

Musgum work: Put your skills on gxhibit

Pam Hatchfield goes to work, she's helping to preserve a little piece of history for generations to come. Hatchfield uses a background in chemistry, art history, and studio art to care for objects ranging from the pre-Egyptian to the contemporary.

"It's very interesting and a lot of fun," she says of her work at the Museum of Fine Arts in Boston.

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Hatchfield, a conservator, is one of many who make a living in the museum industry. More than 200,000 people worked in the industry in May 2008, according to the U.S. Bureau of Labor Statistics (BLS). A museum hires workers in a variety of occupations to help share its treasures with the public.

BLS data also show that workers in the museum industry had a median annual wage of \$27,456 in May 2008, less than the annual median of \$32,390 for all U.S. workers. Still, competition for jobs remains fierce because of the attraction many have to the work. "There's an understanding that museums are nonprofits, and we're not going to get rich working in them," says Jim Hakala, senior educator at the University of Colorado Museum of Natural History in Boulder. "There's a lot of dedication, a real love of the field."

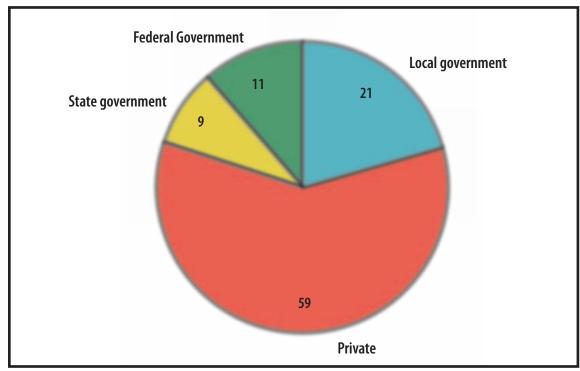
This article explores that dedication, revealing why people enjoy working in museums and what their career options are. The first section describes the museum industry. The second section talks about three categories of museum work: collections management and care, exhibit design, and education. Other sections describe museum occupations and the skills, training, and experience workers need to do their jobs. A final section suggests sources for finding more information.

Museum size and other matters

Museums organize, collect, and present to the public objects or information of historical, cultural, or educational value. Through their collections, museums also aim to preserve each item in an exhibit. And all museums share a mission to educate visitors.

Museums, historical sites, and similar institutions employed 219,700 workers in 2008, according to data from the BLS Quarterly Census of Employment and Wages. Privately owned museums accounted for 130,700 of those workers. Another 64,300 workers were employed in museums operated by local and State governments. And 24,700 worked in the Federal Government's museums. (See chart.)

Percent distribution of employment in museums, historical sites, zoos, and parks, 2008



But not all museum-related workers are employed directly by museums. Some work for firms that museums hire to perform tasks such as conservation, packing and shipping objects, and designing exhibits. Others are self-employed.

There are many types of museums. Some exhibit objects, such as paintings and historical artifacts; others focus on providing an experience. Museum types include art, natural history, and children's museums; science and technology centers; botanical gardens; nature centers; and zoos and aquariums. (Jobs in zoos or aquariums, although included in the total number of workers shown in the chart. are not discussed specifically in this article.)

Museums range in size from large, internationally renowned institutions employing thousands of workers to small, regional museums operated entirely by volunteers. In fact, small museums play a significant role in this industry. According to the American Association of Museums, half of all museums polled in a recent survey employed fewer than seven full-time and five part-time people.

Securing funding for museums is sometimes difficult, in part because museums are usually nonprofit organizations. Most depend heavily on charitable contributions and on money collected from admissions fees, food and museum store sales, building rentals, and other revenue sources. Smaller proportions of museums' operating budgets typically come from grants and other Federal, State, or local government funding and investment income, such as that from endowments. And some museums have a parent organization, such as a college or university, which provides services such as building maintenance or security.

Categories of work

Many positions in museums, such as maintenance and repair workers or administrative assistants, are common to other types of facilities. Other jobs are unique to museums. (For a list of some of the most common occupations in private industry museums—ones that also pay the best—see the table above, at right.)

Median annual wages of selected museum occupations in private industry, May 2008

Occupation	Median wage, May 2008
General and operations managers	\$78,020
Accountants and auditors	55,390
Curators	42,850
Public relations specialists	42,120
Set and exhibit designers	39,770
Archivists	37,330
Executive secretaries and administrative assistants	37,180
First-line supervisors/managers of retail sales workers	35,930
Instructional coordinators	35,220
Museum technicians and conservators	34,620
Self-enrichment education teachers	32,050
Bookkeeping, accounting, and auditing clerks	31,280
Maintenance and repair workers, general	30,000
Landscaping and groundskeeping workers	24,100
Security guards	23,550

No matter what their jobs are, all these workers contribute to a museum's mission. In some museums, especially smaller ones, this may mean that one person does the tasks associated with several jobs: "The curator might be the director, collections manager, education coordinator, gift shop manager, and janitor," says Greg Stevens, a museum educator and director for professional development at the American Association of Museums. Teamwork is also an important part of many museum jobs.

Museum work can be grouped into three broad categories: collections management and care, exhibit design, and education. Occasionally, the three overlap. For example, an exhibit's design often takes into account its educational goals. And proper care of objects must be maintained when designing an exhibit. Similarly, occupations sometimes fall into more than one category. In this article, occupations that span categories are included

in each. Also mentioned are alternative places of employment if museum-related work is available outside a museum.

Collections management and care

Essential to most museums are the objects in it. Museums commonly have thousands if not millions—of objects in their collections, either on display, in storage, or on loan to other institutions. Objects might be documents, artwork, historic artifacts, or almost any other item of value or interest.

Technology helps workers keep track of objects in a museum's collection. For example, detailed information about the history, condition, and location of an object is often stored in computer databases. Additionally, some collections are in the process of being put online to make them more accessible to both museum staff and the public.

Workers who manage and care for a museum's collections are experts on handling items to minimize damage, and they understand how temperature, light, humidity and other factors can harm these objects. These workers ensure that their museum's collections are preserved and shared with the public in a meaningful way. Some of these workers include archivists, collections managers and registrars, conservators, curators, and preparators.

In May 2008, median wages of collections management and care occupations varied in the museum industry, according to BLS. Some examples are \$42,850 for curators, \$37, 336 for archivists, and \$34,620 for museum technicians and conservators—an occupation that includes both low-skilled and highly skilled workers whose wages are likely to represent a broad range.

Archivists. Archivists manage permanent records and other documents of value, such as letters, photographs, and electronic files, and make decisions about which records to archive. Then, they categorize, file, and ensure the preservation of those records. Archivists also may perform research related to the records they keep and help make the records available to others.

Collections managers and registrars. To keep track of both the objects in a museum's collection and the information related to those objects, collections managers and registrars ensure accountability and access to those items. These workers also maintain inventories, files, and databases and manage the paperwork and related duties associated with a museum's objects. Tasks might include handling arrangements and documentation associated with gifts to the museum or with loans of objects, as well as making certain that objects are insured.

Museums sometimes distinguish between collections managers and registrars, with collections managers responsible for the physical care of objects and registrars for the documents and data associated with them.

Conservators. Conservators assess, preserve, and restore the condition of objects. They study objects' chemical and physical composition to authenticate the objects and to better understand how to care for them. These workers usually specialize in a particular type of object or medium-such as furniture, paintings, or textiles—and often work in museums' conservation departments or in conservation centers that provide services to museums and private collectors.

Curators. As the caretakers of part or all of a museum's collection, curators research, write about, and explain collections. Curators also help to acquire new items for a museum and recommend which items to remove from a collection. The head curator in a museum is sometimes also the museum director. (For other curatorial tasks, see the section on exhibit design.)

Preparators. These workers pack and prepare objects for shipment or storage and help get objects ready for display, such as by framing artwork or by creating mounts to support objects. They also might transfer objects within a museum—from storage to the conservation laboratory, for example—or bring objects to and from locations outside the museum. Other tasks can include photographing objects in a collection and helping to maintain inventory records. Some preparators



Registrars maintain the paperwork associated with museum objects.

work directly for museums; others work for outside companies that museums hire to transport objects and exhibits. (For more about preparators, see the section on exhibit design.)

Exhibit design

All types of museums rely on workers to help create or update their exhibits. Natural history museums, science centers, and children's museums have some of the largest exhibit design needs.

Creating a museum exhibit is complex and usually involves a team of workers. Exhibits today frequently incorporate interactive media and other technologies, such as touch-screen kiosks or audio tours, to help visitors have a more dynamic experience. Among the workers who create these interactive media are computer software engineers, scriptwriters, and audiovisual staff. Other workers perform tasks such as determining the desired contents of an exhibit or writing text about an exhibit's displays.

Some museums have in-house design departments. Others rely on workers who have duties in addition to exhibit design. Still others hire exhibit design firms to help them create their exhibits. Curators, exhibit designers, exhibition managers, fabricators, museum educators, and preparators are among the occupations involved in creating museum exhibits.

According to BLS, in May 2008, median wages for exhibit design occupations in the museum industry varied by specialty. Examples include \$19,430 for craft artists, \$36,410 for audio and video equipment technicians, \$39,770 for set and exhibit designers, and \$44,090 for writers and authors.

Curators. These workers, caretakers of museum collections, often oversee an exhibit's creation and design. Based on their subject matter expertise, curators provide input about an exhibit's overall theme and prospective objects. The degree of a curator's involvement varies; some are closely involved in every

In directing the creation of museum exhibits, exhibition managers work with curators and exhibit designers, among others.



aspect of an exhibit's design, and others have more of a consulting role. (See also the section on collections management and care.)

Exhibit designers. Exhibit designers take concepts, ideas, and objectives about exhibits and turn them into designs that can be implemented. The process often involves using computer software to develop and refine drawings, models, and prototypes of the different parts of an exhibit. These designers might, for example, help design and create wall hangings, historical reproductions, or interactive media. Exhibit designers also determine where to put exhibit items and which path visitors should follow when viewing. They communicate these ideas to other workers on the exhibit design team and to workers who build the exhibit. Designers frequently are employed by exhibit design firms, although some work for museums.

Exhibition managers. Exhibition managers oversee and direct the creation of museum exhibits. This oversight includes planning and developing budgets and timelines; communicating with curators, exhibit designers, and others involved in developing the exhibit; and coordinating all work required for the finished display. These workers, who might also be called project managers, may help to promote the exhibit. They may be employed either by a museum or by an exhibit design firm. Their jobs require exhibition managers to stay current on the latest trends in exhibit design.

Fabricators. These workers build an exhibit's parts, such as the climbing gym in a children's museum or a life-sized replica of a space shuttle for a science museum. Fabricators often specialize in a particular trade or aspect of fabrication and may have other job titles, such as carpenter or welder. They commonly are employed by exhibit design firms or work for museums on a contract basis.

Museum educators. Using their understanding of how people learn, museum educators suggest ways to structure an exhibit to optimize visitors' experiences. These workers also help decide which information to share in the exhibits. Additionally, they assist in developing supplemental materials, such as handouts or exhibit brochures that further convey an exhibit's message. Educators may have other duties that support the mission of the museum that are not specifically related to exhibits. (For more information on a variety of museum educators, refer to the section on education.)

Preparators. As the job title suggests, preparators prepare objects for display and help to install them in exhibits. They also might prepare the exhibit space by doing simple construction, building exhibit cases or display units, painting, and hanging text labels or other informative materials. Other tasks sometimes include performing routine maintenance, making mounts, or helping to take down old exhibits. (See also the section on collections management and care.)

Education

All museum workers who help visitors learn about history, culture, and the world around them are involved—to some extent—in education. Some, however, focus specifically on this task.

Education-related museum jobs have become increasingly prominent in recent decades, as museums place greater emphasis on informal or experiential learning. Today, most museums employ at least one person who is responsible for its educational programs and objectives; some museums dedicate an entire department to education.

Workers involved in museum education are usually experts on methods of teaching and presenting information. But they also must understand the history and significance of their museum's mission. Workers might consult with curators and other subject matter experts or perform their own research.

A general title used for many of the occupations performing this work is museum educator. Museum educators' tasks might range from developing instructional materials to coordinating public outreach programs. More specific titles include education directors, educational technology specialists, evaluators, public programs coordinators, school programs coordinators, tour guides, and volunteer coordinators.

Examples of median wages in May 2008 for education-related occupations in the museum industry, according to BLS, were \$19,390 for tour guides and escorts, \$32,050 for self-enrichment teachers, and \$35,220 for instructional coordinators.

Education directors. Sometimes called curators of education, these workers oversee a museum's educational efforts and are often in charge of its education department. They take care of hiring and budgeting for this department and ensure consistency across its educational programs. These directors also might help to create and promote a museum's educational offerings.

Educational technology specialists.

These specialists develop, maintain, or improve various forms of technology-based learning. For example, they might design audience-specific Web sites, such as those for teachers, young children, or teens. Or they might coordinate distance learning programs

that use videoconferencing or other technologies that allow users—such as students in a classroom—to view museum collections remotely.

Evaluators. Evaluators study the effectiveness and appeal of a museum's programs and exhibits. They conduct interviews and administer surveys to determine what a museum's audience likes, what it is learning, and which methods of presenting information work best. They analyze this information, often summarizing the results in written reports that offer suggestions for designing or changing educational programs and exhibits. Evaluators work either directly for museums or as consultants.

Public programs coordinators. Public programs coordinators develop lectures, symposiums, and other events related to a museum's collections or exhibits. Tasks associated



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with these efforts might include researching topics of interest to the public, arranging for speakers, and working with a museum's events coordinator to ensure that programs run smoothly.

School programs coordinators. These workers develop educational materials for teachers and students. They might create teachers' guides to highlight parts of an exhibit, for example, or design worksheets for students visiting the museum. These coordinators also help to schedule museum tours for schoolchildren and either lead the tours or train guides, known as docents, to lead them. And they often perform outreach in schools to increase awareness about the museum.

Tour guides or docents. Tour guides or docents take groups or individual visitors through the museum, explaining the significance of exhibits and answering questions. Their efforts help to stimulate interest in the collections. These positions are frequently filled by volunteers and are often part-time.

Museum workers must be precise, detail-oriented, and have strong organizational and writing skills.



Volunteer coordinators. These coordinators help to manage a museum's volunteer program. Many museums have hundreds of volunteers who give tours or perform other tasks. Volunteer coordinators select and train these unpaid assistants and oversee their scheduling. And in some museums, especially smaller ones, they may be volunteers themselves.

Working in a muscum

The museum industry is competitive, especially for popular museum occupations such as curators, conservators, and museum technicians—occupations for which BLS projects that employment will grow much faster than the average. (BLS does not have outlook information for every museum occupation discussed in this article.)

In highly competitive fields, workers who are willing to relocate for a job often increase their marketability. And for the best entrylevel opportunities in museums, think small. "It's often easier to get a job at a small institution than at a large one," says the University of Colorado's Jim Hakala, "because there are so many historical societies and other small museums."

But many museum workers face the same challenges when funding is low. Budgetary constraints may mean that jobs are cut or that workers must continue to do their jobs despite limited resources. Museum work sometimes involves fundraising efforts to make up for these financial shortfalls. "We're constantly having events to raise money or trying to convince donors that we're worthy of funds," says Mike DiPaolo, executive director of the Lewes Historical Society in Lewes, Delaware.

The work hours of museum staff vary by position. Many workers have a standard weekday, daytime schedule, but some regularly work evenings or weekends to cover extended museum hours or special events.

Some positions involve travel. For some workers, like Jeanne Benas, a registrar at the National Museum of American History, this travel includes transporting or acquiring new objects for the museum.

As a workplace, museums provide variety, both in tasks that need to be performed and in exhibits that change periodically. And that variety, say workers, encourages learning. "The best part about my job is that I get to be a perpetual learner," says Christine Reich, manager of research and evaluation at the Museum of Science in Boston. "Museums themselves are learning institutions, so you learn just by being in them." Conservator Pam Hatchfield agrees. "One of the reasons that I love my job so much," she says, "is that I'm always learning."

Getting there

Planning is beneficial when considering museum work, particularly for competitive occupations. This section describes the general skills, work experience, and education required for many museum careers.

Skills and training

Workers who handle museum items must be precise, detail-oriented, and comfortable being responsible for objects that are often valuable, delicate, or fragile. Written and oral communication skills are also important for many positions. And interpersonal skills are critical, because museum workers frequently interact with the public as well as colleagues.

Considering the possible overlap in job duties, people entering these careers should be flexible and willing to take on a variety of tasks. This overlap also means that organizational skills are important, because museum workers may have to coordinate everything from managing objects to scheduling tours. Other skill requirements are specific to the occupations. Artistic ability is helpful for exhibit designers, for example, and public programs coordinators must have a knack for finding ways to spark interest in a museum's collection.

Educational backgrounds sometimes vary widely within an occupation, depending on

factors such as specific position description and museum needs. As a result, a curator at one museum might have a Ph.D.; at another, the curator might hold a master's degree. In another example, some preparators have a college degree, but others might have a high school diploma, plus experience.

Category of work and type of museum often shape the kind of education that workers need. Workers involved in museum education may be required to have an undergraduate or graduate degree in education, for example. Workers in an art museum usually need at least a bachelor's degree in art history or fine arts, and workers in a science museum might be required to have a degree in science.

Instead of or in addition to getting an advanced degree in a specialized subject, workers in some occupations—such as registrars, museum educators, and curators—earn a more generally focused master's degree or certificate in museum studies. Whether a general degree can or should replace a specialized one is a matter of debate, as is the question about what kind of education is important for museum work.

Many museum workers have academic training in subjects not directly related to museums. For example, Sonal Bhatt, director of interpretation and exhibitions at the Brooklyn Botanical Gardens in New York, has an undergraduate degree in marine biology.

Experience

Having prior museum experience is an important part of landing a permanent job, say experts. "I recommend that people get as much experience as they can because it gives them a broader base," says Hakala. "And, as the job market becomes more competitive, it's necessary."

But how do people get this important experience before they're even hired? Paid or unpaid internships and volunteer positions are common ways to gain museum experience. More than just a resume builder, these experiences provide valuable insights into the work. "Internships and volunteering help you find out what you want to do-or what you

don't want to do-in a museum," says curator Keni Sturgeon of the Mission Mill Museum in Salem, Oregon.

Internships and volunteering also help establish industry contacts. And networking is often a key to getting a museum job, in part because of the competitiveness of the industry. "You often hear, 'It's not what you know, it's who you know," says Sturgeon, "and that's especially true in museums." She, like many others in museum careers, learned of her current position through contacts that she'd made in the past.

Whichever path museum workers take, they must at least have enthusiasm for the museum's mission. "A big part of my job," says Bhatt, "is figuring out how to get people excited about the things that I'm excited about." Having the opportunity to convey to others her passion for science and nature is one of the things that Bhatt loves about her work.

Others appreciate the broader goals associated with working in a museum. "Museums really think about the social good and how to best serve their communities," says the Boston Museum of Science's Reich. "That's a great thing to be a part of."

For more information

In addition to the occupations described in this article, museums need many other workers: security guards, ticket takers, and cashiers, to name a few. Learn about these and other occupations in the Occupational Outlook Handbook, available online at www.bls.gov/ooh or in print at many career centers and public libraries.

Public libraries also may offer a variety of career resources for learning about work in museums. Look for the Official Museum Directory, a compilation of contact information for more than 8,300 museums nationwide.

The museum directory is published by the American Association of Museums, another source of career information. The association

is accessible online at www.aam-us.org or by writing 1575 Eye Street NW., Suite 400, Washington, DC 20005; calling (202) 289-1818; or emailing membership@aam-us.org.

Some organizations are specific to occupations, including the following for archivists and for conservators:

Society of American Archivists 17 N. State St. Suite 1425 Chicago, IL 60602 (312) 606-0722 servicecenter@archivists.org www.archivists.org

American Institute for Conservation of Historic and Artistic Works 1156 15th St. NW. Suite 320 Washington, DC 20005 (202) 452-9545 info@conservation-us.org www.conservation-us.org

Many experts agree that the best way to learn about working in a museum is to volunteer or to get an internship in one. Call or visit a local museum to find out about opportunities, and research training programs by using college guidebooks or by talking to workers in the museum occupations that interest you.

Online resources that can help you locate training programs include:

- museumstudies.si.edu/TrainDirect. htm, for museum studies, historic preservation, public history, and nonprofit management programs, listed by State
- www.acumg.org/studies.html, for selected museum studies, education, exhibition and design, collections management, curatorial, and other programs, listed by type of training
- www.globalmuseum.org (Click on the tab for "Museum Studies," then click on "North America" for a list of museum studies programs throughout the United States and Canada.)