Employers usually seek applicants with a “good eye,” imagination, and creativity, as well as a good technical understanding of photography. Entry-level positions in photojournalism, industrial, or scientific photography generally require a college degree in journalism or photography. Freelance and portrait photographers need technical proficiency, whether gained through a degree program, vocational training, or extensive work experience.

Many universities, community and junior colleges, vocational-technical institutes, and private trade and technical schools offer photography courses. Basic courses in photography cover equipment, processes, and techniques. Bachelor’s degree programs, especially those including business courses, provide a well-rounded education. Art schools offer useful training in design and composition.

Individuals interested in photography should subscribe to photographic newsletters and magazines, join camera clubs, and seek summer or part-time employment in camera stores, newspapers, or photo studios.

Photographers may start out as assistants to experienced photographers. Assistants learn to mix chemicals, develop film, print photographs, and the other skills necessary to run a portrait or commercial photography business. Freelance photographers also should develop an individual style of photography in order to differentiate themselves from the competition. Some photographers enter the field by submitting unsolicited photographs to magazines and art directors at advertising agencies. For freelance photographers, a good portfolio of their work is critical.

Photographers need good eyesight, artistic ability, and hand-eye coordination. They should be patient, accurate, and detail-oriented. Photographers should be able to work well with others, as they frequently deal with clients, graphic designers, or advertising and publishing specialists. Increasingly, photographers need to know computer software programs and applications that allow them to prepare and edit images.

Portrait photographers need the ability to help people relax in front of the camera. Commercial and fine arts photographers must be imaginative and original. News photographers not only must be good with a camera, but also must understand the story behind an event so their pictures match the story. They must be decisive in recognizing a potentially good photograph and act quickly to capture it.

Photographers who operate their own businesses, or freelance, need business skills as well as talent. These individuals must know how to prepare a business plan; submit bids; write contracts; hire models, if needed; get permission to shoot on locations that normally are not open to the public; obtain releases to use photographs of people; license and price photographs; secure copyright protection for their work; and keep financial records.

After several years of experience, magazine and news photographers may advance to photography or picture editor positions. Some photographers teach at technical schools, film schools, or universities.

**Job Outlook**
Photographers can expect keen competition for job openings because the work is attractive to many people. The number of individuals interested in positions as commercial and news photographers usually is much greater than the number of openings. Those who succeed in landing a salaried job or attracting enough work to earn a living by freelancing are likely to be the most creative, able to adapt to rapidly changing technologies, and adept at operating a business. Related work experience, job-related training, or some unique skill or talent—such as a background in computers or electronics—also are beneficial to prospective photographers.

Employment of photographers is expected to increase about as fast as the average for all occupations through 2010. Demand for portrait photographers should increase as the population grows. And, as the number of electronic versions of magazines, journals, and newspapers grows on the Internet, photographers will be needed to provide digital images.

Employment growth of photographers will be constrained somewhat by the widespread use of digital photography. Besides increasing photographers’ productivity, improvements in digital technology will allow individual consumers and businesses to produce, store, and access photographic images on their own. Declines in the newspaper industry will reduce demand for photographers to provide still images for print.

**Earnings**
Median annual earnings of salaried photographers were $22,300 in 2000. The middle 50 percent earned between $16,790 and $33,020. The lowest 10 percent earned less than $13,760, and the highest 10 percent earned more than $46,890. Median annual earnings in the industries employing the largest numbers of salaried photographers were as follows:

- Radio and television broadcasting ........................................ $29,890
- Mailing, reproduction, and stenographic services ............. 29,610
- Newspapers ........................................................................ 28,660
- Photographic studios, portrait ............................................. 19,290

Salaried photographers—more of whom work full time—tend to earn more than those who are self-employed. Because most freelance and portrait photographers purchase their own equipment, they incur considerable expense acquiring and maintaining cameras and accessories. Unlike news and commercial photographers, few fine arts photographers are successful enough to support themselves solely through their art.

**Related Occupations**
Other occupations requiring artistic talent include architects, except landscape and naval; artists and related workers; designers; and television, video, and motion picture camera operators and editors.

**Sources of Additional Information**
Career information on photography is available from:
- Professional Photographers of America, Inc., 229 Peachtree St. NE., Suite 2200, Atlanta, GA 30303. Internet: [http://www.ppa.com](http://www.ppa.com)

**Public Relations Specialists**

(O*NET 27-3031.00)

**Significant Points**

- Although employment is projected to increase much faster than the average, keen competition is expected for entry-level jobs.
- Opportunities should be best for college graduates who combine a degree in public relations or other communications-related fields with a public relations internship or other related work experience.
- The ability to write and speak well is essential.
Nature of the Work
An organization’s reputation, profitability, and even its continued existence can depend on the degree to which its targeted “publics” support its goals and policies. Public relations specialists serve as advocates for businesses, nonprofit associations, universities, hospitals, and other organizations, and build and maintain positive relationships with the public. As managers recognize the growing importance of good public relations to the success of their organizations, they increasingly rely on public relations specialists for advice on the strategy and policy of such programs.

Public relations specialists handle organizational functions such as media, community, consumer, and governmental relations; political campaigns; interest-group representation; conflict mediation; or employee and investor relations. However, public relations is not only “telling the organization’s story.” Understanding the attitudes and concerns of consumers, employees, and various other groups also is a vital part of the job. To improve communications, public relations specialists establish and maintain cooperative relationships with representatives of community, consumer, employee, and public interest groups and with representatives from print and broadcast journalism.

Informing the general public, interest groups, and stockholders of an organization’s policies, activities, and accomplishments is an important part of a public relations specialist’s job. The work also involves keeping management aware of public attitudes and concerns of the many groups and organizations with which they must deal.

Public relations specialists prepare press releases and contact people in the media who might print or broadcast their material. Many radio or television special reports, newspaper stories, and magazine articles start at the desks of public relations specialists. Sometimes the subject is an organization and its policies towards its employees or its role in the community. Often the subject is a public issue, such as health, energy, or the environment.

Public relations specialists also arrange and conduct programs to keep up contact between organization representatives and the public. For example, they set up speaking engagements and often prepare speeches for company officials. These specialists represent employers at community projects; make film, slide, or other visual presentations at meetings and school assemblies; and plan conventions. In addition, they are responsible for preparing annual reports and writing proposals for various projects.

In government, public relations specialists—who may be called press secretaries, information officers, public affairs specialists, or communications specialists—keep the public informed about the activities of government agencies and officials. For example, public affairs specialists in the Department of State keep the public informed of travel advisories and of U.S. positions on foreign issues. A press secretary for a member of Congress keeps constituents aware of the representative’s accomplishments.

In large organizations, the key public relations executive, who often is a vice president, may develop overall plans and policies with other executives. In addition, public relations departments employ public relations specialists to write, research, prepare materials, maintain contacts, and respond to inquiries.

People who handle publicity for an individual or who direct public relations for a small organization may deal with all aspects of the job. They contact people, plan and research, and prepare material for distribution. They also may handle advertising or sales promotion work to support marketing.

Working Conditions
Some public relations specialists work a standard 35- to 40-hour week, but unpaid overtime is common. Occasionally, they must be at the job or on call around the clock, especially if there is an emergency or crisis. Public relations offices are busy places; work schedules can be irregular and frequently interrupted. Schedules often have to be rearranged so that workers can meet deadlines, deliver speeches, attend meetings and community activities, or travel.

Employment
Public relations specialists held about 137,000 jobs in 2000. About 6 out of 10 salaried public relations specialists worked in services industries—management and public relations firms, membership organizations, educational institutions, healthcare organizations, social service agencies, and advertising agencies, for example. Others worked for communications firms, financial institutions, and government agencies. About 8,600 public relations specialists were self-employed.

Public relations specialists are concentrated in large cities, where press services and other communications facilities are readily available and many businesses and trade associations have their headquarters. Many public relations consulting firms, for example, are in New York, Los Angeles, Chicago, and Washington, DC. There is a trend, however, for public relations jobs to be dispersed throughout the Nation, closer to clients.

Training, Other Qualifications, and Advancement
There are no defined standards for entry into a public relations career. A college degree combined with public relations experience, usually gained through an internship, is considered excellent
Those who meet all the requirements of the program earn the Accredited Business Communicator designation. Candidates must have at least 5 years of experience in a communication field and pass a written and oral examination. They also must submit a portfolio of work samples demonstrating involvement in a range of communication projects and a thorough understanding of communication planning. Employers may consider professional recognition through accreditation a sign of competence in this field, which could be especially helpful in a competitive job market.

Promotion to supervisory jobs may come as public relations specialists show that they can handle more demanding assignments. In public relations firms, a beginner may be hired as a research assistant or account assistant and be promoted to account executive, account supervisor, vice president, and, eventually, senior vice president. A similar career path is followed in corporate public relations, although the titles may differ. Some experienced public relations specialists start their own consulting firms. (For more information on public relations managers, see the Handbook statement on advertising, marketing, promotions, public relations, and sales managers.)

### Job Outlook
Keen competition will likely continue for entry-level public relations jobs as the number of qualified applicants is expected to exceed the number of job openings. Many people are attracted to this profession due to the high-profile nature of the work and the relative ease of entry. Opportunities should be best for college graduates who combine a degree in journalism, public relations, advertising, or another communications-related field with a public relations internship or other related work experience. Applicants without the appropriate educational background or work experience will face the toughest obstacles.

Employment of public relations specialists is expected to increase much faster than the average for all occupations through 2010. The need for good public relations in an increasingly competitive business environment should spur demand for public relations specialists in organizations of all sizes. Employment in public relations firms should grow as firms hire contractors to provide public relations services rather than support full-time staff. In addition to employment growth, job opportunities should result from the need to replace public relations specialists who take other jobs or who leave the occupation altogether.

### Earnings
Median annual earnings for salaried public relations specialists were $39,580 in 2000. The middle 50 percent earned between $29,610 and $53,620; the lowest 10 percent earned less than $22,780, and the top 10 percent earned more than $70,480. Median annual earnings in the industries employing the largest numbers of public relations specialists in 2000 were:

- Management and public relations .............................................. $43,690
- Local government ................................................................. 40,760
- State government .................................................................. 39,560
- Colleges and universities ....................................................... 35,080

According to a joint survey conducted by the International Association of Business Communicators and the Public Relations Society of America, the median annual income for a public relations specialist was $39,000 in 1999.

### Related Occupations
Public relations specialists create favorable attitudes among various organizations, special interest groups, and the public through effective communication. Other workers with similar jobs include advertising, marketing, promotions, public relations, and sales staff.
managers; demonstrators, product promoters, and models; news analysts, reporters, and correspondents; lawyers; and police and detectives involved in community relations.

Sources of Additional Information
A comprehensive directory of schools offering degree programs, a sequence of study in public relations, a brochure on careers in public relations, and a $5 brochure entitled, Where Shall I go to Study Advertising and Public Relations?, are available from:
- For information on accreditation for public relations specialists, contact:
  - International Association of Business Communicators, One Halidie Plaza, Suite 600, San Francisco, CA 94102. Internet: http://www.iabc.com

Television, Video, and Motion Picture Camera Operators and Editors
(O*NET 27-4031.00, 27-4032.00)

Significant Points
- Technical expertise, a “good eye,” imagination, and creativity are essential.
- Keen competition for job openings is expected, because many talented people are attracted to the field.
- About one-fourth of camera operators are self-employed.

Nature of the Work
Television, video, and motion picture camera operators produce images that tell a story, inform or entertain an audience, or record an event. Film and video editors edit soundtracks, film, and video for the motion picture, cable, and broadcast television industries. Some camera operators do their own editing.

Making commercial quality movies and video programs requires technical expertise and creativity. Producing successful images requires choosing and presenting interesting material, selecting appropriate equipment, and applying a good eye and steady hand to assure smooth natural movement of the camera.

Camera operators work in television, video, or motion picture cameras to shoot a wide range of subjects, including television series, studio programs, news and sporting events, music videos, motion pictures, documentaries, and training sessions. Some camera operators do their own editing.

Making commercial quality movies and video programs requires technical expertise and creativity. Producing successful images requires choosing and presenting interesting material, selecting appropriate equipment, and applying a good eye and steady hand to assure smooth natural movement of the camera.

Camera operators use television, video, or motion picture cameras to shoot a wide range of subjects, including television series, studio programs, news and sporting events, music videos, motion pictures, documentaries, and training sessions. Some camera operators do their own editing.

Film and video editors use sophisticated digital equipment to edit images and mix sound.

in any of several different camera mounts. For example, the camera operator can be stationary and shoot whatever passes in front of the lens, or the camera can be mounted on a track, with the camera operator responsible for shooting the scene from different angles or directions. Other camera operators sit on cranes and follow the action, while crane operators move them into position. Steadicam operators mount a harness and carry the camera on their shoulders to provide a more solid picture while they move about the action. Camera operators who work in the entertainment field often meet with directors, actors, editors, and camera assistants to discuss ways of filming, editing, and improving scenes.

Working Conditions
Working conditions for camera operators and editors vary considerably. Those employed in government, television and cable networks, and advertising agencies usually work a 5-day, 40-hour week. On the other hand, ENG operators often work long, irregular hours and must be available to work on short notice. Camera operators and editors working in motion picture production also may work long, irregular hours.

ENG operators and those who cover major events, such as conventions or sporting events, frequently travel locally, stay overnight on assignments, or travel to distant places for longer periods. Camera operators filming television programs or motion pictures may travel to film on location.

Some camera operators work in uncomfortable, or even dangerous surroundings, especially ENG operators covering accidents, natural disasters, civil unrest, or military conflicts. Many camera operators must wait long hours in all kinds of weather for an event to take place and stand or walk for long periods while carrying heavy equipment. ENG operators often work under strict deadlines.

Employment
Television, video, and motion picture camera operators held about 27,000 jobs in 2000; and film and video editors held about 16,000. One-fourth of camera operators were self-employed. Some self-employed camera operators contracted with television networks, documentary or independent filmmakers, advertising agencies, or trade show or convention sponsors to do individual projects for a predetermined fee, often at a daily rate.

Most salaried camera operators were employed by television broadcasting stations or motion picture studios. Half of the salaried