

New and emerging occupations

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According to the OES survey, in 2001, most new and emerging (N&E) occupations were in firms with fewer than 100 employees. No single industry dominated in the creation and growth of these occupations. (See chart 1.) More than one-half of these were distributed among human services, transportation, communications, business and personal services, and a wide

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variety of wholesale and retail trade activities. Slightly more than half of all N&E occupations were paid in a range of \$8.50 to \$17. (See chart 2.) No single State or single occupational classification dominated in the creation of N&E occupations; however, healthcare, management, and production occupations were the three most frequent occupation classifications observed. (See chart 3.) Information on specific occupations that are new or emerging is presented below.¹

Construction field

- Metal stud framer
- Epoxy floor installers

New building systems, particularly in commercial construction, and increased

use of new materials explain the appearance of new occupations in the traditional construction industry.

Educational services

- School diagnosticians
- Adaptive physical education specialist
- Distance learning coordinators
- Poison information specialist
- Poison information technician
- Home-school liaison
- Technology infusion specialist
- Director of technology
- Technology coordinator
- Athletic compliance coordinator

Education continues to create N&E occupations. Some of these arise in connection with the objective of tailoring

Chart 1. N&E employment totals and national employment by employment size

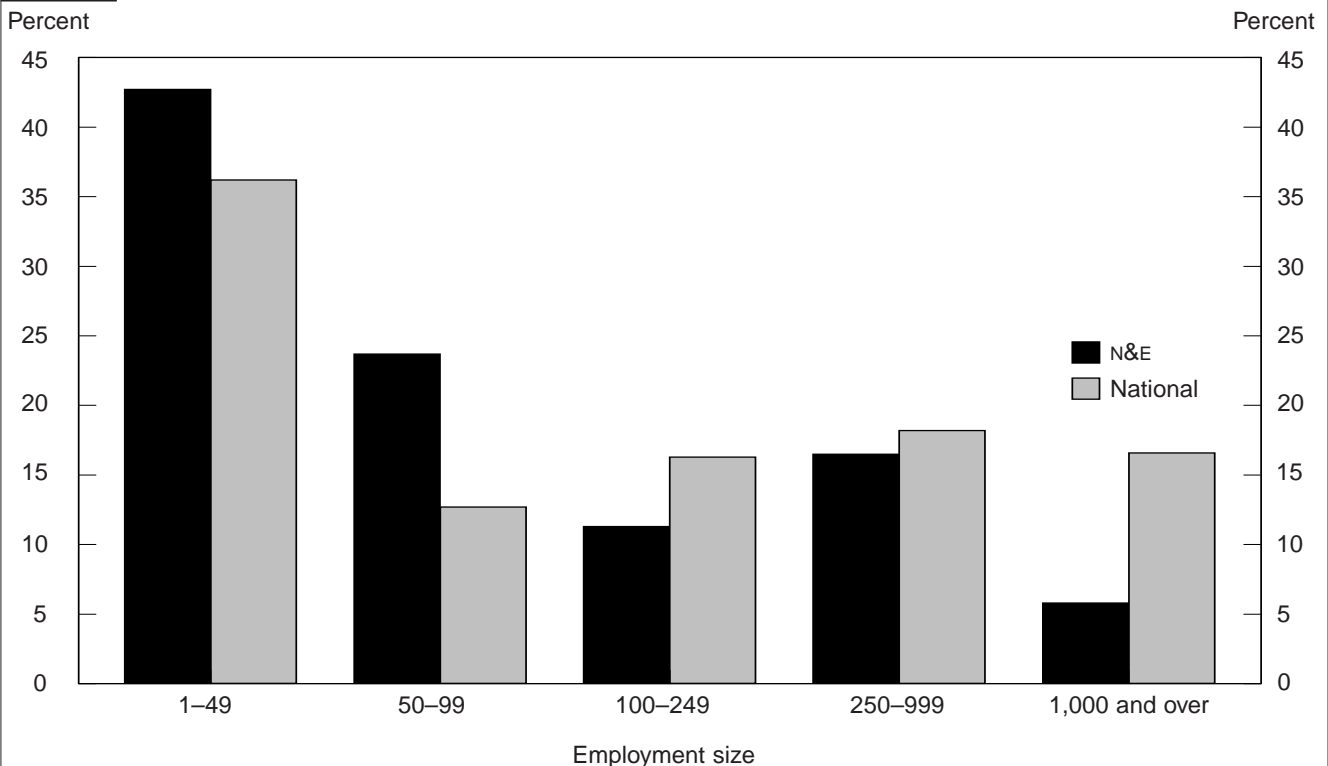


Chart 2. Relative distribution of N&E occupations by survey wage range

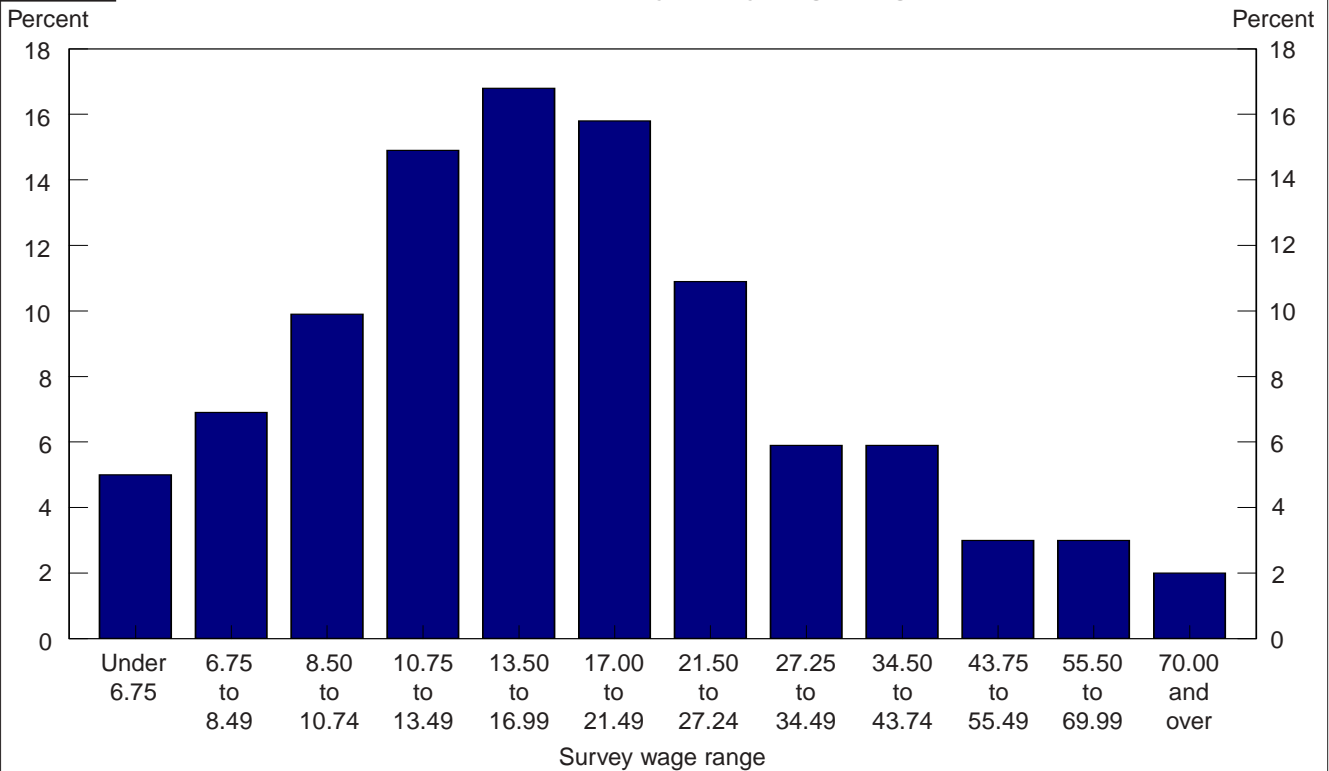
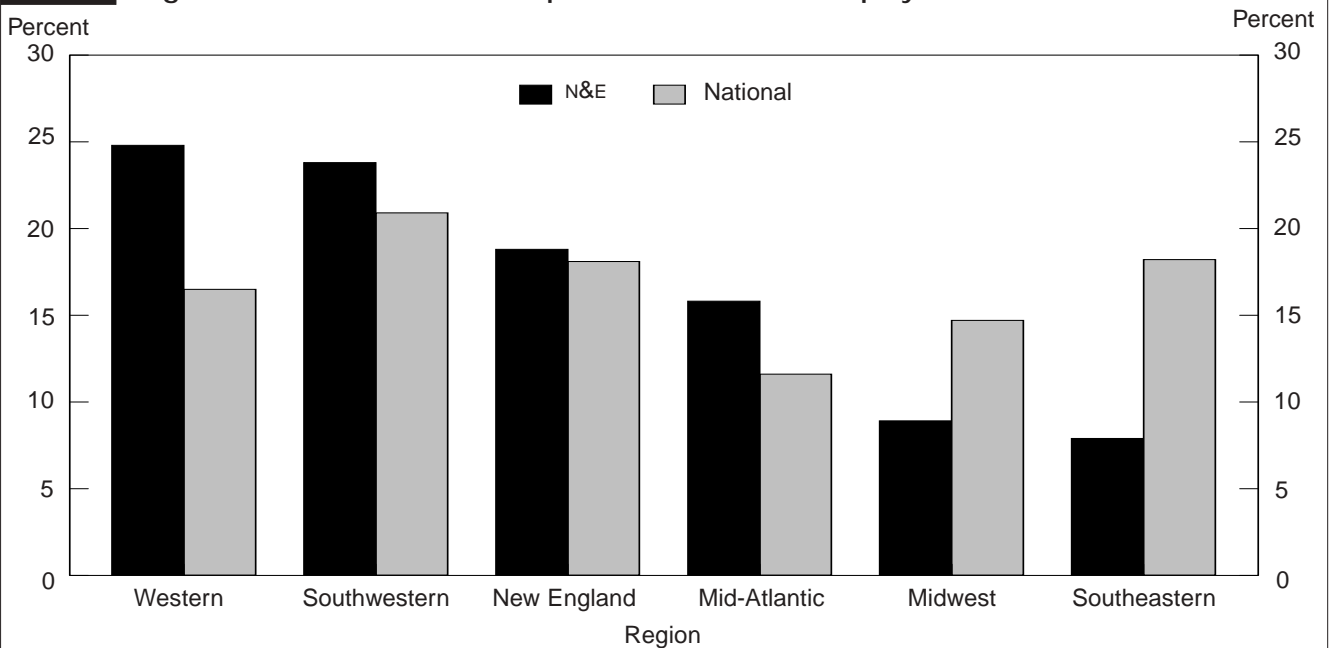


Chart 3. Regional distribution of N&E occupations and national employment



NOTE: Regions are defined as follows: **Western:** Alaska, Arizona, California, Guam, Hawaii, Idaho, Nevada, Oregon, and Washington; **Southwestern:** Arkansas, Colorado, Kansas, Louisiana, Missouri, Montana, New Mexico, Oklahoma, Texas, Utah, and Wyoming; **Midwest:** Illinois, Indiana, Iowa, Michigan, Minnesota, Nebraska, North Dakota, Ohio, South Dakota, and

Wisconsin; **Southeastern:** Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee; **Mid-Atlantic:** Delaware, District of Columbia, Maryland, New Jersey, Pennsylvania, Virginia, and West Virginia; **New England:** Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont.

educational services to students' special needs. Others deal with the use of improved telecommunications applications to deliver education. Technology and its general uses in education explain the creation of other specialist occupations. Governmental regulations governing athletic and other physical education programs have contributed to other occupations in special education and the administration of athletic programs.

Health services

- Monitor technicians
- Medical specimen couriers
- Patient-care technicians
- Urine sample collectors
- Polysomnographic technicians
- Tissue process technicians
- CRN anesthesiologist
- Tissue & eye bank technicians
- Spiritual care giver
- Tissue service coordinator
- Genetic counselor
- Sanitization technician
- Medical certification clerk
- Plasma processor
- Schedulers for surgical cases
- Night monitors

In the health field, N&E occupations have addressed specialized patient care, continuing responses to advancing medical technologies, improved scheduling of surgical procedures, and alternative medical service delivery approaches. Increased attention has been directed toward management and care of tissue banks. In light of recent genome developments, genetic counselors are appearing upon the medical scene.

Social service

- Bill review nurse
- Adult protective services
- Energy auditor
- HazMat drivers
- Weatherization director
- Director information management

- Cheer workers
- Disaster preparedness staff

There are several groups of occupations in social services — nurses and information management workers employed in new fields; workers helping seniors and others in their homes; and disaster preparedness staff. Nurses continue to be employed in areas other than those directly related to providing clinical care services, primarily in the control of medical costs. In addition, a new occupation for nurses was found in the legal field where they are employed as legal nurse staff specialists. Information management, like nursing, is not a new field, but one that continues to appear in a number of new industry settings. Senior and disabled persons are creating situations calling for cheer workers who provide opportunities for therapeutic interaction and others who investigate charges and complaints of mistreatment. Drivers qualified to deliver hazardous materials may provide oxygen to residences and other service locations. Providing services for the insulation and heating of residences has created occupations in weatherization and heating cost recovery. Finally, increased awareness of disaster preparedness is driving the creation of related positions.

Transportation

- Horsedrawn carriage drivers
- Handicapped bus aides

Clearly carriage drivers is not a new occupation; however, its appearance in connection with the development of urban entertainment districts makes this occupation noteworthy. Attention to the mobility needs of the handicapped has contributed to the creation of aide occupations to assist them on buses.

Service

- Surveillance person
- Producer-Internet provider (ISP)

- Psychic counselors
- Chief software architect
- Match-makers
- Web analyst
- Bar-proof checker
- Digital imagers and modelers
- Customer insight analyst
- Interactive media planner
- Sr. supply chain manager
- Televideo engineer
- Divers-underwater inspectors

A variety of service occupations are appearing. Some deal with security needs. Others reflect cultural attitudes about future uncertainties or finding a mate. Behavioral science applications to marketing are creating other kinds of marketing research jobs. The continuing drive to improve the efficiency of manufacturing operations through improved material management has created specialist positions. Increased attention to docks and ports has created highly specialized underwater inspection jobs.

Special attention is called to the Internet and telecommunications technologies. A variety of new specialized occupations continue to appear as a result of these, such as producers for Internet service provider sites, web analysts that study utilization patterns, and interactive media planners. The pattern in development of these N&E occupations appears to have its parallel in the development of new occupations that followed the introduction of automotive technology. The latter industry has continued to contribute to N&E occupations for more than 100 years. The same pattern seems to be developing within the Internet and telecommunication industries.

Engineering services and manufacturing

- Hazardous material engineer
- Neon glass benders
- Compliance engineer
- Cultured marble caster
- Laser engineer
- Glue mixer

- Optical design engineer
- Perfumers
- Optical engineer
- Translators
- Roof truss designers
- Missile specialists
- Pharmacokineticist
- Truss layout and assembly workers

New materials and processes have contributed to the creation of new occupations while the regulatory concern for the associated environmental and health impacts of these have created additional occupations. Lasers and various optical technologies continue to create new

occupations. Manufactured housing components have created both design and production occupations. The drug industry has seen the creation of an occupation, pharmacokineticist, concerned with establishing dosage standards related to the drug availability of retained drug dosages in patients. Some occupations are not new but are once again emerging due to consumer preferences. The cultural resurgence of neon lighting has created the need for neon benders. Market demand for cast marble surfaces has resulted in more work for those who cast it. Finally, the growth of small-scale perfume distributors contributed to the appearance of

perfume mixers. Other occupations that are not new but are emerging in engineering and sciences include translators as manufacturers' foreign markets and contacts increased. Maintenance and renewal of the national defense capabilities is associated with the expanded presence of missile specialists. □

Note

¹ For information on the concepts and methodology of identifying new and emerging occupations, as well as detailed data on the findings of the Occupational Employment Statistics Survey, see Jerome Pikulinski, "New and Emerging Occupations," *Occupational Employment and Wages, May 2003* (Bureau of Labor Statistics Bulletin 2567, September 2004).

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