is a measure of the public's confidence in the health of the economy. When consumers have faith in the economy they are more apt to spend some of their disposable income on retail items.

Between second quarter 2000 and second quarter 2002, Retail trade had the second largest employment

## 2nd Quarter 2002 Total Employment



#### **Projected 2nd Quarter 2004 Total Employment**



- <sup>4</sup> Includes U.S. Postal Service <sup>5</sup> Includes Government hospitals and schools
- <sup>6</sup> Excludes U.S. Post Office, hospitals and schools <sup>7</sup> Includes industries excluded from the major groups

increase, adding 3,612 jobs. Retail trade is projected to add nearly 4,500 jobs by second quarter 2004. Again, it is expected that as the economy recovers spending conditions will also improve. Eating and drinking places, the major employer in Retail trade, accounts for 31 percent of this division's employment. Eating and drinking places is projected to add almost 1,900 jobs by second quarter 2004. General merchandise stores is projected to add 665 jobs by second quarter 2004, reversing the direction where employment declined by 1.7 percent between second quarter 2000 and second quarter 2002.

The only Retail trade industry projected to lose employment is Apparel and accessory stores. Employment in this industry had been steadily decreasing since 1999. Apparel and accessory stores is projected to drop over 150 jobs by second quarter 2004. One probable cause of the employment decrease in this industry is more department type stores (General merchandise stores) coming into the state. These types of stores are able to offer apparel and accessories in addition to other necessities, which can be a timesaver.

#### Finance, Insurance, and Real Estate

Employment in Finance, insurance, and real estate is projected to grow slower than the prior two years. Despite the economic slowdown, employment in this industry was the second fastest growing industry in New Hampshire between second quarter 2000 and second quarter 2002, up over 1,800 jobs or nearly six percent.

Employment is projected to add just over 700 employees during the projection period, a growth of over two percent. All Finance, insurance, and real estate industries, except Holding and other investment offices, are projected to see some growth during this time. Employment in this division is expected to maintain a faster pace than the state as a whole.

Employment in Depository institutions is projected to add 175 jobs. This industry is projected to add the second highest number of jobs in this division, but is not expected to see the growth it saw the prior two years.

#### **Services**

Services added the most jobs between second quarter 2000 and second quarter 2002. Services is expected to have the largest employment increase by second quarter 2004, up 6,260 jobs. Business services took the hardest hit between second quarter 2000 and second quarter 2002, losing over 5,100 jobs. Most of this loss was in Computer and data processing services and Personnel supply services. Personnel supply services is expected to rebound, while it is unclear if Computer and data processing services will. Business services is the only industry within Services that is expected to lose employment over the projection period. Decreases in this industry are expected to be minimal, with a projected drop of 0.2 percent.

Three of every five new jobs in Services are expected to be in Health services and Educational services. For

# **Short-term Industry Projections**

2002 to 2004

SIC	2002 10 2004	2nd Qtr	2nd Qtr	Net	Rate of
	Industry	2002			Growth
Couc	•				
	Total Employment	646,313	655,979	9,666	1.5%
	(includes self-employed and unpaid family workers)				
	Total Covered Employment	603,068	612,142	9,074	1.5%
07	A gricultural Comicae	F 224	F F02	272	E 20/
07	Agricultural Services	5,231	5,503	272	5.2%
14	Nonmetallic Minerals, except Fuels	n	n 00 400	n 4 400	n 5 00/
15-17	Construction	27,979		1,460	5.2%
15	General Building Contractors	6,816	7,152	336	4.9%
16	Heavy Construction, excluding Buildings	3,114	3,054	-60	-1.9%
17	Special Trade Contractors	18,049	19,233	1,184	6.6%
20-39	Manufacturing	89,615	84,145	-5,470	-6.1%
	Durable Coade	62.444	E0 E07	4.544	7.00/
0.4	Durable Goods	63,111	58,567	-4,544	-7.2%
24	Lumber and Wood Products	4,165	3,979	-186	-4.5%
25	Furniture and Fixtures	904	866	-38	-4.2%
32	Stone, Clay, and Glass Products	2,495	2,526	31	1.2%
33	Primary Metal Industries	3,888	3,151	-737	-19.0%
34	Fabricated Metal Products	7,354	6,979	-375	-5.1%
35	Industrial Machinery and Equipment	14,371	13,360	-1,011	-7.0%
36	Electronics and Other Electric Equipment	14,622	13,403	-1,219	-8.3%
37	Transportation Equipment	2,617	2,425	-192	-7.3%
38	Instruments and Related Products	10,205	9,355	-850	-8.3%
39	Miscellaneous Manufacturing Industries	2,490	2,523	33	1.3%
	Nondurable Goods	26,504	25,578	-926	-3.5%
20	Food and Kindred Products	2,936	2,983	47	1.6%
22	Textile Mill Products	2,028	1,777	-251	-12.4%
23	Apparel and Other Textile Products	1,059	976	-83	-7.8%
26	Paper and Allied Products	3,269	2,978	-291	-8.9%
27	Printing and Publishing	7,126	7,241	115	1.6%
28	Chemicals and Allied Products	1,626	1,708	82	5.0%
29	Petroleum and Coal Products	196	199	3	1.5%
30	Rubber and Miscellaneous Plastic Products	7,081	6,767	-314	-4.4%
31	Leather and Leather Products	1,183	949	-234	-19.8%
	Leather and Leather Froducts	1,103	343	204	13.070
40-49	Transportation and Public Utilities	25,703	25,686	-17	-0.1%
	(except Railroad transportation)				
41	Local and Interurban Passenger Transit	3,357	3,435	78	2.3%
42	Trucking and Warehousing	5,156	5,235	79	1.5%
43	U.S. Postal Service (Government only)	4,513	4,503	-10	-0.2%
44	Water Transportation	n	n	n	n
45	Transportation by Air	3,324	3,499	175	5.3%
46	Pipelines, except Natural Gas	n	n o, ioo	n	0.070
47	Transportation Services	828	687	-141	-17.0%
48	Communications	4,442	4,251	-191	-4.3%
49	Electric, Gas, and Sanitary Services	3,766	3,747	-191	-4.5% -0.5%

n = not disclosable

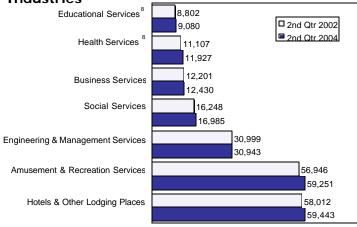
# **Short-term Industry Projections (continued)**

2002 to 2004

	2002 to 2004				
SIC		2nd Qtr	2nd Qtr	Net	Rate of
Code	Industry	2002	2004	Change	Growth
50-51	Wholesale Trade	32,950	34,051	1,101	3.3%
50	Wholesale Trade - Durable Goods	21,203	21,854	651	3.1%
51	Wholesale Trade - Nondurable Goods	11,747	12,197	450	3.8%
		,	,		
52-59	Retail Trade	134,609	139,069	4,460	3.3%
52	Building Materials and Garden Supplies	7,672	7,837	165	2.2%
53	General Merchandise Stores	16,412	17,077	665	4.1%
54	Food Stores	22,317	22,577	260	1.2%
55	Automotive Dealers and Service Stations	15,139	15,733	594	3.9%
56	Apparel and Accessory Stores	5,540	5,384	-156	-2.8%
57	Furniture and Homefurnishing Stores	6,084	6,167	83	1.4%
58	Eating and Drinking Places	41,187	43,077	1,890	4.6%
59	Miscellaneous Retail	20,258	21,217	959	4.7%
60-67	Finance, Insurance, and Real Estate	33,519	34,224	705	2.1%
60	Depository Institutions	7,508	7,683	175	2.3%
61	Nondepository Institutions	1,803	1,878	75	4.2%
62	Security and Commodity Brokers	4,889	5,052	163	3.3%
63	Insurance Carriers	8,965	8,992	27	0.3%
64	Insurance Agents, Brokers, and Service	4,113	4,220	107	2.6%
65	Real Estate	5,821	6,004	183	3.1%
67	Holding and Other Investment Offices	420	395	-25	-6.0%
70-89	Services	218,835	225,095	6,260	2.9%
70	Hotels and Other Lodging Places	8,802	9,080	278	3.2%
72	Personal Services	6,602	6,791	189	2.9%
73	Business Services	30,999	30,943	-56	-0.2%
75	Auto Repair, Services, and Parking	5,429	5,501	72	1.3%
76	Miscellaneous Repair Services	1,737	1,818	81	4.7%
78	Motion Pictures	1,777	1,848	71	4.0%
79	Amusement and Recreation Services	11,107	11,927	820	7.4%
80	Health Services (includes Government Hospitals)	56,946	59,251	2,305	4.0%
81	Legal Services	4,180	4,241	61	1.5%
82	Educational Services (includes Government Schools)	58,012	59,443	1,431	2.5%
83	Social Services	16,248	16,985	737	4.5%
84	Museums, Botanical, Zoological Gardens	554	569	15	2.7%
86	Membership Organizations	4,050	4,073	23	0.6%
87	Engineering and Management Services	12,201	12,430	229	1.9%
89	Services, Not Elsewhere Classified	191	195	4	2.1%
	Government	34,171	34,482	311	0.9%
	Federal Government (excludes US Postal Service)	2,852	2,801	-51	-1.8%
	State Government (excludes Hospitals and Education)	12,236	12,241	5	0.0%
	Local Government (excludes Education)	19,083	19,440	357	1.9%
	Self-Employed and Unpaid Family Workers	43,245	43,837	592	1.4%

n = not disclosable

# Projected Employment in Major Service Industries



<sup>&</sup>lt;sup>8</sup> Includes Government hospitals and schools

projection purposes, both of these industries include government employment. (For additional information, please see the Methodology section at the end of this report.) Educational services and Health services each increased over 4,000 between second quarter 2000 and second quarter 2002. Health services is forecasted to grow half as fast as it did during the prior two years.

This industry is projected to add 2,305 jobs, up four percent. Educational services had the largest number of employees within Services during second quarter 2000. The gap between Educational services and Health services during second quarter 2000 was 1,240 employees. By second quarter 2004 the gap is expected to be less than 200 employees, because Health services is expected to grow at a faster rate than Educational services.

#### Government

Employment in Government, excluding U.S. Postal Service, Hospitals, and Education, is expected to grow just under one percent by second quarter 2004. Government, minus the above-mentioned sections, accounted for five percent of total employment in the state. The majority of Government employment is in Local government. Nearly four out of seven Government workers are employed in Local government, which is projected to add the most jobs, 357, while State government is expected to remain relatively unchanged. Federal government is projected to lose 51 jobs, a drop of nearly two percent by second quarter 2004.

### **Short-term Major Occupational Projections**

2002 to 2004

SOC		2nd Qtr	2nd Qtr	Net	Rate of
Code	Major Occupation Groups	2002	2004	Change	Growth
	Total, All Occupations	646,313	655,979	9,666	1.5%
11-0000	Management Occupations	45,729	46,297	568	1.2%
13-0000	Business and Financial Operations Occupations	20,576	20,903	327	1.6%
15-0000	Computer and Mathematical Occupations	12,102	12,801	699	5.8%
17-0000	Architecture and Engineering Occupations	12,703	12,212	-491	-3.9%
19-0000	Life, Physical, and Social Science Occupations	4,590	4,640	50	1.1%
21-0000	Community and Social Services Occupations	8,031	8,463	432	5.4%
23-0000	Legal Occupations	3,521	3,598	77	2.2%
25-0000	Education, Training, and Library Occupations	40,580	41,873	1,293	3.2%
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations	7,499	7,596	97	1.3%
29-0000	Healthcare Practitioners and Technical Occupations	30,543	31,782	1,239	4.1%
31-0000	Healthcare Support Occupations	13,435	14,041	606	4.5%
33-0000	Protective Service Occupations	10,816	11,065	249	2.3%
35-0000	Food Preparation and Serving Related Occupations	49,179	50,914	1,735	3.5%
37-0000	Building and Grounds Cleaning and Maintenance Occupations	21,344	21,791	447	2.1%
39-0000	Personal Care and Service Occupations	19,799	20,635	836	4.2%
41-0000	Sales and Related Occupations	91,855	94,050	2,195	2.4%
43-0000	Office and Administrative Support Occupations	102,545	102,996	451	0.4%
45-0000	Farming, Fishing, and Forestry Occupations	1,164	1,164	0	0.0%
47-0000	Construction and Extraction Occupations	28,636	29,719	1,083	3.8%
49-0000	Installation, Maintenance, and Repair Occupations	27,853	28,088	235	0.8%
51-0000	Production Occupations	57,683	54,677	-3,006	-5.2%
53-0000	Transportation and Material Moving Occupations	36,130	36,674	544	1.5%

Top 20 Fastest Growing Occupations, 2002 - 2004

Top 20 rastest Growing				
			Percent	U
	2002	2004	Change	Code
Desktop Publishers	228	254	11.4%	7
Medical Assistants	1,066	1,166	9.4%	10
Computer Support Specialists	1,722	1,879	9.1%	6
Personal and Home Care Aides	2,071	2,255	8.9%	11
Physician Assistants	291	317	8.9%	5
Audiologists	35	38	8.6%	3
Medical Records and Health				
Information Technicians	754	817	8.4%	6
Social and Human Service				
Assistants	2,608	2,823	8.2%	10
Film and Video Editors	25	27	8.0%	5
First-Line Supervisors/Managers				
of Correctional Officers	51	55	7.8%	8
Network and Computer Systems				
Administrators	909	980	7.8%	5
Physical Therapist Aides	77	83	7.8%	11
Pharmacy Technicians	769	828	7.7%	10
Computer Software Engineers,				
Applications	3,373	3,628	7.6%	5
Network Systems and Data				
Communications Analysts	543	584	7.6%	5
Fitness Trainers and Aerobics				
Instructors	1,608	1,727	7.4%	7
Physical Therapist Assistants	285	306	7.4%	6
HelpersRoofers	83	89	7.2%	11
Hotel, Motel, and Resort Desk				
Clerks	919	985	7.2%	11
HelpersPainters, Paperhangers,				
Plasterers, and Stucco Masons	42	45	7.1%	11

Note: Only occupations with base year employment 25 or greater are listed

#### Self-Employed and Unpaid Family Workers

By second quarter 2002 the number of Self-employed and unpaid family workers dropped by almost 900 people. With the economy expected to improve, it is anticipated that more people will try to work for themselves. The number of Self-employed and unpaid family workers is projected to increase 1.4 percent, adding almost 600 **Top 15** 

# Occupational Projections

#### Overview

workers.

Sales and related occupations are projected to add the most employment, nearly 2,200 by second quarter 2004, up 2.4 percent. This occupational group had the second largest share of employment, over 14 percent. Computer and mathematical occupations are expected to grow the fastest, up 5.8 percent over the projection period, even though the share of total employment for this group of occupations

is relatively small. Office and administrative support occupations had the largest share of employment in the state, nearly 16 percent. This occupational group is only projected to grow 0.4 percent by second quarter 2004, representing an additional 451 jobs.

Understandably, Production occupations are projected to lose the most employment, over 3,000. This occupational group is expected to have the fastest decrease in employment, over five percent. Architecture and engineering occupations is the only other occupation group projected to lose employment, almost 500 jobs.

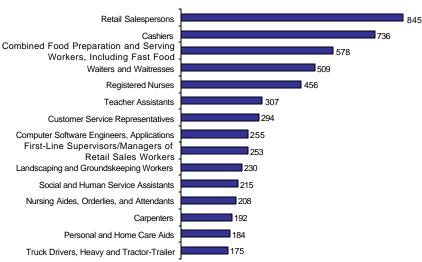
#### **Growing Occupations**

Three of the top five fastest growing occupations are in the medical field, while the remaining two are computer related. The fastest growing among all occupations with an employment base of 25 or greater is Desktop publishers. This occupation is expected to grow by 11.4 percent by second quarter 2004.

One quarter of the top twenty fastest growing occupations require at least a Bachelor's degree, while another quarter require short-term on-the-job training. Audiologists require a Master's degree; this was the highest degree needed among the top twenty fastest growing occupations.

With spending conditions expected to improve by second quarter 2004, it is reasonable to expect that Retail salesperson and Cashiers will add the most new jobs respectively. Over the past few years Nurses have been in demand. This occupation is expected to be the

Top 15 Occupations Adding the Most New Jobs, 2002-2004



fifth ranked occupation among those adding the most new jobs, up nearly four percent by second quarter 2004.

Three of the top 20 occupations adding the most jobs require an Associate degree or higher. Fifteen require some type of on-the-job training, while the remaining two require work experience.

### **Declining Occupations**

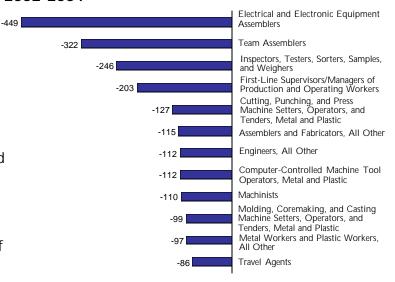
Most of the fastest declining occupations are affected by the decrease in Manufacturing. Seventeen of the top 20 fastest declining occupations are in Manufacturing industries. Patternmakers, metal and plastic and Foundry mold and coremakers are among the top three occupations to decrease the fastest. Both of these occupations are projected to lose over 17 percent of their employment by second guarter 2004.

Top 20 Fastest Declining Occupations, 2002 - 2004

	2nd Qtr 2002		Percent Change	Training Code
Shoe Machine Operators and				
Tenders	n	n	n	10
Patternmakers, Metal and Plastic	28	23	-17.9%	10
Foundry Mold and Coremakers	121	100	-17.4%	10
Travel Agents	526	440	-16.3%	7
Metal-Refining Furnace Operators				
and Tenders	90	77	-14.4%	10
Shoe and Leather Workers and				
Repairers	384	332	-13.5%	9
Telephone Operators	n	n	n	11
Pourers and Casters, Metal	98	85	-13.3%	10
Rolling Machine Setters,				
Operators, and Tenders, Metal				
and Plastic	442	392	-11.3%	10
Tool Grinders, Filers, and				
Sharpeners	133	118	-11.3%	10
Chemical Plant and System				
Operators	n	n	n	9
Extruding and Drawing Machine				
Setters, Operators, and Tenders,				
Metal and Plastic	788	707	-10.3%	10
Electrical and Electronic		-		
Equipment Assemblers	4,638	4,189	-9.7%	11
Model Makers, Metal and Plastic	84	76	-9.5%	10
Fabric and Apparel	95	86	-9.5%	9
Captains, Mates, and Pilots of				
Water Vessels	32	29	-9.4%	8
Lathe and Turning Machine Tool				
Setters, Operators, and Tenders,				
Metal and Plastic	577	523	-9.4%	10
Coil Winders, Tapers, and	011	OLO	0.170	10
Finishers	283	257	-9.2%	11
Textile Knitting and Weaving	200	201	J.2 /0	- ''
Machine Setters, Operators, and				
Tenders	295	268	-9.2%	9
Timing Device Assemblers,	200	200	J.2 /0	3
Adjusters, and Calibrators	n	n	n	10
rajustors, and Cambrators	- 11	- 11	- 11	10

Note: Only occupations with base year employment 25 or greater are listed

# Top Ten Occupations Losing the Most Jobs, 2002-2004



Over half of the top 20 fastest declining occupations are projected to reduce their workforce by at least ten percent. Travel agents are projected to decrease over 16 percent. This was one of the occupations that was not within Manufacturing. Travel agents require some form of post-secondary vocational training, the highest level among the fastest declining occupations.

Occupations that are expected to lose the most jobs by second quarter 2004 are ones that generally do not require formal education. Out of the 20 occupations losing the most jobs only two require an Associate degree or a Bachelor's degree. The majority of the other 18 occupations require some form of on-the-job training. Typically these types of jobs are entry level jobs and not career-oriented jobs.

Electrical and electronic equipment assemblers are projected to lose the most jobs, an expected drop of nearly 450 jobs. Most of the occupations that are projected to lose the most jobs are located within Manufacturing. The top nine occupations are projected to lose between 100 and 322 employees each.

# Occupations with the Most Annual Openings

Total employment should not be divided by the number of forecasted years to get an annual rate of growth. It may not give an accurate picture of the employment situation. It should not be assumed that one year will have the same increase or replacements as another year. The data in this section is an average and should be used

Top 20 Occupations with the Most Annual Openings, 2002 - 2004

			Total	Training
	Growth	Replace	Openings	Code
Cashiers	368	1,306	1,674	11
Retail Salespersons	423	1,162	1,585	11
Combined Food Preparation and				
Serving Workers, Including Fast Food	289	793	1,082	11
Waiters and Waitresses	255	679	934	11
Stock Clerks and Order Fillers	13	443	456	11
Registered Nurses	228	212	440	6
Teacher Assistants	154	142	295	11
Counter Attendants, Cafeteria, Food				
Concession, and Coffee Shop	35	255	289	11
General and Operations Managers	87	164	251	4
Laborers and Freight, Stock, and				
Material Movers, Hand	12	231	243	11
Office Clerks, General	87	153	240	11
First-Line Supervisors/Managers of				
Retail Sales Workers	127	97	223	8
Landscaping and Groundskeeping				
Workers	115	100	215	11
Elementary School Teachers, Except				
Special Education	77	132	209	5
Secondary School Teachers, Except				
Special and Vocational Education	76	130	206	5
Customer Service Representatives	147	53	200	10
Counter and Rental Clerks	47	153	199	11
Cooks, Restaurant	84	115	199	9
Sales Representatives, Wholesale				
and Manufacturing, Except Technical				
and Scientific Products	48	148	195	10
Receptionists and Information Clerks	76	110	186	11

as a guideline only. (For additional clarification please see the Methodology section at the end of this report.)

The demand for employment is made up of new jobs as a result of economic growth and the need to replace workers who retire, get promoted, change careers, or leave their employment for some other reason. Some jobs have a high turnover rate and therefore will have a higher replacement need.

For example, both Cashiers and Retail salespersons have a high turnover rate. These occupations are expected to have the largest replacement need. In combination with the number of new jobs due to economic growth, they are also projected to have the largest average annual openings during the projection period.

#### **Training**

Short-term projections can be used by job seekers to pursue training based on occupational growth trends. These trends can be used to identify which jobs will be in demand and what kind of training is needed for these positions. Each occupational table, except the major occupation group table, includes training codes to assist in determining which types of training will be in demand in the near future.

### Occupational Education and Training Categories and Codes

- 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.
- **Doctoral degree** Completion of the degree program usually requires at least 3 years of full-time equivalent academic work beyond the bachelor's degree.
- Master's degree Completion of the degree program usually requires 1 or 2 years of full-time equivalent study beyond the bachelor's degree.
- 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.
- 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.
- O6 **Associate degree** Completion of the degree program usually requires at least 2 years of full-time equivalent academic work.
- 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.
- 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.
- **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.

#### Methodology

Short-term industry projections use monthly employment data from the Covered Employment and Wages Program (ES-202) and historical trends of Self-employed workers based on ratios from the U.S. Census Bureau. These projections were created by using the Short-term Industry Forecasting System, which was developed by America's Labor Market Information System (ALMIS).

Occupational projections were created with MicroMatrix software, which was developed by the Utah Department of Workforce Services and administered by the MicroMatrix Consortium as part of ALMIS. These projections were created by applying Occupational Employment Statistics (OES) industry staffing patterns to industry projections. National change factors were applied to each occupation in an industry to determine the projected level of employment.

Both short- and long-term projections forecast industry data first. These industry projections are then applied to OES industry staffing patterns to develop occupational projections. It is expected that the occupational staffing patterns will not be the same as the base period, therefore, a method is used in conjunction with the industry projections to arrive at the occupational projections.

The base period is second quarter 2002 and is projected to second quarter 2004. Short-term projections will be prepared by the Economic and Labor Market Information Bureau every six months. Projections, whether they are short-term or long-term, are for the forecasted year only. It should not be assumed that total growth or loss divided by the number of forecasted years would give an annual rate of growth or loss. The growth or loss will fluctuate over the projected period. An annual average may be misleading and will not give an accurate picture of the employment situation.

Industries that are not forecasted because either New Hampshire has no employment or no significant employment:

Agricultural production - crops, Agriculture productions - livestock, Forestry, and Fishing, hunting, and trapping.

- Metal mining, Coal mining, and Oil and gas extraction
- Tobacco products
- Railroad transportation
- Private households

Because the primary interest is the forecasting of occupations, employment totals in Government, Health services, Educational services, and U.S. Postal Service have been adjusted to be consistent with OES occupational staffing patterns. Employment in U.S. Postal Service was removed from Federal government and reported under U.S. Postal Service (SIC code 43). Hospitals were removed from State government and added to Health services (SIC code 80). Education was removed from State and Local government and added to Educational services (SIC code 82).

This projection report used industry data based on the Standard Industrial Classification (SIC) system. This system was replaced by the North American Industrial Classification System (NAICS) in 2001. Even though NAICS information was available for second quarter 2002, occupational data was gathered based on SIC code, therefore this projection report is also categorized by SIC. The next set of short-term projections will be reported in NAICS.

There are advantages to NAICS. The first advantage is to capture changes in the economy and emerging industries. The second advantage is to allow all three North American Free Trade Agreement (NAFTA) partners (United States, Canada, and Mexico) the ability to measure and compare industries between countries. The third advantage is to use a unified concept to classify industries. This is done by classifying establishments using similar labor, capital expenditures, and raw material input. The SIC system used a mixture of ways to classified establishments.

The employment and occupational data gathered from employers must be kept confidential, therefore the information was screened to ensure that specific data about an establishment could not be determined from published information. Data was suppressed when: fewer than three firms reported data for an occupation within an industry; or one firm accounted for more than 50 percent of total employment for an occupation; or two firms, combined, accounted for more than

75 percent of total employment for an occupation. An "n" indicates that employment did not meet confidentiality standards and therefore cannot be disclosed.

#### **Short-term vs. Long-term Projections**

The Economic and Labor Market Information Bureau publishes both short- and long-term projections. There are several differences between the two sets of data. The first difference is the time period. Long-term projections are created every two years for a tenyear period and are based on annual averages. Short-term projections will be created every six months and will be based on quarterly averages.

Short-term projections capture business cycles and seasonal changes. Long-term projections capture structural, technological, and demographic changes. Long-term projections are influenced by national trends, while short-term projections look at how current economic trends affect employment.

Gail Houston

For additional information including supplementary detailed tables, please contact Gail Houston at: (603) 228-4179 or ghouston@nhes.state.nh.us

### Top Five Fastest Growing Jobs by Training Code

soc		Employ	yment	Change		Training
Code	Title	2002	2004	Number	Percent	Code
First Pro	ofessional Degree	7,558	7,797	239	3.2%	·
29-1051	Pharmacists	835	876	41	4.9%	1
29-1131	Veterinarians	376	394	18	4.8%	1
29-1069	Physicians & Surgeons, All Other	410	427	17	4.1%	1
29-1061	Anesthesiologists	97	101	4	4.1%	1
29-1199	Health Diagnosing & Treating Practitioners, All Other	595	619	24	4.0%	1
Doctora	I Degree	4,564	4,745	181	4.0%	
19-1022	Microbiologists	56	59	3	5.4%	2
	Political Science Teachers, Postsecondary Atmospheric, Earth, Marine, & Space Sciences Teachers,	60	63	3	5.0%	2
	Postsecondary	61	64	3	4.9%	2
25-1067	Sociology Teachers, Postsecondary	82	86	4	4.9%	2
25-1125	History Teachers, Postsecondary	82	86	4	4.9%	2
Master's	s Degree	7,404	7,663	259	3.5%	
29-1121	Audiologists	35	38	3	8.6%	3
25-4010	Archivists, Curators, & Museum Technicians	107	114	7	6.5%	3
29-1127	Speech-Language Pathologists	507	540	33	6.5%	3
21-1023	Mental Health & Substance Abuse Social Workers	243	258	15	6.2%	3
21-1013	Marriage & Family Therapists	86	91	5	5.8%	3
Work Ex	xperience plus Bachelor's or Higher degree	32,878	33,361	483	1.5%	
11-9111	Medical & Health Services Managers	1,146	1,201	55	4.8%	4
11-9031	Education Administrators, Preschool & Child Care Center	254	265	11	4.3%	4
11-2011	Advertising & Promotions Managers	423	438	15	3.5%	4
11-3021	Computer & Information Systems Managers	1,267	1,311	44	3.5%	4
13-1111	Management Analysts	2,449	2,520	71	2.9%	4

# **Top Five Fastest Growing Jobs by Training Code (continued)**

soc		Emplo	yment	Char	nge	Training
Code	Title	2002	2004	Number	Percent	Code
Bachelo	or's Degree	78,194	79,612	1,418	1.8%	
	Physician Assistants	291	317	26	8.9%	5
	Film & Video Editors	25	27	2	8.0%	5
	Network & Computer Systems Administrators	909	980	71	7.8%	5
	Computer Software Engineers, Applications	3,373	3,628	255	7.6%	5
15-1081	Network Systems & Data Communications Analysts	543	584	41	7.6%	5
	ate Degree	25,526	26,293	767	3.0%	
	Computer Support Specialists	1,722	1,879	157	9.1%	6
	Medical Records & Health Information Technicians	754	817	63	8.4%	6
	Physical Therapist Assistants	285	306	21	7.4%	6
	Dental Hygienists	901	955	54	6.0%	6
29-1126	Respiratory Therapists	350	369	19	5.4%	6
Postsec	condary Vocational Training	30,744	31,385	641	2.1%	
43-9031	Desktop Publishers	228	254	26	11.4%	7
	Fitness Trainers & Aerobics Instructors	1,608	1,727	119	7.4%	7
31-9011	Massage Therapists	178	188	10	5.6%	7
29-2055	Surgical Technologists	278	293	15	5.4%	7
15-1099	Computer Specialists, All Other	1,505	1,586	81	5.4%	7
Work E	xperience in a Related Occupation	54,986	55,611	625	1.1%	
	First-Line Supervisors/Managers of Correctional Officers	51	55	4	7.8%	8
25-3021	Self-Enrichment Education Teachers	753	783	30	4.0%	8
43-4141	New Accounts Clerks	398	412	14	3.5%	8
25-1194	Vocational Education Teachers, Postsecondary	118	122	4	3.4%	8
27-2032	Choreographers	32	33	1	3.1%	8
Long-te	rm on-the-Job Training	47,202	47,682	480	1.0%	
_	Structural Iron & Steel Workers	143	153	10	7.0%	9
	Entertainers & Performers, Sports & Related Workers, All Other	90	96	6	6.7%	9
	Electricians	2,550	2,694	144	5.6%	9
49-3092	Recreational Vehicle Service Technicians	91	96	5	5.5%	9
	Cooks, Restaurant	3,197	3,365	168	5.3%	9
Modera	te-term on-the-Job Training	119,701	119 406	-295	-0.2%	
	Medical Assistants	1,066	1,166	100	9.4%	10
	Social & Human Service Assistants	2,608	2,823	215	8.2%	10
	Pharmacy Technicians	769	828	59	7.7%	10
	Insulation Workers	132	141	9	6.8%	10
	Air Transportation Workers, All Other (OES Only)	98	104	6	6.1%	10
	erm on-the-Job Training	236,222		4,826	2.0%	
	Personal & Home Care Aides	2,071	2,255	184	8.9%	11
	Physical Therapist Aides	77	83	6	7.8%	11
	HelpersRoofers	83	89	6	7.0%	11
	Hotel, Motel, & Resort Desk Clerks	919	985	66	7.2%	11
	HelpersPainters, Paperhangers, Plasterers, & Stucco Masons	42	45	3	7.1%	11
77 3014	riolpora i alintora, i aportiangora, i lasterera, & otubbo Masoria	72	70	3	1.1/0	1.1