

arts councils, and the National Endowment for the Arts, should remain competitive. Nonetheless, studios, galleries, and individual clients are always on the lookout for artists who display outstanding talent, creativity, and style. Population growth, rising incomes, and growth in the number of people who appreciate the fine arts will contribute to the demand for fine artists. Talented fine artists who have developed a mastery of artistic techniques and skills, including computer skills, will have the best job prospects.

The need for artists to illustrate and animate materials for magazines, journals, and other printed or electronic media will spur demand for illustrators and animators of all types. Growth in the entertainment industry, including cable and other pay television broadcasting and motion picture production and distribution, will provide new job opportunities for illustrators, cartoonists, and animators. Competition for most jobs, however, will be strong, because job opportunities are relatively few and the number of people interested in these positions usually exceeds the number of available openings. Employers should be able to choose from among the most qualified candidates.

Earnings

Median annual earnings of salaried art directors were \$56,880 in 2000. The middle 50 percent earned between \$41,290 and \$80,350. The lowest 10 percent earned less than \$30,130, and the highest 10 percent earned more than \$109,440. Median annual earnings were \$63,510 in advertising, the industry employing the largest numbers of salaried art directors.

Median annual earnings of salaried fine artists, including painters, sculptors, and illustrators were \$31,190 in 2000. The middle 50 percent earned between \$20,460 and \$42,720. The lowest 10 percent earned less than \$14,690, and the highest 10 percent earned more than \$58,580.

Median annual earnings of salaried multi-media artists and animators were \$41,130 in 2000. The middle 50 percent earned between \$30,700 and \$54,040. The lowest 10 percent earned less than \$23,740, and the highest 10 percent earned more than \$70,560. Median annual earnings were \$44,290 in computer and data processing services, the industry employing the largest numbers of salaried multi-media artists and animators.

Earnings for self-employed artists vary widely. Some charge only a nominal fee while they gain experience and build a reputation for their work. Others, such as well-established freelance fine artists and illustrators, can earn more than salaried artists. Many, however, find it difficult to rely solely on income earned from selling paintings or other works of art. Like other self-employed workers, freelance artists must provide their own benefits.

Related Occupations

Other workers who apply art skills include architects, except landscape and naval; archivists, curators, and museum technicians; designers; landscape architects; and photographers. Some computer-related occupations require art skills, including computer software engineers and desktop publishers.

Sources of Additional Information

For general information about art and design and a list of accredited college-level programs, contact:

► The National Association of Schools of Art and Design, 11250 Roger Bacon Dr., Suite 21, Reston, VA 20190. Internet: <http://www.arts-accredit.org/nasad/default.htm>

For information on careers in medical illustration, contact:

► The Association of Medical Illustrators, 2965 Flowers Road South, Suite 105, Atlanta, GA 30341. Internet: <http://medical-illustrators.org>

Designers

(O*NET 27-1021.00, 27-1022.00, 27-1023.00, 27-1024.00, 27-1025.00, 27-1026.00, 27-1027.01, 27-1027.02)

Significant Points

- Three out of 10 designers are self-employed—almost 5 times the proportion for all professional and related occupations.
- Creativity is crucial in all design occupations; most designers need a bachelor's degree, and candidates with a master's degree hold an advantage.
- Keen competition is expected for most jobs, despite projected faster-than-average employment growth, because many talented individuals are attracted to careers as designers.

Nature of the Work

Designers are people with a desire to create. They combine practical knowledge with artistic ability to turn abstract ideas into formal designs for the merchandise we buy, the clothes we wear, the publications we read, and the living and office space we inhabit. Designers usually specialize in a particular area of design, such as automobiles, industrial or medical equipment, or home appliances; clothing and textiles; floral arrangements; publications, logos, signage, or movie or TV credits; interiors of homes or office buildings; merchandise displays; or movie, television, and theater sets.

The first step in developing a new design or altering an existing one is to determine the needs of the client, the ultimate function for which the design is intended, and its appeal to customers. When creating a design, designers often begin by researching the desired design characteristics, such as size, shape, weight, color, materials used, cost, ease of use, fit, and safety.

Designers then prepare sketches—by hand or with the aid of a computer—to illustrate the vision for the design. After consulting with the client, an art or design director, or a product development team, designers create detailed designs using drawings, a structural model, computer simulations, or a full-scale prototype. Many designers increasingly are using computer-aided design (CAD) tools to create and better visualize the final product. Computer models allow greater ease and flexibility in exploring a greater number of design alternatives, thus reducing design costs and cutting the time it takes to deliver a product to market. Industrial designers use computer-aided industrial design (CAID) tools to create designs and machine-readable instructions that communicate with automated production tools.

Designers sometimes supervise assistants who carry out their creations. Designers who run their own businesses also may devote a considerable amount of time to developing new business contacts, reviewing equipment and space needs, and performing administrative tasks, such as reviewing catalogues and ordering samples. Design encompasses a number of different fields. Many designers specialize in a particular area of design, whereas others work in more than one area.

Commercial and industrial designers, including designers of commercial products and equipment, develop countless manufactured products, including airplanes; cars; children's toys; computer equipment; furniture; home appliances; and medical, office, and recreational equipment. They combine artistic talent with research on product use, customer needs, marketing, materials, and production methods to create the most functional and appealing design

that will be competitive with others in the marketplace. Industrial designers typically concentrate in an area of sub-specialization such as kitchen appliances, auto interiors, or plastic-molding machinery.

Fashion designers design clothing and accessories. Some high-fashion designers are self-employed and design for individual clients. Other high-fashion designers cater to specialty stores or high-fashion department stores. These designers create original garments, as well as those that follow established fashion trends. Most fashion designers, however, work for apparel manufacturers, creating designs of men's, women's, and children's fashions for the mass market.

Floral designers cut and arrange live, dried, or artificial flowers and foliage into designs, according to the customer's order. They trim flowers and arrange bouquets, sprays, wreaths, dish gardens, and terrariums. They usually work from a written order indicating the occasion, customer preference for color and type of flower, price, the time at which the floral arrangement or plant is to be ready, and the place to which it is to be delivered. The variety of duties performed by floral designers depends on the size of the shop and the number of designers employed. In a small operation, floral designers may own their shops and do almost everything, from growing and purchasing flowers to keeping financial records.

Graphic designers use a variety of print, electronic, and film media to create designs that meet clients' commercial needs. Using computer software, they develop the overall layout and design of magazines, newspapers, journals, corporate reports, and other publications. They also may produce promotional displays and marketing brochures for products and services, design distinctive company logos for products and businesses, and develop signs and signage systems—called environmental graphics—for business and government. An increasing number of graphic designers develop material to appear on Internet home pages. Graphic designers also produce the credits that appear before and after television programs and movies.

Interior designers plan the space and furnish the interiors of private homes, public buildings, and business or institutional facilities, such as offices, restaurants, retail establishments, hospitals, hotels, and theaters. They also plan the interiors when existing structures are renovated or expanded. Most interior designers specialize. For example, some may concentrate in residential design, and others may further specialize by focusing on particular rooms, such as kitchens or baths. With a client's tastes, needs, and budget in mind, interior designers prepare drawings and specifications for non-load bearing interior construction, furnishings, lighting, and finishes. Increasingly, designers use computers to plan layouts, which can easily be changed to include ideas received from the client. Interior



Interior designers frequently carry sample books to meetings with clients.

designers also design lighting and architectural details—such as crown molding, built-in bookshelves, or cabinets—coordinate colors, and select furniture, floor coverings, and window treatments. Interior designers must design space to conform to Federal, State, and local laws, including building codes. Designs for public areas also must meet accessibility standards for the disabled and elderly.

Merchandise displayers and window dressers, or *visual merchandisers*, plan and erect commercial displays, such as those in windows and interiors of retail stores or at trade exhibitions. Those who work on building exteriors erect major store decorations, including building and window displays, and spot lighting. Those who design store interiors outfit store departments, arrange table displays, and dress mannequins. In large retail chains, store layouts typically are designed corporately, through a central design department. To retain the chain's visual identity and ensure that a particular image or theme is promoted in each store, designs are distributed to individual stores by e-mail, downloaded to computers equipped with the appropriate design software, and adapted to meet individual store size and dimension requirements.

Set and exhibit designers create sets for movie, television, and theater productions and design special exhibition displays. Set designers study scripts, confer with directors and other designers, and conduct research to determine the appropriate historical period, fashion, and architectural styles. They then produce sketches or scale models to guide in the construction of the actual sets or exhibit spaces. Exhibit designers work with curators, art and museum directors, and trade show sponsors to determine the most effective use of available space.

Working Conditions

Working conditions and places of employment vary. Designers employed by manufacturing establishments, large corporations, or design firms generally work regular hours in well-lit and comfortable settings. Self-employed designers tend to work longer hours.

Designers who work on a contract, or job, basis frequently adjust their workday to suit their clients' schedules, meeting with them during evening or weekend hours when necessary. Designers may transact business in their own offices or studios or in clients' homes or offices, or they may travel to other locations, such as showrooms, design centers, clients' exhibit sites, and manufacturing facilities. Designers who are paid by the assignment are under pressure to please clients and to find new ones to maintain a constant income. All designers face frustration at times when their designs are rejected or when they cannot be as creative as they wish. With the increased use of computers in the workplace and the advent of Internet websites, more designers conduct business, research design alternatives, and purchase supplies electronically than ever before.

Occasionally, industrial designers may work additional hours to meet deadlines. Similarly, graphic designers usually work regular hours, but may work evenings or weekends to meet production schedules. In contrast, set and exhibit designers work long and irregular hours; often, they are under pressure to make rapid changes. Merchandise displayers and window trimmers who spend most of their time designing space typically work in office-type settings; however, those who also construct and install displays spend much of their time doing physical labor, such as those tasks performed by a carpenter or someone constructing and moving stage scenery. (Carpenters are discussed elsewhere in the *Handbook*.) Fashion designers may work long hours to meet production deadlines or prepare for fashion shows. In addition, fashion designers may be required to travel to production sites across the United States and overseas. Interior designers generally work under deadlines and may work extra hours to finish a job. Also, they regularly carry

heavy, bulky sample books to meetings with clients. Floral designers usually work regular hours in a pleasant work environment, but holiday, wedding, and funeral orders often require overtime.

Employment

Designers held about 492,000 jobs in 2000. About one-third were self-employed. Employment was distributed as follows:

Graphic designers	190,000
Floral designers	102,000
Merchandise displayers and window trimmers	76,000
Commercial and industrial designers	50,000
Interior designers	46,000
Fashion designers	16,000
Set and exhibit designers	12,000

Designers work in a number of different industries, depending on their design specialty. Most industrial designers, for example, work for engineering or architectural consulting firms or for large corporations. Most salaried interior designers work for furniture and home furnishings stores, interior designing services, and architectural firms. Others are self-employed and do freelance work—full time or part time—in addition to a salaried job in another occupation.

Set and exhibit designers work for theater companies; film and television production companies; and museums, art galleries, and convention and conference centers. Fashion designers generally work for textile, apparel, and pattern manufacturers; wholesale distributors of clothing, furnishings, and accessories; or for fashion salons, high-fashion department stores, and specialty shops. Most floral designers work for retail flower shops or in floral departments located inside grocery and department stores.

Training, Other Qualifications, and Advancement

Creativity is crucial in all design occupations. People in this field must have a strong sense of the esthetic—an eye for color and detail, a sense of balance and proportion, and an appreciation for beauty. Despite the advancement of computer-aided design, sketching ability remains an important advantage in most types of design, especially fashion design. A good portfolio—a collection of examples of a person's best work—often is the deciding factor in getting a job.

A bachelor's degree is required for most entry-level design positions, except for floral design and visual merchandising. Esthetic ability is important for floral design and visual merchandising, but formal preparation typically is not necessary. Many candidates in industrial design pursue a master's degree to better compete for open positions.

Interior design is the only design field subject to government regulation. According to the American Society for Interior Designers, 19 States and the District of Columbia require interior designers to be licensed or registered. Passing the National Council for Interior Design qualification examination is required for licensure. To take the exam, one must complete at least 2 years of postsecondary education in design, at least 2 years of practical work experience in the field, plus additional related education or experience to total at least 6 years of combined education and experience in design. Because licensing is not mandatory in all States, membership in a professional association is an indication of an interior designer's qualifications and professional standing—and can aid in obtaining clients.

In fashion design, employers seek individuals with a 2- or 4-year degree who are knowledgeable in the areas of textiles, fabrics, and ornamentation, as well as trends in the fashion world. Set and exhibit designers typically have college degrees in design. A Master of Fine Arts (MFA) degree from an accredited university program further establishes one's design credentials. Membership in the United Scenic Artists, Local 829, is a nationally recognized standard of achievement for scenic designers.

Most floral designers learn their skills on the job. When employers hire trainees, they generally look for high school graduates who have a flair for arranging and a desire to learn. Completion of formal training, however, is an asset for floral designers, particularly for advancement to the chief floral designer level. Vocational and technical schools offer programs in floral design, usually lasting less than a year, while 2- and 4-year programs in floriculture, horticulture, floral design, or ornamental horticulture are offered by community and junior colleges, and colleges and universities.

Formal training for some design professions also is available in 2- and 3-year professional schools that award certificates or associate degrees in design. Graduates of 2-year programs normally qualify as assistants to designers. The Bachelor of Fine Arts degree is granted at 4-year colleges and universities. The curriculum in these schools includes art and art history, principles of design, designing and sketching, and specialized studies for each of the individual design disciplines, such as garment construction, textiles, mechanical and architectural drawing, computerized design, sculpture, architecture, and basic engineering. A liberal arts education, with courses in merchandising, business administration, marketing, and psychology, along with training in art, is recommended for designers who want to freelance. Additionally, persons with training or experience in architecture qualify for some design occupations, particularly interior design.

Because computer-aided design is increasingly common, many employers expect new designers to be familiar with its use as a design tool. For example, industrial designers extensively use computers in the aerospace, automotive, and electronics industries. Interior designers use computers to create numerous versions of interior space designs—images can be inserted, edited, and replaced easily and without added cost—making it possible for a client to see and choose among several designs.

The National Association of Schools of Art and Design currently accredits about 200 postsecondary institutions with programs in art and design; most of these schools award a degree in art. Some award degrees in industrial, interior, textile, graphic, or fashion design. Many schools do not allow formal entry into a bachelor's degree program until a student has successfully finished a year of basic art and design courses. Applicants may be required to submit sketches and other examples of their artistic ability.

The Foundation for Interior Design Education Research also accredits interior design programs and schools. Currently, there are more than 120 accredited professional programs in the United States and Canada, primarily located in schools of art, architecture, and home economics.

Individuals in the design field must be creative, imaginative, persistent, and able to communicate their ideas in writing, visually, and verbally. Because tastes in style and fashion can change quickly, designers need to be well-read, open to new ideas and influences, and quick to react to changing trends. Problem-solving skills and the ability to work independently and under pressure are important traits. People in this field need self-discipline to start projects on their own, to budget their time, and to meet deadlines and production schedules. Good business sense and sales ability also are important, especially for those who freelance or run their own business.

Beginning designers usually receive on-the-job training, and normally need 1 to 3 years of training before they can advance to higher-level positions. Experienced designers in large firms may advance to chief designer, design department head, or other supervisory positions. Some designers become teachers in design schools and colleges and universities. Many faculty members continue to consult privately or operate small design studios to complement their classroom activities. Some experienced designers open their own firms.

Job Outlook

Despite projected faster-than-average employment growth, designers in most fields—with the exception of floral design—are expected to face keen competition for available positions. Many talented individuals are attracted to careers as designers. Individuals with little or no formal education in design, as well as those who lack creativity and perseverance, will find it very difficult to establish and maintain a career in design. Floral design should be the least competitive of all design fields because of the relatively low pay and limited opportunities for advancement, as well as the relatively high job turnover of floral designers in retail flower shops.

Overall, the employment of designers is expected to grow faster than the average for all occupations through the year 2010. In addition to those that result from employment growth, many job openings will arise from the need to replace designers who leave the field. Increased demand for industrial designers will stem from the continued emphasis on product quality and safety; the demand for new products that are easy and comfortable to use; the development of high-technology products in medicine, transportation, and other fields; and growing global competition among businesses. Demand for graphic designers should increase because of the rapidly increasing demand for Web-based graphics and the expansion of the video entertainment market, including television, movies, videotape, and made-for-Internet outlets. Rising demand for professional design of private homes, offices, restaurants and other retail establishments, and institutions that care for the rapidly growing elderly population should spur employment growth of interior designers. Demand for fashion designers should remain strong, because many consumers continue to demand new fashions and apparel styles.

Earnings

Median annual earnings for commercial and industrial designers were \$48,780 in 2000. The middle 50 percent earned between \$36,460 and \$64,120. The lowest 10 percent earned less than \$27,290, and the highest 10 percent earned more than \$77,790.

Median annual earnings for fashion designers were \$48,530 in 2000. The middle 50 percent earned between \$34,800 and \$73,780. The lowest 10 percent earned less than \$24,710, and the highest 10 percent earned more than \$103,970. Median annual earnings were \$52,860 in apparel, piece goods, and notions—the industry employing the largest numbers of fashion designers.

Median annual earnings for floral designers were \$18,360 in 2000. The middle 50 percent earned between \$14,900 and \$22,110. The lowest 10 percent earned less than \$12,570, and the highest 10 percent earned more than \$27,860. Median annual earnings were \$20,160 in grocery stores and \$17,760 in miscellaneous retail stores, including florists.

Median annual earnings for graphic designers were \$34,570 in 2000. The middle 50 percent earned between \$26,560 and \$45,130. The lowest 10 percent earned less than \$20,480, and the highest 10 percent earned more than \$58,400. Median annual earnings in the industries employing the largest numbers of graphic designers were as follows:

Management and public relations	\$37,570
Advertising	37,080
Mailing, reproduction, and stenographic services	36,130
Commercial printing	29,730
Newspapers	28,170

Median annual earnings for interior designers were \$36,540 in 2000. The middle 50 percent earned between \$26,800 and \$51,140. The lowest 10 percent earned less than \$19,840, and the highest 10 percent earned more than \$66,470. Median annual earnings were \$40,710 in engineering and architectural services and \$34,890 in furniture and home furnishings stores.

Median annual earnings of merchandise displayers and window dressers were \$20,930 in 2000. The middle 50 percent earned between \$16,770 and \$26,840. The lowest 10 percent earned less than \$13,790, and the highest 10 percent earned more than \$31,130. Median annual earnings were \$22,210 in groceries and related products and \$18,820 in department stores.

Median annual earnings for set and exhibit designers were \$31,440 in 2000. The middle 50 percent earned between \$21,460 and \$42,800. The lowest 10 percent earned less than \$13,820, and the highest 10 percent earned more than \$57,400.

According to the Industrial Designers Society of America, the median base salary, excluding deferred compensation, bonuses, royalties, and commissions, for an industrial designer with 1 to 2 years of experience was about \$36,500 in 2000. Staff designers with 5 years of experience earned \$45,000, whereas senior designers with 8 years of experience earned \$64,000. Industrial designers in managerial, executive, or ownership positions earned substantially more—up to \$600,000 annually; however, the \$80,000 to \$180,000 range was more representative.

The American Institute of Graphic Arts (AIGA) reported 1999 median earnings for graphic designers with increasing levels of responsibility. Staff-level graphic designers earned \$36,000, while senior designers, who may supervise junior staff or have some decision-making authority that reflects their knowledge of graphic design, earned \$50,000. Solo designers, who freelance or work independently of a company, reported median earnings of \$50,000. Design directors, the creative heads of design firms or in-house corporate design departments, earned \$80,000. Graphic designers with business responsibilities for the operation of a firm as owners, partners, or principals earned \$90,000.

Related Occupations

Workers in other occupations who design or arrange objects, materials, or interiors to enhance their appearance and function include artists and related workers; architects, except landscape and naval; engineers, landscape architects, and photographers. Some computer-related occupations require design skills, including computer software engineers and desktop publishers.

Sources of Additional Information

For general information about art and design and a list of accredited college-level programs, contact:

- ▶ National Association of Schools of Art and Design, 11250 Roger Bacon Dr., Suite 21, Reston, VA 20190. Internet: <http://www.arts-accredit.org/nasad/default.htm>

For information on industrial design careers and a list of academic programs in industrial design, write to:

- ▶ Industrial Designers Society of America, 1142 Walker Rd., Great Falls, VA 22066. Internet: <http://www.idsa.org>

For information about graphic design careers, contact:

- ▶ American Institute of Graphic Arts, 164 Fifth Ave., New York, NY 10010. Internet: <http://www.aiga.org>

For information on degree, continuing education, and licensure programs in interior design and interior design research, contact:

- ▶ American Society for Interior Designers, 608 Massachusetts Ave. NE., Washington, DC 20002-6006. Internet: <http://www.asid.org>

For information on degree, continuing education, and licensure programs, and general information on the interior design profession, contact:

- ▶ International Interior Design Association, 997 Merchandise Mart, Chicago, IL 60654. Internet: <http://www.iida.org>

For a list of schools with accredited programs in interior design, contact:

- ▶ Foundation for Interior Design Education Research, 146 Monroe Center NW., Suite 1318, Grand Rapids, MI 49503. Internet: <http://www.fider.org>

For information about careers in floral design, contact:

- ▶ Society of American Florists, 1601 Duke St., Alexandria, VA 22314.