Archivists, Curators, and Museum Technicians

(O*NET 25-4011.00, 25-4012.00, 25-4013.00)

Significant Points

- Most worked in museums, historical sites, and similar venues; in educational institutions; or in Federal, State, or local government.
- A graduate degree and related work experience are required for most positions; museum technicians may enter with a bachelor's degree.
- Keen competition is expected for most jobs because qualified applicants generally outnumber job openings.

Nature of the Work

Archivists, curators, and museum technicians work for museums, governments, zoos, colleges and universities, corporations, and other institutions that require experts to preserve important records and artifacts. These workers preserve important objects and documents, including works of art, transcripts of meetings, photographs, coins and stamps, living and preserved plants and animals, and historic objects, including, for example, turn-ofthe-century immigration records, buildings, and sites.

Archivists and curators plan and oversee the arrangement, cataloguing, and exhibition of collections and, along with technicians and conservators, maintain collections. They acquire and preserve important documents and other valuable items for permanent storage or display. They also describe, catalogue, and analyze, valuable objects for the benefit of researchers and the public.

Archivists and curators may coordinate educational and public outreach programs, such as tours, workshops, lectures, and classes, and may work with the boards of institutions to administer plans and policies. They also may research topics or items relevant to their collections.

Although some duties of archivists and curators are similar, the types of items they deal with differ: curators usually handle objects with cultural, biological, or historical significance, such as sculptures, textiles, and paintings, while archivists handle mainly records and documents that are retained because of their importance and potential value in the future.

Archivists collect, organize, and maintain control over a wide range of information deemed important enough for permanent safekeeping. This information takes many forms: photographs, films, video and sound recordings, and electronic data files in a wide variety of formats, as well as more traditional paper records, letters, and documents.

Archivists maintain records in accordance with accepted standards and practices that ensure the long-term preservation and easy retrieval of the documents. Records may be saved on any medium, including paper, film, videotape, audiotape, computer disk, or DVD. They also may be copied onto some other format to protect the original and to make the records more accessible to researchers who use them. As various storage media evolve,

archivists must keep abreast of technological advances in electronic information storage.

Archivists often specialize in an area of history so they can more accurately determine which records in that area qualify for retention and should become part of the archives. Archivists also may work with specialized forms of records, such as manuscripts, electronic records, photographs, cartographic records, motion pictures, and sound recordings.

Computers are increasingly being used to generate and maintain archival records. Professional standards for the use of computers in handling archival records are still evolving. Expanding computer capabilities that allow more records to be stored and exhibited electronically have transformed, and are expected to continue to transform, many aspects of archival collections.

Curators administer museums, zoos, aquariums, botanical gardens, nature centers, and historic sites. The head curator of the museum is usually called the *museum director*. Curators direct the acquisition, storage, and exhibition of collections, including negotiating and authorizing the purchase, sale, exchange, or loan of collections. They are also responsible for authenticating, evaluating, and categorizing the specimens in a collection. Curators oversee and help conduct the institution's research projects and related educational programs. Today, an increasing part of a curator's duties involves fundraising and promotion, which may include the writing and reviewing of grant proposals, journal articles, and publicity materials, as well as attendance at meetings, conventions, and civic events.

Most curators specialize in a particular field, such as botany, art, paleontology, or history. Those working in large institutions may be highly specialized. A large natural history museum, for example, would employ separate curators for its collections of birds, fishes, insects, and mammals. Some curators maintain their collections, others do research, and others perform administrative tasks. In small institutions with only one or a few curators, one curator may be responsible for a number of tasks, from maintaining collections to directing the affairs of the museum.

Conservators manage, care for, preserve, treat, and document works of art, artifacts, and specimens—work that may require substantial historical, scientific, and archaeological research. They use x-rays, chemical testing, microscopes, special lights, and other laboratory equipment and techniques to examine objects and determine their condition and the appropriate method for preserving them. Conservators document their findings and treat items to minimize their deterioration or to restore them to their original state. Conservators usually specialize in a particular material or group of objects, such as documents and books, paintings, decorative arts, textiles, metals, or architectural material. In addition to their conservation work, conservators participate in outreach programs, research topics in their area of specialty, and write articles for scholarly journals.

Museum technicians assist curators by performing various preparatory and maintenance tasks on museum items. They also answer public inquiries and assist curators and outside scholars in using collections. Archives technicians help archivists organize, maintain, and provide access to historical documentary materials.

Work environment. The working conditions of archivists and curators vary. Some spend most of their time working with the public, providing reference assistance and educational services. Others perform research or process records, which often means working alone or in offices with only a few people. Those who



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restore and install exhibits or work with bulky, heavy record containers may lift objects, climb, or stretch. Those in zoos, botanical gardens, and other outdoor museums and historic sites frequently walk great distances. Conservators work in conservation laboratories. The size of the objects in the collection they are working with determines the amount of effort involved in lifting, reaching, and moving objects.

Curators who work in large institutions may travel extensively to evaluate potential additions to the collection, organize exhibitions, and conduct research in their area of expertise. However, travel is rare for curators employed in small institutions.

Training, Other Qualifications, and Advancement

Employment as an archivist, conservator, or curator usually requires graduate education and related work experience. Museum technicians often start work with a bachelor's degree. While completing their formal education, many archivists and curators work in archives or museums to gain "hands-on" experience.

Education and training. Although archivists earn a variety of undergraduate degrees, a graduate degree in history or library science with courses in archival science is preferred by most employers. Many colleges and universities offer courses or practical training in archival techniques as part of their history, library science, or other curriculum. A few institutions now offer master's degrees in archival studies. Some positions may require knowledge of the discipline related to the collection, such as business or medicine.

For employment as a curator, most museums require a master's degree in an appropriate discipline of the museum's specialty—art, history, or archaeology—or in museum studies. Many employers prefer a doctoral degree, particularly for curators in natural history or science museums. Earning two graduate degrees—in museum studies (museology) and a specialized subject—gives a candidate a distinct advantage in this competitive job market. In small museums, curatorial positions may be available to individuals with a bachelor's degree. Because curators, particularly those in small museums, may have administrative and managerial responsibilities, courses in business administration, public relations, marketing, and fundraising also are recommended. For some positions, an internship of full-time museum work supplemented by courses in museum practices is needed.

When hiring conservators, employers look for a master's degree in conservation or in a closely related field, together with substantial experience. There are only a few graduate programs in museum conservation techniques in the United States. Competition for entry to these programs is keen; to qualify, a student must have a background in chemistry, archaeology or studio art, and art history, as well as work experience. For some programs, knowledge of a foreign language also is helpful. Conservation apprenticeships or internships as an undergraduate can enhance one's admission prospects. Graduate programs last 2 to 4 years, the latter years of which include internship training. A few individuals enter conservation through apprenticeships with museums, nonprofit organizations, and conservators in private practice. Apprenticeships should be supplemented with courses in chemistry, studio art, and history. Apprenticeship training, although accepted, is a more difficult route into the conservation profession.

Museum technicians usually need a bachelor's degree in an appropriate discipline of the museum's specialty, training in museum studies, or previous experience working in museums, particularly in the design of exhibits. Similarly, archives technicians usually need a bachelor's degree in library science or history, or relevant work experience. Relatively few schools grant a bachelor's degree in museum studies. More common are undergraduate minors or tracks of study that are part of an undergraduate degree in a related field, such as art history, history, or archaeology. Students interested in further study may obtain a master's degree in museum studies, offered in colleges and universities throughout the country. However, many employers feel that, while museum studies are helpful, a thorough knowledge of the museum's specialty and museum work experience are more important.

Certification and other qualifications. The Academy of Certified Archivists offers voluntary certification for archivists. The designation "Certified Archivist" can be obtained by those with at least a master's degree and a year of appropriate archival experience. The certification process requires candidates to pass a written examination, and they must renew their certification periodically.

Archivists need research skills and analytical ability to understand the content of documents and the context in which they were created and to decipher deteriorated or poor-quality printed matter, handwritten manuscripts, photographs, or films. A background in preservation management is often required of archivists because they are responsible for taking proper care of their records. Archivists also must be able to organize large amounts of information and write clear instructions for its retrieval and use. In addition, computer skills and the ability to work with electronic records and databases are very important. Because electronic records are becoming the prevalent form of record-keeping, and archivists must create searchable databases, knowledge of Web technology is increasingly being required.

Curatorial positions often require knowledge in a number of fields. For historic and artistic conservation, courses in chemistry, physics, and art are desirable. Like archivists, curators need computer skills and the ability to work with electronic databases. Many curators are responsible for posting information on the

Internet, so they also need to be familiar with digital imaging, scanning technology, and copyright law.

Curators must be flexible because of their wide variety of duties, among which are the design and presentation of exhibits. In small museums, curators need manual dexterity to build exhibits or restore objects. Leadership ability and business skills are important for museum directors, while marketing skills are valuable in increasing museum attendance and fundraising.

Advancement. Continuing education is available through meetings, conferences, and workshops sponsored by archival, historical, and museum associations. Some larger organizations, such as the National Archives in Washington, D.C., offer such training in-house.

Many archives, including one-person shops, are very small and have limited opportunities for promotion. Archivists typically advance by transferring to a larger unit that has supervisory positions. A doctorate in history, library science, or a related field may be needed for some advanced positions, such as director of a State archive.

In large museums, curators may advance through several levels of responsibility, eventually becoming the museum director. Curators in smaller museums often advance to larger ones. Individual research and publications are important for advancement in larger institutions.

Technician positions often serve as a steppingstone for individuals interested in archival and curatorial work. Except in small museums, a master's degree is needed for advancement.

Employment

Archivists, curators, and museum technicians held about 27,000 jobs in 2006. About 38 percent were employed in museums, historical sites, and similar institutions, and 18 percent worked for State and private educational institutions, mainly college and university libraries. Nearly 31 percent worked in Federal, State, and local government, excluding educational institutions. Most Federal archivists work for the National Archives and Records Administration; others manage military archives in the U.S. Department of Defense. Most Federal Government curators work at the Smithsonian Institution, in the military museums of the Department of Defense, and in archaeological and other museums and historic sites managed by the U.S. Department of the Interior. All State governments have archival or historical record sections employing archivists. State and local governments also have numerous historical museums, parks, libraries, and zoos employing curators.

Some large corporations that have archives or record centers employ archivists to manage the growing volume of records created or maintained as required by law or necessary to the firms' operations. Religious and fraternal organizations, professional associations, conservation organizations, major private collectors, and research firms also employ archivists and curators.

Conservators may work under contract to treat particular items, rather than as regular employees of a museum or other institution. These conservators may work on their own as private contractors, or they may work as an employee of a conservation laboratory or regional conservation center that contracts their services to museums.

Job Outlook

Faster than average employment growth is expected through 2016. Keen competition is expected for most jobs as archivists, curators, and museum technicians because qualified applicants generally outnumber job openings.

Employment change. Employment of archivists, curators, and museum technicians is expected to increase 18 percent over the 2006-16 decade, faster than the average for all occupations. Jobs for archivists are expected to increase as public and private organizations require organization of and access to increasing volumes of records and information. Public interest in science, art, history, and technology will continue, creating opportunities for curators, conservators, and museum technicians. Museum attendance has held steady in recent years, many museums are financially healthy, and many have pursued building and renovation projects.

There has been an increase in self-employment among conservators, as many museums move toward hiring these workers on contract rather than keeping them permanently on staff. This trend is expected to continue.

Demand for archivists who specialize in electronic records and records management will grow more rapidly than the demand for archivists who specialize in older media formats.

Job prospects. Keen competition is expected for most jobs as archivists, curators, and museum technicians because qualified applicants generally outnumber job openings. Graduates with highly specialized training, such as master's degrees in both library science and history, with a concentration in archives or records management and extensive computer skills, should have the best opportunities for jobs as archivists. Opportunities for those who manage electronic records are expected to be better than for those who specialize in older media formats.

Curator jobs, in particular, are attractive to many people, and many applicants have the necessary training and knowledge of the subject. But because there are relatively few openings, candidates may have to work part time, as an intern, or even as a volunteer assistant curator or research associate after completing their formal education. Substantial work experience in col-

Projections data from the National Employment Matrix

Occupational Title	SOC Code	Employment, 2006	Projected employment,	Change, 2006-2016	
			2016	Number	Percent
Archivists, curators, and museum technicians	25-4010	27,000	33,000	5,000	18
Archivists	25-4011	6,400	7,400	900	14
Curators	25-4012	10,000	13,000	2,400	23
Museum Technicians and Conservators	25-4013	11,000	12,000	1,700	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*.

lection management, research, exhibit design, or restoration, as well as database management skills, will be necessary for permanent status.

Conservators also can expect competition for jobs. Competition is stiff for the limited number of openings in conservation graduate programs, and applicants need a technical background. Conservation program graduates with knowledge of a foreign language and a willingness to relocate will have an advantage over less qualified candidates.

Museums and other cultural institutions can be subject to cuts in funding during recessions or periods of budget tightening, reducing demand for these workers. Although the number of archivists and curators who move to other occupations is relatively low, the need to replace workers who retire will create some additional job openings.

Earnings

Median annual earnings of archivists in May 2006 were \$40,730. The middle 50 percent earned between \$30,610 and \$53,990. The lowest 10 percent earned less than \$23,890, and the highest 10 percent earned more than \$73,060. Median annual earnings of curators in May 2006 were \$46,300. The middle 50 percent earned between \$34,410 and \$61,740. The lowest 10 percent earned less than \$26,320, and the highest 10 percent earned more than \$80,030. Median annual earnings of museum technicians and conservators in May 2006 were \$34,340. The middle 50 percent earned between \$26,360 and \$46,120. The lowest 10 percent earned less than \$20,600, and the highest 10 percent earned more than \$61,270.

In 2007, the average annual salary for archivists in the Federal Government was \$79,199; for museum curators, \$80,780; for museum specialists and technicians, \$58,855; and for archives technicians, \$44,547.

Related Occupations

The skills that archivists, curators, and museum technicians use in preserving, organizing, and displaying objects or information of historical interest are shared by artists and related workers; librarians; and anthropologists and archeologists, historians, and other social scientists.

Sources of Additional Information

For information on archivists and on schools offering courses in archival studies, contact:

➤ Society of American Archivists, 527 South Wells St., 5th floor, Chicago, IL 60607-3922. Internet: http://www.archivists.org

For general information about careers as a curator and schools offering courses in museum studies, contact:

➤ American Association of Museums, 1575 Eye St.NW., Suite 400, Washington, DC 20005. Internet: http://www.aam-us.org
For information about careers and education programs in conservation and preservation, contact:

➤ American Institute for Conservation of Historic and Artistic Works, 1717 K St.NW., Suite 200, Washington, DC 20006.

Internet: http://aic-faic.org

For information about archivists and archivist certification, contact:

- ➤ AcademyofCertifiedArchivists,90StateSt.,Suite1009,Albany, NY 12207. Internet: http://www.certifiedarchivists.org For information about government archivists, contact:
- ➤ National Association of Government Archivists and Records Administrators, 90 State St., Suite 1009, Albany, NY 12207. Internet: http://www.nagara.org

Information on obtaining positions as archivists, curators, and museum technicians with the Federal Government is available from the Office of Personnel Management through USAJOBS, the Federal Government's official employment information system. This resource for locating and applying for job opportunities can be accessed through the Internet at http://www.usajobs.opm.gov or through an interactive voice response telephone system at (703) 724-1850 or TDD (978) 461-8404. These numbers are not toll free, and charges may result.