Landscape Architects

(O*NET 17-1012.00)

Significant Points

- Almost 19 percent of all landscape architects are self-employed—more than 2 times the proportion for all occupations.
- 49 States require landscape architects to be licensed.
- New graduates can expect to face competition for jobs in the largest and most prestigious landscape architecture firms, but there should be good job opportunities overall as demand for landscape architecture services increases.

Nature of the Work

Everyone enjoys attractively designed residential areas, public parks and playgrounds, college campuses, shopping centers, golf courses, and parkways. Landscape architects design these areas so that they are not only functional, but also beautiful, and compatible with the natural environment. They plan the location of buildings, roads, and walkways, and the arrangement of flowers, shrubs, and trees. They also design and plan the restoration of natural places disturbed by humans such as wetlands, stream corridors, mined areas and forested land.

Landscape architects work for many types of organizations—from real estate development firms starting new projects to municipalities constructing airports or parks—and they often are involved with the development of a site from its conception. Working with architects, surveyors, and engineers, landscape architects help determine the best arrangement of roads and buildings. They also collaborate with environmental scientists, foresters, and other professionals to find the best way to conserve or restore natural resources. Once these decisions are made, landscape architects create detailed plans indicating new topography, vegetation, walkways, and other landscaping details, such as fountains and decorative features.

In planning a site, landscape architects first study the project holistically. They also consider the purpose of the project and the funds available. They analyze the natural elements of the site, such as the climate, soil, slope of the land, drainage, and vegetation; observe where sunlight falls on the site at different times of the day; and assess the effect of existing buildings, roads, walkways, and utilities.

After studying and analyzing the site, landscape architects prepare a preliminary design. To address the needs of the client as well as the conditions at the site, they frequently make changes before a final design is approved. They also take into account any local, State, or Federal regulations, such as those protecting wetlands or historic resources. In preparing designs, computer-aided design (CAD) has become an essential tool for most landscape architects. Many landscape architects also use video simulation to help clients envision the proposed ideas and plans. For larger scale site planning, landscape architects also use geographic information systems (GIS) technology, a computer mapping system.

Throughout all phases of planning and design, landscape architects consult with other professionals, such as civil engineers, hydrologists, or architects, involved in the project. Once the design is complete, they prepare a proposal for the client. They produce detailed plans of the site, including written reports, sketches, models, photographs, land-use studies, and cost estimates, and submit them for approval by the client and by regulatory agencies. When the plans are approved, landscape architects prepare working drawings showing all existing and proposed features. They also outline in detail the methods of construction and draw up a list of necessary materials. Landscape architects then monitor the implementation of their design, while general contractors or landscape contractors usually direct the actual construction of the site and installation of plantings.

Some landscape architects work on a variety of projects. Others specialize in a particular area, such as street and highway beautification, waterfront improvement projects, parks and playgrounds, or shopping centers. Still others work in regional planning and resource management; feasibility, environmental impact, and cost studies; or site construction. Increasingly, landscape architects work in environmental remediation, such as preservation and restoration of wetlands or abatement of stormwater run-off in new developments. Historic landscape preservation and restoration is another area where landscape architects increasingly play a role.

Landscape architects who work for government agencies do site and landscape design for government buildings, parks, and other public lands, as well as park and recreation planning in national parks and forests. In addition, they prepare environmental impact statements and studies on environmental issues such as public land-use planning. Some restore degraded land, such as mines or landfills. Others use their skills in traffic-calming, the "art" of slowing traffic through the use of traffic design, enhancement of the physical environment, and greater attention to aesthetics.

Work environment. Landscape architects spend most of their time in offices creating plans and designs, preparing models and cost estimates, doing research, or attending meetings with

Landscape architects consult with clients and other professionals throughout the plannining and design of a project.

clients and other professionals involved in a design or planning project. The remainder of their time is spent at the site. During the design and planning stage, landscape architects visit and analyze the site to verify that the design can be incorporated into the landscape. After the plans and specifications are completed, they may spend additional time at the site observing or supervising the construction. Those who work in large national or regional firms may spend considerably more time out of the office, traveling to sites.

Salaried employees in both government and landscape architectural firms usually work regular hours. However, they may occasionally work overtime to meet a project deadline. Hours of self-employed landscape architects vary depending on the demands of their projects.

Training, Other Qualifications, and Advancement

Almost every state requires landscape architects to be licensed. While requirements vary among the states, they usually include a degree in landscape architecture from an accredited school, work experience, and the passage of the Landscape Architect Registration Exam.

Education and training. A bachelor's or master's degree in landscape architecture usually is necessary for entry into the profession. There are two undergraduate professional degrees: a Bachelor of Landscape Architecture (BLA) and a Bachelor of Science in Landscape Architecture (BSLA). These usually require four or five years of study in design, construction techniques, art, history, natural and social sciences. There are generally two types of graduate degree programs. For those who hold an undergraduate degree in a field other than landscape architecture and intend to become landscape architecture practitioners, the Master of Landscape Architecture (MLA) typically takes three years of full-time study. Those who hold undergraduate degrees in landscape architecture can earn their MLA in two years.

In 2007, 61 colleges and universities offered 79 undergraduate and graduate programs in landscape architecture that were accredited by the Landscape Architecture Accreditation Board of the American Society of Landscape Architects. Courses required in these programs usually include subjects such as surveying, landscape design and construction, landscape ecology, site design, and urban and regional planning. Other courses include history of landscape architecture, plant and soil science, geology, professional practice, and general management. The design studio is another important aspect of many curriculums. Whenever possible, students are assigned real projects, providing them with valuable hands-on experience. While working on these projects, students become proficient in the use of computer-aided design, geographic information systems, and video simulation.

Licensure and certification. As of January 2008, 49 states required landscape architects to be licensed. Licensing is based on the Landscape Architect Registration Examination (L.A.R.E.), sponsored by the Council of Landscape Architectural Registration Boards and administered in two portions, graphic and multiple choice. Admission to the exam usually requires a degree from an accredited school plus 1 to 4 years of work experience under the supervision of a licensed landscape architect, although standards vary from State to State. For those without an accredited landscape architecture degree, most states provide alternative paths to qualify to take the L.A.R.E., usually requiring more work experience. Currently, 15 States require that a State examination be passed in addition to the L.A.R.E. to satisfy registration requirements. State examinations focus on laws, environmental regulations, plants, soils, climate, and any other characteristics unique to the State.

Because requirements for licensure are not uniform, landscape architects may find it difficult to transfer their registration from one State to another. However, those who meet the national standards of graduating from an accredited program, serving 3 years of internship under the supervision of a registered landscape architect, and passing the L.A.R.E. can satisfy requirements in most States. By meeting national requirements, a landscape architect can also obtain certification from the Council of Landscape Architectural Registration Boards which can be useful in obtaining reciprocal licensure in other states.

In States where licensure is required, new hires may be called "apprentices" or "intern landscape architects" until they become licensed. Their duties vary depending on the type and size of the employing firm. They may do project research or prepare working drawings, construction documents, or base maps of the area to be designed. Some are allowed to participate in the actual design of a project. However, interns must perform all work under the supervision of a licensed landscape architect. Additionally, all drawings and specifications must be signed and sealed by the licensed landscape architect, who takes legal responsibility for the work. After gaining experience and becoming licensed, landscape architects usually can carry a design through all stages of development.

Many States require some form of continuing education to maintain a license. Requirements usually involve the completion of workshops, seminars, formal university classes, conferences, self-study courses, or other classes.

The Federal Government does not require its landscape architects to be licensed. Candidates for entry positions with the Federal Government should have a bachelor's or master's degree in landscape architecture.

Other qualifications. People planning a career in landscape architecture should appreciate nature, enjoy working with their hands, and possess strong analytical skills. Creative vision and artistic talent also are desirable qualities. Good oral communication skills are essential. Landscape architects must be able to convey their ideas to other professionals and clients and to make presentations before large groups. Strong writing skills also are valuable, as is knowledge of computer applications of all kinds, including word processing, desktop publishing, and spreadsheets. Landscape architects use these tools to develop presentations, proposals, reports, and land impact studies for clients, colleagues, and superiors. Landscape architects must also be able to draft and design using CAD software. Many employers recommend that prospective landscape architects complete at least one summer internship with a landscape architecture firm to hone their technical skills and to gain an understanding of the day-to-day operations of the business, including how to win clients, generate fees, and work within a budget.

Advancement. After several years, landscape architects may become project managers, taking on the responsibility for meeting schedules and budgets, in addition to overseeing the project design. Later, they may become associates or partners of a firm, with a proprietary interest in the business.

Many landscape architects are self-employed. Self-discipline, business acumen, and good marketing skills are important qualities for those who choose to open their own business. Even with these qualities, however, some may struggle while building a client base.

Those with landscape architecture training also qualify for jobs closely related to landscape architecture, and may, after gaining some experience, become construction supervisors, land or environmental planners, or landscape consultants.

Employment

Landscape architects held about 28,000 jobs in 2006. More than 1 out of 2 landscape architects were employed in architectural, engineering, and related services. State and local governments employed approximately 6 percent of all landscape architects. About 2 out of 10 landscape architects were self-employed.

Employment of landscape architects is concentrated in urban and suburban areas throughout the country; some landscape architects work in rural areas, particularly those employed by the Federal Government to plan and design parks and recreation areas.

Job Outlook

Employment of landscape architects is expected to grow faster than the average for all occupations through the year 2016. There should be good job prospects for landscape architects overall, but opportunities may depend on geographic location and local real estate and construction markets.

Employment change. Employment of landscape architects is expected to increase by 16 percent during the 2006-16 decade, which is faster than the average for all occupations. Employment will grow because the expertise of landscape architects will be sought after in the planning and development of new construction to meet the needs of a growing population. With land costs rising and the public desiring more beautiful spaces, the importance of good site planning and landscape design is growing.

New construction will spur demand for landscape architects to help plan sites that meet with environmental regulations and zoning laws and integrate new structures with the natural environment in the least disruptive way. For example, landscape architects will be needed to manage stormwater run-off to avoid pollution of waterways and conserve water resources. Landscape architects also will be increasingly involved in preserving and restoring wetlands and other environmentally sensitive sites.

Continuation of the Safe, Accountable, Flexible, Efficient, Transportation, Equity Act: A Legacy for Users also is expected to spur employment for landscape architects, particularly in State and local governments. This Act, known as SAFE-TEA-LU, provides funds for surface transportation and transit programs, such as interstate highway construction and maintenance, pedestrian and bicycle trails, and safe routes to schools.

In addition to the work related to new development and construction, landscape architects are expected to be involved in historic preservation, land reclamation, and refurbishment of existing sites. Additionally, landscape architects will be needed to create security perimeters that are better integrated with their surroundings for many of the Nation's landmarks, monuments, and buildings.

Job prospects. In addition to growth, the need to replace landscape architects who retire or leave the labor force will produce some additional job openings.

Opportunities will vary by year and geographic region, depending on local economic conditions. During a recession, when real estate sales and construction slow down, landscape architects may face greater competition for jobs and sometimes layoffs. But because landscape architects can work on many different types of projects, they may have steadier work than other design professionals when traditional construction slows.

New graduates can expect to face competition for jobs in the largest and most prestigious landscape architecture firms, but there should be good job opportunities overall as demand for landscape architecture services increases. Many employers prefer to hire entry-level landscape architects who have internship experience, which significantly reduces the amount of on-the-job training required. Opportunities will be best for landscape architects who develop strong technical skills—such as computer design—communication skills, and knowledge of environmental codes and regulations. Those with additional training or experience in urban planning increase their opportunities for employment in landscape architecture firms that specialize in site planning as well as landscape design.

Earnings

In May 2006, median annual earnings for landscape architects were $55,140. The middle 50 percent earned between $42,720 and $73,240. The lowest 10 percent earned less than $34,230 and the highest 10 percent earned over $95,420. Architectural, engineering, and related services employed more landscape architects than any other group of industries, and there the median annual earnings were $56,060 in May 2006.

Related Occupations

Landscape architects use their knowledge of design, construction, land-use planning, and environmental issues to develop a

Projections data from the National Employment Matrix

Occupational Title	SOC Code	Employment, 2006	Projected employment, 2016	Change, 2006-2016	
				Number	Percent
Landscape architects	17-1012	28,000	32,000	4,600	16

NOTE: Data in this table are rounded. See the discussion of the employment projections table in the *Handbook* introductory chapter on *Occupational Information Included in the Handbook*.

landscape project. Others whose work requires similar skills are architects, except landscape and naval; surveyors, cartographers, photogrammetrists, and surveying technicians; civil engineers; and urban and regional planners. Landscape architects also must know how to grow and use plants in the landscape. Some conservation scientists and foresters and biological scientists also study plants and do related work. Environmental scientists and hydrologists, and geoscientists, like many landscape architects, work in the area of environmental remediation.

Sources of Additional Information

Additional information, including a list of colleges and universities offering accredited programs in landscape architecture, is available from:

➤ American Society of Landscape Architects, Career Information, 636 Eye St.NW., Washington, DC 20001-3736.
Internet: **http://www.asla.org**

General information on registration or licensing requirements is available from:

➤ Council of Landscape Architectural Registration Boards, 3949 Pender Dr., Suite 120, Vienna, VA 22030.
Internet: **http://www.clarb.org**