

openings. Some job openings also will arise from the need to replace experienced planners who transfer to other occupations, retire, or leave the labor force for other reasons.

Most planners work for local governments with limited resources and many demands for services. When communities need to cut expenditures, planning services may be cut before more basic services such as police or education. As a result, the number of openings in private industry for consulting positions is expected to grow more rapidly than the number of openings in government.

Most new jobs for urban and regional planners will arise in more affluent, rapidly expanding communities. Local governments need planners to address an array of problems associated with population growth. For example, new housing developments require roads, sewer systems, fire stations, schools, libraries, and recreation facilities that must be planned while considering budgetary constraints. Small town chambers of commerce, economic development authorities, and tourism bureaus may hire planners, preferring candidates with some background in marketing and public relations.

Earnings

Median annual earnings of urban and regional planners were \$46,500 in 2000. The middle 50 percent earned between \$36,510 and \$57,900. The lowest 10 percent earned less than \$29,890, and the highest 10 percent earned more than \$72,090. Median annual earnings in local government, the industry employing the largest numbers of urban and regional planners, were \$45,300.

Related Occupations

Urban and regional planners develop plans for the growth of urban, suburban, and rural communities. Others whose work is similar include architects, civil engineers, environmental engineers, landscape architects, and geographers.

Sources of Additional Information

Information on careers, salaries, and certification in urban and regional planning is available from:

- ▶ American Planning Association, Education Division, 122 South Michigan Ave., Suite 1600, Chicago, IL 60603-6107. Internet: <http://www.planning.org>

Social Scientists, Other

(O*NET 19-3041.00, 19-3091.01, 19-3091.02, 19-3092.00, 19-3093.00, 19-3094.00)

Significant Points

- Educational attainment of social scientists is among the highest of all occupations.
- Job opportunities are expected to be best in social service agencies, research and testing services, and management consulting firms.

Nature of the Work

The major social science occupations covered in this statement include anthropologists, archaeologists, geographers, historians, political scientists, and sociologists. (Economists, psychologists, and urban and regional planners are covered elsewhere in the *Handbook*.)

Social scientists study all aspects of society—from past events and achievements to human behavior and relationships between groups. Their research provides insights that help us understand different ways in which individuals and groups make decisions, exercise power, and respond to change. Through their studies and

analyses, social scientists suggest solutions to social, business, personal, governmental, and environmental problems.

Research is a major activity for many social scientists. They use various methods to assemble facts and construct theories. Applied research usually is designed to produce information that will enable people to make better decisions or manage their affairs more effectively. Interviews and surveys are widely used to collect facts, opinions, or other information. Information collection takes many forms including living and working among the population being studied; field investigations, the analysis of historical records and documents; experiments with human or animal subjects in a laboratory; administration of standardized tests and questionnaires; and preparation and interpretation of maps and computer graphics. The work of the major specialties in social science—other than psychologists, economists, and urban and regional planners—varies greatly, although, specialists in one field may find that their research overlaps work being conducted in another discipline.

Anthropologists study the origin and the physical, social, and cultural development and behavior of humans. They may study the way of life, archaeological remains, language, or physical characteristics of people in various parts of the world. Some compare the customs, values, and social patterns of different cultures. Anthropologists usually concentrate in sociocultural anthropology, archaeology, linguistics, or biological-physical anthropology. Sociocultural anthropologists study customs, cultures, and social lives of groups in settings that vary from unindustrialized societies to modern urban centers.

Archaeologists recover and examine material evidence, such as ruins, tools, and pottery remaining from past human cultures in order to determine the history, customs, and living habits of earlier civilizations. Linguistic anthropologists study the role and changes over time of language in various cultures. Biological-physical anthropologists study the evolution of the human body, look for the earliest evidences of human life, and analyze how culture and biology influence one another. Most anthropologists specialize in one particular region of the world.

Geographers analyze distributions of physical and cultural phenomena on local, regional, continental, and global scales. Economic geographers study the distribution of resources and economic activities. Political geographers are concerned with the relationship of geography to political phenomena, whereas cultural geographers study the geography of cultural phenomena. Physical geographers study variations in climate, vegetation, soil, and landforms, and their implications for human activity. Urban and transportation geographers study cities and metropolitan areas, while regional geographers study the physical, economic, political, and cultural characteristics of regions, ranging in size from a congressional district to entire continents. Medical geographers study health care delivery systems, epidemiology (the study of the causes and control of epidemics), and the effect of the environment on health. (Some occupational classification systems include geographers under physical scientists rather than social scientists.)

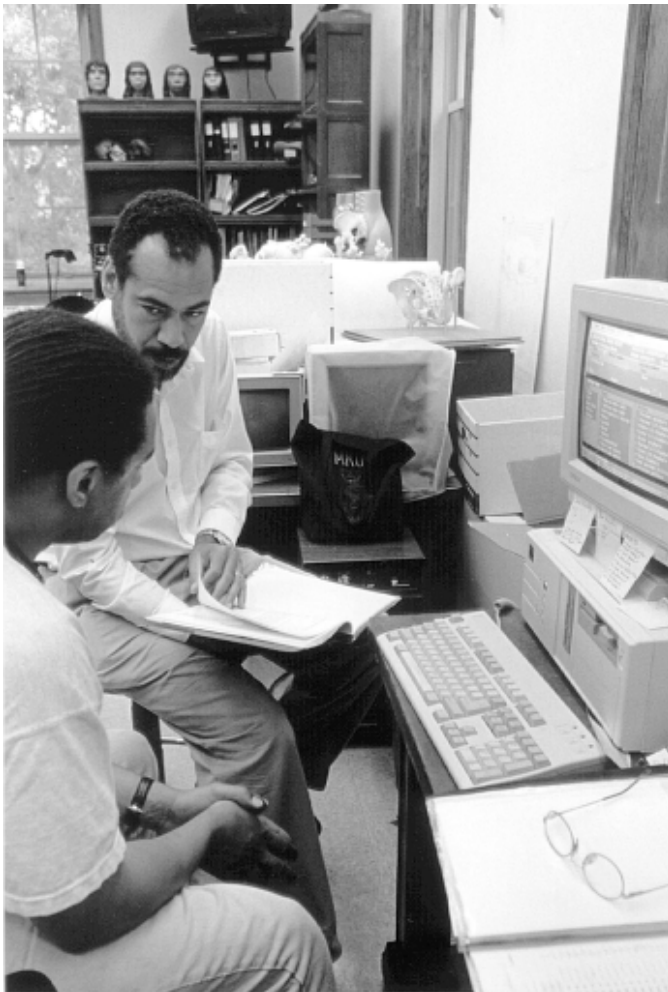
Historians research, analyze, and interpret the past. They use many sources of information in their research, including government and institutional records, newspapers and other periodicals, photographs, interviews, films, and unpublished manuscripts such as personal diaries and letters. Historians usually specialize in a country or region; a particular time period; or a particular field, such as social, intellectual, cultural, political, or diplomatic history. Biographers collect detailed information on individuals. Other historians help study and preserve archival materials, artifacts, and historic buildings and sites.

Political scientists study the origin, development, and operation of political systems and public policy. They conduct research on a

wide range of subjects such as relations between the United States and other countries, the institutions and political life of nations, the politics of small towns or a major metropolis, or the decisions of the U.S. Supreme Court. Studying topics such as public opinion, political decision-making, ideology, and public policy, they analyze the structure and operation of governments as well as various political entities. Depending on the topic, a political scientist might conduct a public opinion survey, analyze election results, analyze public documents, or interview public officials.

Sociologists study society and social behavior by examining the groups and social institutions people form, as well as various social, religious, political, and business organizations. They also study the behavior and interaction of groups, trace their origin and growth, and analyze the influence of group activities on individual members. They are concerned with the characteristics of social groups, organizations, and institutions; the ways individuals are affected by each other and by the groups to which they belong; and the effect of social traits such as sex, age, or race on a person's daily life. The results of sociological research aid educators, lawmakers, administrators, and others interested in resolving social problems and formulating public policy.

Most sociologists work in one or more specialties, such as social organization, stratification, and mobility; racial and ethnic relations; education; family; social psychology; urban, rural, political, and comparative sociology; sex roles and relations; demography; gerontology; criminology; or sociological practice.



Research is a major activity for many social scientists.

Working Conditions

Most social scientists have regular hours. Generally working behind a desk, either alone or in collaboration with other social scientists, they read and write research reports. Many experience the pressures of writing and publishing articles, deadlines and tight schedules, and sometimes they must work overtime, for which they usually are not reimbursed. Social scientists often work as an integral part of a research team, where good communications skills are important. Travel may be necessary to collect information or attend meetings. Social scientists on foreign assignment must adjust to unfamiliar cultures, climates, and languages.

Some social scientists do fieldwork. For example, anthropologists, archaeologists, and geographers may travel to remote areas, live among the people they study, learn their languages, and stay for long periods at the site of their investigations. They may work under rugged conditions, and their work may involve strenuous physical exertion.

Social scientists employed by colleges and universities usually have flexible work schedules, often dividing their time among teaching, research and writing, consulting, or administrative responsibilities.

Employment

Social scientists held about 15,000 jobs in 2000. Many worked as researchers, administrators, and counselors for a wide range of employers, including Federal, State, and local governments, educational institutions, social service agencies, research and testing services, and management consulting firms. Other employers include international organizations, associations, museums, and historical societies.

Many additional individuals with training in a social science discipline teach in colleges and universities, and in secondary and elementary schools. (For more information, see teachers—postsecondary and teachers—preschool, kindergarten, elementary, middle, and secondary elsewhere in the *Handbook*.) The proportion of social scientists that teach varies by specialty—for example, the academic world usually is a more important source of jobs for graduates in history than for graduates in the other fields of study.

Training, Other Qualifications, and Advancement

Educational attainment of social scientists is among the highest of all occupations. The Ph.D. or equivalent degree is a minimum requirement for most positions in colleges and universities and is important for advancement to many top-level nonacademic research and administrative posts. Graduates with master's degrees in applied specialties usually have better professional opportunities outside of colleges and universities, although the situation varies by field. Graduates with a master's degree in a social science may qualify for teaching positions in community colleges. Bachelor's degree holders have limited opportunities and in most social science occupations do not qualify for "professional" positions. The bachelor's degree does, however, provide a suitable background for many different kinds of entry-level jobs, such as research assistant, administrative aide, or management or sales trainee. With the addition of sufficient education courses, social science graduates also can qualify for teaching positions in secondary and elementary schools.

Training in statistics and mathematics is essential for many social scientists. Mathematical and quantitative research methods increasingly are used in geography, political science, and other fields. The ability to use computers for research purposes is mandatory in most disciplines.

Depending on their jobs, social scientists may need a wide range of personal characteristics. Because they constantly seek new

information about people, things, and ideas, intellectual curiosity and creativity are fundamental personal traits. The ability to think logically and methodically is important to a political scientist comparing, for example, the merits of various forms of government. Objectivity, open-mindedness, and systematic work habits are important in all kinds of social science research. Perseverance is essential for an anthropologist, who might spend years accumulating artifacts from an ancient civilization. Excellent written and oral communication skills are essential for all these professionals.

Job Outlook

Overall employment of social scientists is expected to grow about as fast as the average for all occupations through 2010. Prospects are best for those with advanced degrees, and usually are better in disciplines such as sociology, anthropology, and archaeology, which offer more opportunities in nonacademic settings.

Government agencies, social service organizations, marketing, research and consulting firms, and a wide range of businesses seek social science graduates, although often in jobs with titles unrelated to their academic discipline. Social scientists will face stiff competition for academic positions. However, the growing importance and popularity of social science subjects in secondary schools is strengthening the demand for social science teachers at that level.

Candidates seeking positions as social scientists can expect to encounter competition in many areas of social science. Some social science graduates, however, will find good employment opportunities in areas outside traditional social science, often in related jobs that require good research, communication, and quantitative skills.

Earnings

Median annual earnings of all other social scientists (excluding economists, psychologists, and urban and regional planners) were \$48,330 in 2000. Anthropologists and archeologists had median annual earnings of \$36,040; geographers, \$46,690; historians, \$39,860; political scientists, \$81,040; and sociologists, \$45,670.

In the Federal Government, social scientists with a bachelor's degree and no experience could start at \$21,900 or \$27,200 a year in 2001, depending on their college records. Those with a master's degree could start at \$33,300, and those with a Ph.D. degree could begin at \$40,200, while some individuals with experience and an

advanced degree could start at \$48,200. Beginning salaries were slightly higher in selected areas of the country where the prevailing local pay level was higher.

Related Occupations

A number of occupations requiring training and personal qualities similar to those of social scientists are covered elsewhere in the *Handbook*. These include computer programmers; computer software engineers; counselors; lawyers; mathematicians; news analysts, reporters, and correspondents; postsecondary teachers; social workers; statisticians; and systems analysts.

Sources of Additional Information

Detailed information about economists and market and survey researchers, psychologists, and urban and regional planners is presented elsewhere in the *Handbook*.

For information about careers in anthropology, contact:

➤ The American Anthropological Association, 4350 N. Fairfax Dr., Suite 640, Arlington, VA 22203-1620. Internet: <http://www.aaanet.org>

For information about careers in archaeology, contact:

➤ Society for American Archaeology, 900 2nd St. NE., Suite 12, Washington, DC 20002-3557. Internet: <http://www.saa.org>

➤ Archaeological Institute of America, 656 Beacon St., Boston, MA 02215-2006. Internet: <http://www.archaeological.org>

For information about careers in geography, contact:

➤ Association of American Geographers, 1710 16th St. NW., Washington, DC 20009-3198. Internet: <http://www.aag.org>

Information on careers for historians is available from:

➤ American Historical Association, 400 A St. SE., Washington, DC 20003-3889. Internet: <http://www.theaha.org>

➤ Organization of American Historians, 112 North Bryan Ave., Bloomington, IN 47408-4199. Internet: <http://www.oah.org>

➤ American Association for State and Local History, 1717 Church St., Nashville, TN 37203-2991. Internet: <http://www.aaslh.org>

For information about careers in political science, contact:

➤ National Association of Schools of Public Affairs and Administration, 1120 G St. NW., Suite 730, Washington, DC 20005-3869. Internet: <http://www.nasppaa.org>

Information about careers in sociology is available from:

➤ American Sociological Association, 1307 New York Ave. NW., Suite 700, Washington, DC 20005-4712. Internet: <http://www.asanet.org>

For information about careers in demography, contact:

➤ Population Association of America, 8630 Fenton St., Suite 722, Silver Spring, MD 20910-3812. Internet: <http://www.popassoc.org>

Health Diagnosing and Treating Practitioners

Chiropractors

(O*NET 29-1011.00)

Significant Points

- Employment of chiropractors is expected to increase faster than average, and job prospects should be good.
- Chiropractic care of back, neck, extremities, and other joint damage has become more accepted as a result of recent research and changing attitudes.
- In chiropractic, as in other types of independent practice, earnings are relatively low in the beginning, but increase as the practice grows.

Nature of the Work

Chiropractors, also known as *doctors of chiropractic* or *chiropractic physicians*, diagnose and treat patients whose health problems are associated with the body's muscular, nervous, and skeletal systems, especially the spine. Chiropractors believe interference with these systems impairs normal functions and lowers resistance to disease. They also hold that spinal or vertebral dysfunction alters many important body functions by affecting the nervous system, and that skeletal imbalance through joint or articular dysfunction, especially in the spine, can cause pain.

The chiropractic approach to healthcare is holistic, stressing the patient's overall health and wellness. It recognizes that many factors affect health, including exercise, diet, rest, environment, and heredity. Chiropractors provide natural, drugless, nonsurgical health treatments, and rely on the body's inherent recuperative abilities.