



NATIONAL ENDOWMENT FOR THE

Humanities

DIVISION OF PRESERVATION AND ACCESS

Narrative Section of a Successful Application

The attached document contains the grant narrative of a previously funded grant application. It is not intended to serve as a model, but to give you a sense of how a successful application may be crafted. Every successful application is different, and each applicant is urged to prepare a proposal that reflects its unique project and aspirations. Prospective applicants should consult the NEH Division of Preservation and Access application guidelines at <http://www.neh.gov/grants/preservation/sustaining-cultural-heritage-collections> for instructions. Applicants are also strongly encouraged to consult with the NEH Division of Preservation and Access staff well before a grant deadline.

Note: The attachment only contains the grant narrative, not the entire funded application. In addition, certain portions may have been redacted to protect the privacy interests of an individual and/or to protect confidential commercial and financial information and/or to protect copyrighted materials.

Project Title: Furnishing Sustainable Photography Storage

Institution: San Francisco Museum of Modern Art

Project Director: Jill Sterrett

Grant Program: Sustaining Cultural Heritage Collections

San Francisco Museum of Modern Art
Furnishing Sustainable Photography Storage

Abstract

The San Francisco Museum of Modern Art (SFMOMA) is dedicated to making the art of our time a vital and meaningful part of public life. Sustainable conservation of its collections is both a mission-critical activity and a priority in the institution's strategic plan. SFMOMA respectfully requests a \$350,000 NEH SCHC implementation grant as part of a \$877,195 project to enhance the preservation of the museum's photography collection with the purchase and installation of storage furniture for two new storage vaults, the Cold Storage Vault and the Study Center Storage Vault.

Significance to the Humanities

SFMOMA was among the first American art museums to recognize photography as an art form. Consequently, its photography collection spans the entire history of the medium, from its invention in 1839 to the present day. It is the largest collection at SFMOMA, numbering 16,000 objects. Well known for an innovative collection and exhibition philosophy, the Department of Photography initiates major exhibitions, accompanied by scholarly catalogues, which are critically acclaimed and frequently used as teaching tools in classes ranging from high school photography courses to MFA programs. Graduate students and scholars regularly research the permanent collection, most notably through the Department of Photography's annual ten-week summer fellowship.

The proposed project is part of a much larger expansion that will triple SFMOMA's overall space for exhibitions and will create a new Photography Center that will be the largest space permanently dedicated to the display of photography in the United States. The Photography Center will greatly enhance the experience of both scholars and school groups exploring the permanent collection.

Principal Activities

The proposed project addresses three present conditions that are among SFMOMA's foremost preservation challenges: 1) Due to significant growth in the photography collection, which has doubled in size in the past twenty years, the museum has been forced to store the photography in four different locations within the greater San Francisco Bay Area. 2) Currently, the museum has no capacity for cold storage, which has been substantiated as the best practice for arresting the deterioration of color prints. Yet in recent decades, as color has become the medium of choice for a growing number of artists, the volume of color photographs has grown and currently total 2,425. 3) The expansion of which the proposed project is a component is subject to the City of San Francisco's Green Building Ordinance, among the most rigorous sustainability standards in the country. SFMOMA is thus required to balance the compelling need for cold storage against equally compelling demands for energy efficiency and cost effectiveness. Thus, the project will: unite the entire collection on site at the museum, create the capacity for both cool and cold storage, and maintain LEED Gold certification. During a project period that spans two years, principal activities will include: full-scale collection review, matting and framing of photographs identified for rehousing, purchase of customized art storage furniture for two new storage vaults; and a phased installation process.

Expected Results

SFMOMA anticipates that successful completion of the project will result in the following outcomes: 1) Improve preservation of one of the most culturally significant photography collections in the country. 2) Improve access to the photography collection by storing it in its entirety at one address. 3) Minimize the environmental impact of urgently needed cold storage capacity.

San Francisco Museum of Modern Art
Furnishing Sustainable Photography Storage

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San Francisco Museum of Modern Art
Furnishing Sustainable Photography Storage

INTRODUCTION

Project Overview

The San Francisco Museum of Modern Art (SFMOMA) respectfully requests a \$350,000 National Endowment for the Humanities Sustaining Cultural Heritage Collections Implementation Grant to enhance the preservation and use of the museum's distinguished photography collection, which numbers 16,000 objects. The proposed project includes the purchase and installation of storage furniture for two new storage vaults, the Cold Storage Vault and the Study Center Storage Vault, that will house the entire photography collection within the museum's building and allow for projected growth of the collection from 2012 through 2027. The storage systems purchased for these new vaults are integral to a larger museum building expansion project that will comply with City of San Francisco's Green Building Ordinance, one of the nation's most rigorous building codes for the reduction of waste in the built environment. Successful completion of the proposed project addresses three of the highest priorities in the museum's Strategic Plan for 2012 through 2018: caring for one of the foremost photography collections in the world; increasing access to and fostering use of the photography collection by the public and scholars; and advancing sustainable preservation practices for the photography collection (Appendix A).

Organizational Profile

Mission

SFMOMA is dedicated to making the art of our time a vital and meaningful part of public life. For that reason we assemble and care for unparalleled collections, create exhilarating exhibitions, and develop engaging public programs. In all of these endeavors, we are guided by our enduring commitment to fostering creativity and embracing new ways of seeing the world.

History

Founded in 1935, SFMOMA relocated to its Mario Botta-designed building on Third Street in the South of Market area of San Francisco in 1995. Since then, the museum's collection has more than doubled in size to 29,000 objects, annual attendance has tripled, and membership has grown beyond 43,000. SFMOMA houses the West Coast's most comprehensive collection of 20th- and 21st-century art, including painting, sculpture, photography, architecture, design, and media art. The exhibition program has become one of the world's strongest, with acclaimed shows that travel to leading museums internationally. SFMOMA presents more than 20 exhibitions and 300 education programs annually. Attendance in fiscal year 2012 totaled 659,000 visitors onsite and 3,200,000 virtual visitors to sfmoma.org. The museum employs a total of 266 FTEs and has an annual operating budget of approximately \$34 million as well as an endowment of \$151 million.

In September 2009, SFMOMA announced a pioneering partnership with Doris and the late Donald Fisher, founders of Gap Inc., for the long-term loan of the Fisher Collection, one of the world's most important private collections of contemporary art, and an expansion that will create an additional 100,000 square feet of gallery and public space. SFMOMA will break ground in June 2013 for the expansion, which is being designed by the Norwegian American architecture firm Snøhetta and is slated for completion in late 2015. Beyond the physical extension of the building, this project represents a transformation of the museum as a whole. By enhancing SFMOMA's programs and collections and bringing the Fisher Collection into public view, SFMOMA will expand as a museum for learning, inspiration, and interaction for residents of the Bay Area and beyond.

Connection of the Project to the Organization's Mission

SFMOMA's collections are the core of its mission and activities. The museum has a comprehensive Collections Management Policy in place, which is reviewed and presented to the Executive Committee of the Board of Trustees every five years for approval. The most recent version of the Policy was presented and approved on October 10, 2012 (Appendix B).

SIGNIFICANCE AND USE OF THE COLLECTION

Photography Collection Overview

SFMOMA was among the first American art museums to recognize photography as an art form. For more than 75 years, the museum has been engaged in the acquisition, research, presentation, and interpretation of photographs. Consequently, its photography collection—one of the oldest among art museums nationwide—spans the entire history of the medium, from its invention in 1839 to the present day. Photography is the largest collection at SFMOMA, numbering 16,000 objects.

History and Strengths of the Collection

When SFMOMA opened in 1935, the most important local art movement was modern photography, which found formal expression in the **f/64 group**, whose chief practitioners included **Ansel Adams**, **Edward Weston**, and **Imogen Cunningham**. SFMOMA acquired their works through major gifts from key donors such as founding trustee Albert Bender, and as a result, has one of the finest collections of West Coast modernist photography in the United States, including such masterpieces as Edward Weston's *Two Shells*, (1927) and *Pepper No. 30*, (1930). By the 1950s, the museum had developed an important photography collection, which helped Ansel Adams persuade **Georgia O'Keeffe** to donate and sell 67 prints from the estate of her late husband, **Alfred Stieglitz**, to the museum in 1952. That collection established a significant representation of East Coast modernism, on which curators have continued to build, adding important works by **Paul Strand** and a major group of rare vintage photographs by **Charles Sheeler**.

With the appointment of Van Deren Coke as Director of Photography in 1979 and the establishment of a distinct Photography Department in 1980, SFMOMA formally recognized the importance of the medium to its overall artistic program. Under Coke's leadership, exhibitions of historical and contemporary photography grew to account for one-third of the museum's exhibition schedule. The Photography Department launched a robust acquisitions program, and established important holdings in surrealism and the German avant-garde, including exceptional works by **Man Ray** such as *Untitled (Rayograph)*, 1922 and by **László Moholy-Nagy** (including *Vom Funkturm*, (1929). A photographer himself, Coke also actively collected the conceptual and experimental work of his own time. As a result, the museum's holdings of 1970s American photography are exceptionally deep, including major bodies of work by **William Eggleston** (76 works), **Robert Cumming** (40 works), and **Lewis Baltz** (203 works).

Sandra S. Phillips was named Curator of Photography in 1987 and has served as Senior Curator since 1999. Under Phillips' leadership, the Photography Department has initiated a number of major exhibitions that achieved wide recognition and critical acclaim. Since her appointment, the collection has grown exponentially, developing indisputable strengths—for which the institution is world-renowned—in the representation of the Western landscape and land use from the 19th century to the present; Japanese photography, in the largest and best collection found anywhere outside of Japan; and in the development of the documentary tradition from the early 20th century to the present. The current curatorial staff also considers the 19th century to be integral to an understanding of the evolution of photographic modernism, and has therefore collected significant examples of the most important 19th-century practitioners and has built a small but significant collection. The museum's holdings are complemented by those in the Sack Photographic Trust, a supporting organization of the museum established in 1998, which comprises approximately 1,000 works, many of which are 19th-century masterpieces.

Holdings in Western Landscape and Land Use

The curators have built a significant concentration of early representations of Western American land, especially as it was developed through settlement and the growth of the railroad, mining, and logging industries. The first photographs to enter SFMOMA's collection in 1935 were works by **Ansel Adams**. Today, the collection includes more than 250 works by this iconic Western photographer. Other important holdings include nine works by **Eadweard Muybridge**, including his magnificent mammoth plate landscape *Pi-Wi-Ack (Shower of Stars)*, *Vernal Falls*, *400 Feet*, *Valley of Yosemite* (1872) and 25 works by **Carleton E. Watkins**, including the mammoth plate

Pohono, Bridal Veil, 900 Feet, Yosemite (1861). The museum also has significant holdings of contemporary American photographer **Robert Adams** (390 works), including the entire series *Turning Back* (1999-2003), a meditation on the environmental legacy of westward expansion undertaken on the bicentennial of the expedition of Lewis and Clark.

Japanese Photography

Thanks in small part to its location on the Pacific Rim and in large part to the research interests of its Senior Curator, SFMOMA has made postwar and contemporary Japanese photography a major area of exhibition and collection. Beginning with a small but select group of pictures that entered the collection in the 1980s, the museum has built considerable strength in the work of Japanese photographers of the postwar era through the present. The museum's holdings in this area include key works by the internationally recognized artists **Daido Moriyama** (64 works) and **Shomei Tomatsu** (77 works), both of whom were subjects of major monographic exhibitions at SFMOMA, as well as works by the influential artists **Masahisa Fukase** and **Eikoh Hosoe**, among many others. By continually expanding these holdings, including two major recent promised gifts totaling nearly 470 photographs, SFMOMA has established one of the most important collections of Japanese photography in the world.

Documentary Tradition

The Photography Department has created a cohesive history of documentary photography, building upon the early acquisition of small but important works by **Walker Evans** and **Lewis Hine** to build a collection that now could be considered representative of the documentary tradition through the present day. Curators are interested in educating the public about the continuations and transmutations of the documentary idea in contemporary photography, in particular the deliberate confusion of journalism and composed image making. This interest extends to the current use of digital photography by artists to test and extend notions of photographic truth.

Dorothea Lange is represented in the collection by 76 works, including the iconic *Migrant Mother* (1936). The department is equally committed to collecting works from the later evolution of street photography in the 1960s and 1970s, with an emphasis on **Garry Winogrand** (the subject of a major retrospective opening in 2013) and **Diane Arbus**. The museum's works by Arbus include two of her most famous images, *Identical twins, Roselle, N.J.* (1966) and *A Jewish giant at home with his parents in the Bronx, N.Y.* (1970). A very recent promised gift from collector and gallerist (b) (6) adds 26 Arbus works, all from the untitled last series of the artist's career. Renowned street photographer **Helen Levitt** is represented by 69 works. California artists **Henry Wessel**, **Jim Goldberg**, and **Larry Sultan** are well represented, as are other American artists such as **Larry Fink** and **Judith Joy Ross**. *Face of Our Time*, a recurring exhibition series begun in 2009, considers contemporary expressions of the documentary impulse. SFMOMA has acquired work by all of the artists included in this series, including **Yto Barrada**, **Zanele Muholi**, and **Guy Tillim**.

Vernacular Collection

Dedicated to the examination of visual culture in all its forms, the SFMOMA Photography Department is distinctive for its active interest in collecting and exhibiting vernacular photography—anonymous snapshots, documentary evidence, and other photographic images never intended to be viewed as art. Viewing the genre as worthy of scholarly consideration in and of itself, the museum's exhibition and interpretation activities also consider its influence on artists' practice, from Walker Evans to Conceptual Art. Many artists have turned their attention to the use of photography to document conceptual projects or as a way of deconstructing the formal elements in a photograph, both longstanding modes of operation within the tradition. SFMOMA consciously collects this aspect of photographic practice, with works by **Cindy Sherman**, **Richard Prince**, **Ed Ruscha** and others of that generation who use photography as an extension of their work in other media.

Relation of the Collection to Similar Holdings in Other Repositories

SFMOMA's photography collection is a medium-sized collection, close in scale to that of the Art Institute of Chicago. It is in the top tier of photography collections in the United States. In addition to its areas of strength outlined above, SFMOMA's collection distinguishes itself by its approach to collecting. With one of the oldest photography collections in the country, SFMOMA is interested in telling a fuller and more complicated story about the history of the medium than would be possible with a collection composed entirely of masterworks by master practitioners. Rather, the museum has chosen, while representing the great masters, to also collect in areas outside the traditional canon, such as vernacular photography and scientific photography.

Exhibitions and Education Programs

SFMOMA presents more than 20 exhibitions annually, of which up to 33% are devoted to photography. As a complement to the exhibitions, the museum presents a robust program of curator talks, docent tours, lectures, film screenings, and live performances, nearly all of which are free with museum admission. In Fiscal Year 2012, SFMOMA presented a total of 1,993 such programs, in which 44,837 visitors participated.

In addition to a varied special exhibitions program, the Photography Department maintains an ongoing exhibition drawn from the museum's collection, *Picturing Modernity: Selections from the SFMOMA Collection*, in the museum's dedicated photography galleries. This exhibition, which includes between 60 and 100 objects and changes approximately three times a year, seeks to provide an overview of the photographic medium, from the advent of photography in 1839 to contemporary works. Objects range from Gold-Rush era daguerreotypes to recent work by contemporary artists and are accompanied by extended didactic object labels. The department also produces an illustrated guide to photographic processes for use in the galleries. SFMOMA is the only institution in Northern California to maintain a continuous display of the medium's entire history. These survey exhibitions are regularly used as teaching tools by the numerous schools in the region, ranging from high school photography classes to MFA programs.

The museum's Photography Department regularly initiates major exhibitions that achieve wide recognition and critical acclaim. It is known for its innovative exhibition philosophy, which, like its collection, embraces the entire history of photography and its many uses within visual culture. Outstanding examples from recent decades include:

- *Crossing the Frontier: Photographs of the Developing West, 1849 to the Present* (1996). Far more than a picturesque survey of landscape photography, this thoughtful exhibition balanced images of the West's natural wonders with documentary photos of massive engineering projects, images of vistas overrun with humanity and its works, and vernacular photography. *Crossing the Frontier* offered a revision of traditional understandings of the representation of landscape, focusing instead on land use: the social and ecological impact of the doctrine of Manifest Destiny and the ongoing development of the American West. The show examined how such photographs shaped cultural attitudes about the West and its natural resources but also traced the influence of 19th- and early 20th-century documentary and vernacular photography on more recent representations of the American West. The fully illustrated catalogue brought together essays on a range of topics significant to the humanities, from the co-optation of the mythology of the West by Ralph Lauren, to the urban planning of Las Vegas and an assessment of the impact of geology on the West's development. The exhibition traveled to the Yale University Art Gallery, the Phoenix Art Museum, and the Tokyo Metropolitan Museum of Photography.
- *Brought to Light: Photography and the Invisible, 1840–1900* (2008). This groundbreaking and critically acclaimed exhibition explored the use of photography in 19th-century science, with a particular focus on the representation of phenomena invisible to the naked eye. Organized by SFMOMA Curator of Photography Corey Keller, *Brought to Light* featured more than 200 vintage photographs and photographically illustrated books, most of which had never been on public display in the United States. The exhibition included works made between 1839 and 1900 by both noted scientists and amateur experimenters during the concurrent flowering of photography and modern

science. Drawn from American and European private and public collections, highlights included some of the earliest daguerreotypes made through the telescope; Jules Janssen's circular daguerreotype plate designed to capture the 1874 transit of Venus; photomicrographs by William Henry Fox Talbot and Auguste-Adolphe Bertsch; motion studies by Eadweard Muybridge and Étienne-Jules Marey; early and rare X-ray photographs; and spirit photographs by Louis Darget. The works in the show demonstrated the previously hidden realms scientists were able to visualize only through the aid of photography and invited visitors to imagine what pictures of the invisible might have meant at a time when contemporary technologies such as satellite imaging and PET scans were utterly unimaginable. The show also explored the complex and changing relationship between science and art, asking visitors to contemplate the role of aesthetics in scientific imagery and the impact of the visual models such imagery provided on modern and contemporary art. Attendance at SFMOMA totaled 110,711. The exhibition traveled to the Albertina Museum in Vienna and was accompanied by an award-winning catalogue (with a German edition) with essays by Jennifer Tucker, Associate Professor of History at Wesleyan University, and Tom Gunning, film historian and Distinguished Professor at the University of Chicago.

- *Exposed: Voyeurism, Surveillance and the Camera Since 1870* (2010). Co-organized by SFMOMA and Tate Modern, London, *Exposed* presented more than 200 pictures that together formed an inquiry into the camera's powerful voyeuristic capacity. Conceived as a sequel to Sandra Phillips's 1997 exhibition *Police Pictures*, *Exposed* probed the shifting boundaries between seeing and spying, the private act and the public image, and challenged visitors to consider how the camera transformed the very nature of looking in modern and contemporary culture. Works by major artists, including Brassai, Henri Cartier-Bresson, Walker Evans, Nan Goldin, Lee Miller, Thomas Ruff, Paul Strand, and Weegee were presented alongside photographs made by amateurs, professional journalists, and government agencies. The exhibition traveled to Tate Modern and the Walker Art Center, Minneapolis. Attendance at SFMOMA totaled 263,865. Public programming included a roundtable on the future of investigative reporting with David Cohn, founder of Spot.us; Susan Meiselas, photographer; Robert Rosenthal, Executive Director of the Center for Investigative Reporting; A.C. Thompson, reporter for ProPublica; and Lola Vollen, founder of the Life After Exoneration program. This lively discussion offered a glimpse into the ethics of looking from a journalistic perspective and the rapidly shifting nature of journalism in the digital age. A film series presented in partnership with the Castro Theater included Sophie Calle's road trip movie *Double Blind*, Michelangelo Antonioni's classic film *Blow Up*, and a collection of short voyeuristic films from the turn of the century.

SFMOMA has also undertaken many monographic exhibitions that offer new perspectives on artists' work and generate new scholarship in the field. Recent examples include:

- *Diane Arbus Revelations* (2003). Co-organized by guest curator Elisabeth Sussman, Curator of Photography at the Whitney Museum of American Art, New York, and SFMOMA's Sandra Phillips, this show brought together 200 of the artist's most significant photographs, making it the most complete presentation of her work ever assembled. Prints were drawn from public and private collections and included many images that had never before been exhibited publicly. As the title suggests, *Revelations* offered a new understanding of Arbus's oeuvre by incorporating unknown or lesser-known works with her iconic images. The exhibition was further enriched by the inclusion of Arbus's extensive notebooks, personal and professional correspondence, contact sheets, newspaper clippings, cameras, and other ephemera that provided a rich and previously unexplored avenue into the artist's influences, motivations, and aspirations. After opening at SFMOMA the exhibition traveled to the Los Angeles County Museum of Art; the Museum of Fine Arts, Houston; the Metropolitan Museum of Art, New York; Museum Folkwang, Essen, Germany; the Victoria and Albert Museum, London; and the Walker Art Center, Minneapolis. One of the most highly attended photography shows in SFMOMA's history, visitorship totaled 170,931.

- *Francesca Woodman* (2011). The most comprehensive exhibition to date of Woodman's brief but extraordinary career, this exhibition assembled approximately 160 vintage photographs—many that had never before been on view—drawn primarily from the Woodman family's personal collection and made available solely for this project. Contextualizing her most canonical pictures as part of a larger body of work that is more varied than was previously suspected, the Lucie Award-nominated exhibition offered the fullest view of Woodman's oeuvre to date. The SFMOMA presentation also included a permanent collection exhibition of work by Woodman's contemporaries to highlight the historical context for her photography as well as to draw attention to pertinent themes including gender, the representation of the self, and the relationship between performance and photography. Attendance at SFMOMA totaled 137,174. The show traveled to the Solomon R. Guggenheim Museum, New York, where it was seen by an additional 350,000 visitors. Public programs included a panel discussion with Julia Bryan-Wilson, Associate Professor of Modern and Contemporary Art at UC Berkeley; Corey Keller, Curator; Amy Lyford, Professor of Art History and the Visual Arts at Occidental College; and Peggy Phelan, Chair in the Arts and Professor in Drama and English at Stanford University in which the panelists discussed the role of gender and performance in Woodman's work historically and considered her continuing relevance to contemporary art. The retrospective was accompanied by a film screening, presented jointly with SF Cinemathèque, of Elisabeth Subrin's *The Fancy*, an oblique and conceptual portrait of Woodman.

Although the museum is renowned for its special exhibitions, the permanent collection has also formed the core of several major thematic photography exhibitions at SFMOMA. The considerable strength of the collection has allowed the museum to mount such in-depth presentations as:

- *The Provoke Era: Postwar Japanese Photography* (2009). This was the first survey of SFMOMA's collection of Japanese photography, now acknowledged as one of the best in the United States. Tracing the response of Japanese photographers to their country's shifting social and political atmosphere in the wake of World War II, this exhibition focused on the growth of the photographic avant-garde in Japan between 1950 and 1980. Among the internationally known artists represented were Masahisa Fukase, Eikoh Hosoe, Daido Moriyama, and Shomei Tomatsu. The exhibition was accompanied by extensive didactic texts and labels. The museum offered a **Curator Talk** by SFMOMA Assistant Curator of Photography Lisa Sutcliffe; a **Teacher Institute** workshop for teachers focusing on identity; and a **Film Screening** including rare films by Hosoe and Moriyama and recent videos by Yasumasa Morimura.
- *The View From Here* (2010). This chronologically organized overview of California photography from the 1840s to the present displayed for the first time the astounding depth of the museum's holdings in this area. Organized as part of a museum-wide celebration of the institution's 75th anniversary, the exhibition included approximately 250 objects ranging from Gold Rush-era daguerreotypes to pictures by members of Group f/64, street and documentary photographs, conceptual work from the 1970s, and contemporary photographs. Artists included Ansel Adams, Lewis Baltz, Dorothea Lange, Ed Ruscha, Larry Sultan, Carleton Watkins, Carrie Mae Weems, and others.
- *Photography in Mexico* (2012). Presenting a complex synthesis of art and politics, this exhibition explored Mexico's rich photography tradition from the 1920s to the present. Including photographs made for the illustrated press at midcentury and documentary investigations from the 1970s and 1980s, the selection of more than 150 photographs from the museum's collection included works by Manuel Carillo, Graciela Iturbide, Elsa Medina, Pablo Ortiz Monasterio, Mariana Yampolsky, and more. In an effort to encourage visitorship among the Bay Area's substantial Latino community, all didactic and marketing materials were produced in both English and Spanish. The complementary programming offered by the museum included: an **Artists Panel Discussion** moderated by SFMOMA Education Curator Dominic Willsdon in which three members of the younger generation of artists in the exhibition—Alejandro Cartagena, Pablo Lopez Luz, and Daniela Rossell—discussed their work and considered whether it is still important to locate their photographic practice in relation to the tradition of

photography in Mexico; **Un Ojo a la Fotografía, a mixer and exhibition tour** presented in partnership with LAM Social Club, a membership-based community for Latino professionals; a **Video Screening of *Un Banquete en Tellapayac*** by Olivier Debroise; and a **two-part Critics Panel Discussion** about Mexican modernity and visual culture—with Professor Maria Ines Canal of Universidad Autonoma Metropolitana; Professor Jesse Lerner of Pitzer College; Assistant Professor Tarek Elhaik of San Francisco State University; and Rogelio Villarreal of *Replicante* magazine—with one real-time public panel discussion and one virtual session that linked panelists via Skype to three artists featured in the exhibition.

The Provoke Era: Postwar Japanese Photography and Photography in Mexico will travel to six museums in underserved areas throughout the state of California from 2013 through 2015, at no charge to the presenting institutions, through a grant-funded community-building initiative.

Public Symposium

In addition to the extensive exhibition-related public programming outlined above, Curator of Photography Corey Keller organized a major two-day symposium in 2010 provocatively titled *Is Photography Over?* The museum invited a range of major thinkers and practitioners—including Vince Aletti, long-time photography critic for the *Village Voice*; George Baker, associate professor of art history at UCLA; Walead Beshty, artist; Jennifer Blessing, Senior Curator of Photography at the Solomon R. Guggenheim Museum; Charlotte Cotton, former curator of photography at LACMA; Philip-Lorca diCorcia, artist; Geoff Dyer, author; Peter Galassi, former Chief Curator of Photography at the Museum of Modern Art New York; Douglas Nickel, Andrea V. Rosenthal Professor of Modern Art, Department of the History of Art and Architecture, Brown University; Trevor Paglen, artist; Blake Stimson, professor of art history at UC Davis; and Joel Snyder, professor and chair of the Department of Art History at the University of Chicago—to write brief responses to the question “Is photography over?” The texts were used to kick off a public panel discussion that was continued in closed-door sessions the next day and then followed by a public session to report back on those conversations about obsolescing technology, the changing forms of photographic distribution, and the role of the medium within the discourses of contemporary art. More than 750 people attended the symposium and others participated in the conversation through a blog. The museum documented the proceedings and continues to make the initial written texts, blog posts, and YouTube videos of the public sessions available on its website. More than 11,000 people to date have viewed the videos of the symposium online, and it remains a touchstone for current discussions of contemporary photography.

K-12 School, Youth, Family, and Teacher Programs

SFMOMA offers a variety of on-site programs to K-12 students. The museum’s school programs are distinguished by their small group sizes—an average docent-to-student ratio of 1:6 compared to an average of 1:12 among its peers. Another distinction is the inclusion of a hands-on art activity as part of the visit experience for all students in K through 5. These programs operate at capacity each year.

SFMOMA also offers innovative family-friendly programming for multigenerational audiences, including Family Sundays and customized tours and activities in the Koret Visitor Education Center, and always popular teacher trainings. Total attendance in fiscal year 2012 for School, Youth, Family, and Teacher programming was 55,336.

Digital Interpretive Resources

In 2009, SFMOMA completed an ambitious overhaul of its website, converting www.sfmoma.org into an unparalleled resource for the public to use in exploring modern art. A variety of media—videos, webcasts, podcasts, audio commentaries—offer members of the public a wealth of information about and context around the works in the museum’s collection. Public programs are routinely recorded and converted into content for the website alongside artist interviews and conversations. In the past year, SFMOMA has published video interviews with Richard Misrach, Jim Goldberg and Naoya Hatakeyama — all available on the museum’s website.

SFMOMA has also been on the front lines of innovating multimedia education tools for adults. These include: *Explore Modern Art* (EMA), an online learning resource at the heart of the website; *Making Sense of Modern Art*, an extensive and engaging online guide to works in the museum's permanent collection, a portion of which is also available as a hand-held multimedia tour; and *Voices and Images of California Art*, an interactive program composed of primary source materials related to California artists that won first prize in interactive media from the American Alliance of Museum's MUSE Awards and a Gold Apple Award from the National Educational Media Network.

Research and Publications

Research Facilities

The SFMOMA Research Library was established in 1935 with the aim of advancing scholarship in modern and contemporary art. Its holdings—totaling 80,000 books, more than 2,000 periodicals, and 47,000 artists' files—reflect the collecting, exhibiting, and educational activities of the museum itself, with particular strengths in photography, art, architecture, design, and media arts. Within the Research Library, the Sidney Tillim Collection includes 1,000 volumes focusing on photomechanical reproduction processes from the 1870s to the 1970s. The Research Library also houses the SFMOMA Archives, the repository of the museum's institutional records dating back to its inception, including records from the Office of the Director, photographs documenting select exhibitions and events, and exhibition records. The Research Library is open to researchers by appointment and admission is always free. On average, the Library and Archives together receive a total of approximately 1,000 visits and phone or email inquiries from researchers annually.

In 2010, in collaboration with University of California, Berkeley, SFMOMA completed an oral history project that includes interviews with leading photographers, photography scholars, and the community. These fully transcribed interviews are available online and through the SFMOMA Research Library and the University of California.

In addition, the Photography Collection has a dedicated Study Room, staffed by an Assistant Curator of Photography, where scholars can view works not currently on display in the museum's galleries. Access policies for the Study Room are the same as for the Research Library. In addition to scholarly researchers, the Photography Department currently hosts between 20 and 30 undergraduate and graduate school groups per year, providing in-depth curatorial tours of exhibitions and hands-on print viewings.

Research Activities

As SFMOMA prepares for the public opening of its new, greatly enlarged museum building in early 2016, the Photography Department has embarked on a major research initiative: a full-scale collection review. The curatorial staff will work with other departments to complete this multi-year project, which will correct fundamental cataloguing information and complete the digital imaging (or reimaging when necessary) of the collection. The goal of the project is a quantitative and qualitative analysis of the museum's photography holdings, which will support the development of a strategic plan for collecting to build on current strengths and address lacunae. Research results will also form the basis of an online publishing initiative to make new research about the collection available to the public on the museum's website.

SFMOMA is committed to pushing the boundaries of its field. Research and project-focused initiatives play a central role in its efforts to preserve and present the art of our time. Among recent research projects that SFMOMA has been a part of are: *Story Board*, a digital hub for text and videos, dialogue, and outside links that offer windows into the worlds of SFMOMA artists; *Google Art Project*, an online compilation of high-resolution images and virtual gallery tours from a broad range of art institutions; and *Steve: The Art Museum Tagging Project*, which employs a user-generated taxonomy to describe objects in museum collections, addressing the gap that exists between how art is described in museums and how it is understood by the public.

Graduate Education

Each year since 2007, the Photography Department has hosted a summer research fellow. The William and Elizabeth Patterson Curatorial Research Fellowship in Photography is awarded annually to an advanced graduate student in photographic history who seeks to deepen his or her understanding of a specific area of the museum's collection. Fellows spend ten weeks conducting in-depth research on an area of the collection identified by the department as in particular need of scholarly attention and corresponding to the Fellow's interests and expertise. Areas of research have included Edward Weston, Japanese photography of the 1960s and 70s, and the Sidney Tillim Collection of photographically-illustrated books. Fellows present their findings in a variety of formats ranging from public lectures to online publication.

SFMOMA's Elise S. Haas Conservation Studio has a long history as a post-graduate conservation fellowship venue and has created a highly regarded conservation curriculum focused on caring for contemporary art in the contemporary museum. While the museum places significant value on the knowledge and skills of disciplinary experts, the Fellowship is also designed to initiate collaboration between conservation disciplines, including photography and media arts, works on paper, painting and sculpture. The Fellow undertakes research corresponding to her/his interests and expertise and presents the results in a variety of formats ranging from public lectures to online publication. In 2010, this two-year fellowship received over sixty applications from five continents. SFMOMA has trained more than 25 conservators who now work in institutions and in private practice nationally and internationally.

Publications

SFMOMA has an active publications program, creating scholarly catalogues for most of the major exhibitions that it organizes. Recent publications from the Photography Department include:

- *Garry Winogrand* (2013); co-published with Yale University Press; includes essays by Tod Papageorge, Director of Photography at the Yale University School of Art; Susan Kismaric, Lecturer at Fordham University, Sandra Phillips of SFMOMA, and Jeff Rosenheim, Associate Curator of Photographs at The Metropolitan Museum of Art.
- *Francesca Woodman* (2011); published in association with DAP/Distributed Art Publishers, edited by Corey Keller, SFMOMA Curator of Photography, with essays by Julia Bryan-Wilson, Associate Professor of Art History at the University of California, Berkeley, and Jennifer Blessing, Senior Curator of Photography at the Guggenheim Museum.
- *Exposed: Voyeurism, Surveillance, and the Camera Since 1870* (2010); co-published with Yale University Press and Tate Modern, with essays by Sandra Phillips, SFMOMA Curator of Photography; Simon Baker, Curator of Photography at Tate Modern, London; Philip Brookman, Director of Curatorial Affairs at the Corcoran Gallery of Art, Washington, DC; and Carol Squiers, Curator at the International Center of Photography, New York.
- *Brought to Light: Photography and the Invisible, 1840-1900* (2008); co-published with Yale University Press, edited by SFMOMA Associate Photography Curator Corey Keller, with essays by Tom Gunning, University of Chicago Cinema and Media Studies Professor, and Jennifer Tucker, cultural historian and Associate Professor at Wesleyan University.
- *Shomei Tomatsu: Skin of the Nation* (2004); co-published with Yale University Press, edited by photographer and essayist Leo Rubenfen, with essays by Sandra Phillips of SFMOMA and John W. Dower, Emeritus Professor of History at MIT.

Moreover, the curatorial staff regularly contributes scholarly essays to other institutions' exhibition catalogues and artists' monographs.

Expanding Public and Scholarly Access to the Photography Collection

As part of SFMOMA's museum building expansion, a new **Photography Center** will be created, which will double the amount of space devoted to photography within the museum and create powerful adjacencies that will foster the

study and conservation of the collection. The addition of dedicated special exhibition spaces within the Photography Center will enable much more of the museum's permanent collection to be on view throughout the year and will double the exhibition space currently devoted to photography. The Photography Center, to be located on the third floor of the expanded museum, will total 20,060 square feet, making it the largest space permanently dedicated to the display of photography in the United States.

The Photography Center will include a 4,200-square foot **Study Center** for the hands-on viewing of prints from the collection. The proximity of the Study Center to the photography galleries will greatly improve the experience of both scholars and school groups exploring the permanent collection. One of the two storage vaults created through the proposed project, the 1,890-square foot **Study Center Storage Vault**, will be located in the Study Center and will also facilitate increased access. Also within the Study Center will be a 1,000-square foot viewing area, which will facilitate educators' physical access to the collection and therefore enhance their ability to interpret the collection. The proximity of the two spaces also promises new opportunities for intellectual collaboration.

In addition, the new Photography Center will support an **expanded exhibition schedule**. Currently SFMOMA presents three or four special photography exhibitions each year in addition to three rotations of the permanent collection. With the new Photography Center, the museum will triple the number of works from the permanent collection it displays annually and present four to six special exhibitions in new dedicated galleries. Moreover, the additional square footage for permanent collection exhibitions will allow for greater innovation and flexibility in presenting the history of photography.

CURRENT CONDITIONS AND PRESERVATION CHALLENGES

The proposed storage systems for SFMOMA's photography collection address three present conditions that have been identified as the museum's foremost preservation challenges.

1) The pace of photography collection growth and inadequate storage capacity

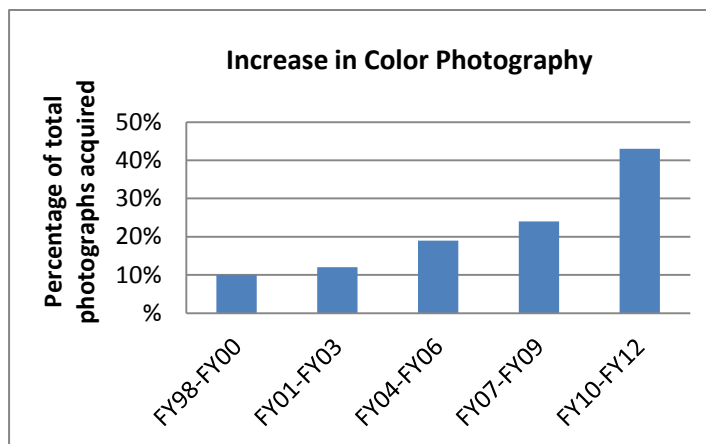
Since moving into its current museum building in the South of Market area of San Francisco in 1995, SFMOMA has experienced tremendous growth in attendance, membership, and support. Due to significant gifts and an ambitious collection development plan, the photography collection has doubled in size in the past 20 years. Currently, SFMOMA is not able to store the entire photography collection at the museum where the photography galleries are located; the photography collection is stored in four different locations within the greater San Francisco Bay Area.

The 16,000 photographs in the SFMOMA collection include the entire range of photographic media—from daguerreotypes, salted paper prints, albumen prints, and autochromes to gelatin silver prints, chromogenic development prints, dye transfer prints and the digital. The museum maintains responsible exhibition practices for photographic materials, resulting in gallery rotations of over 500 photographs each year. This active rotation cycle and the collection's high frequency of use by artists, curators, scholars, and students necessitate collection transit patterns that are both detrimental to the long-term preservation of the collection and energy inefficient for the museum.

2) The needs of color photography and the lack of cold storage

In recent decades, as color film and now digital processes have become the medium of choice for a growing number of artists, the percentage of the color photographs in the SFMOMA collection has grown. Today there are 2,425 color photographs in the collection. Upon close analysis of collection growth the museum is tracking a consistent increase in the number of color photographs acquired each year, as seen in the graph below. Because many of these color photographs are large format (exceeding six feet in height or width) specific types of storage furniture, such as rack storage, are required.

Currently, the museum has no capacity for cold storage, which has been substantiated as the best practice for arresting deterioration of color prints. The museum's commitment to cold storage is framed by definitive research conducted by the Image Permanence Institute (IPI), a department of the College of Imaging Arts and Sciences at the Rochester Institute of Technology. The IPI's research was published in the *Storage Guide for Color Photographic Materials* by James M. Reilly (1998). It demonstrated that color materials can exhibit noticeable fading in as little as 40 years with some materials



beginning to fade in as little as three years. The dye molecules in color photographs are less stable as temperature rises and they begin to undergo rearrangement. Bonds are broken and dyes become colorless. The process is irreversible. If color photographs are to last, cold storage is a necessity. Cold storage with a reasonable relative humidity (such as 50% or below) is the single most effective way to preserve a color photography collection. Prior to undertaking this important research, the IPI was actively involved in the standards creation process through the American National Standards Institute (ANSI) and the International Organization for Standardization (ISO), as well as in defining the testing methods and standardizations for research.

3) The City of San Francisco's Green Building Ordinance and the need to achieve LEED Gold certification

In July 2013, SFMOMA will break ground on the expansion project that will more than double its overall size by constructing an addition that connects to the rear of its existing museum building. The construction project is subject to the City of San Francisco's Green Building Ordinance (San Francisco Building Code 13C), among the most rigorous sustainability requirements in the country, which requires that the new addition achieve a minimum LEED Gold certification and an energy reduction of at least 15% over California's energy code. SFMOMA thus must balance its commitment to preserve works in the collection with the demand to maximize energy efficiency.

Developed by the US Green Building Council in 1998, the LEED (Leadership in Energy and Environmental Design) system comprises a number of ratings for design, construction and operation of high-performance green building. There are four ascending levels of LEED certification: certified, silver, gold and platinum. The San Francisco Green Building Ordinance has required SFMOMA to consider the nature and use of its collections, the building envelope, the museum's environmental climate criteria, the San Francisco Bay Area climate, and energy use to outline a cohesive strategy that balances preservation effectiveness, cost, and environmental impact.

Preventive Conservation Practices and Policies

The museum's 2012-2018 strategic plan supports expanded funding for the collection, including state-of-the-art storage, collection research, conservation, digitization, and publication. To this end, SFMOMA purchased a 75,000 square-foot facility, located in South San Francisco approximately 13 miles from the museum's building, that is presently undergoing a \$4.5M retrofit to become the museum's off-site art storage facility. The museum's first, fully-owned off-site art storage facility will be built according to the same sustainable preservation practices being applied to the expanded museum building, and it will be completed in February 2013. While the proposed Cold Storage Vault and the Study Center Vault for the photography collection will be permanently located in the expanded museum building, the off-site art storage facility will provide an interim home for the photography collection until the museum's building expansion construction is completed, in late 2015.

The SFMOMA Collections Management Policy is reviewed frequently to ensure that it upholds SFMOMA's core values, mission and purpose and the museum's high ethical standards. The policy guides professional museum practice for collections accessions, deaccession, documentation, imaging, conservation, insurance, loans, access, intellectual property, inventory and appraisal.

SFMOMA has a long history of art conservation and preservation, dating back to 1971 when the Conservation Department was established. Curators, librarians, registrars, the installation crew, and collection/image database managers work closely with the department of six full-time conservators in active stewardship of the collection. The Conservation Department ensures the long-term preservation of the collection through treatment, preventive care, research, and facilitation of a robust loans program and a dynamic exhibition schedule. The long-range plan for conservation is updated regularly, and it is represented in the museum's Collections Management Policy.

The museum manages the physical care of its collection in the following ways:

- Maintaining relative humidity and temperature according to best practice when the museum's building was constructed in 1995 (American Society of Heating, Refrigerating, and Air-Conditioning Engineers, ASHRAE Class AA category).
- Maintaining a fire sprinkler assembly utilizing a combination of wet and pre-action systems.
- Maintaining a fully integrated fire alarm and safety system, with at least one smoke detector in every room and a source of emergency power.
- Maintaining an intrusion detection system that works with access and control systems and video to protect the museum 24/7 from unwanted intruders and breaches in the perimeter.
- Maintaining a pest management program that is managed by museum staff and a contracted pest control service.
- Ensuring safe art handling, packing and transit.
- In recent years SFMOMA has updated its policies to obtain TSA certification for loaned artworks.
- Because San Francisco Bay Area is an active earthquake region, collection staff maintains and updates an emergency plan that outlines protocols to assess damage to the collection at the museum and in its satellite storage facilities.

The museum manages the administrative and intellectual control of its collection in the following ways:

- SFMOMA's Collections Division brings five allied departments (Conservation, Registration, Library/Archives, Collections Information and Access, and Collections Research) to manage administrative and intellectual control of the collection.
- Monitoring environmental conditions in galleries and storage using sensors and a central computer.
- Conducting periodic inventories (photography collection inventory to be completed in January 2013).
- Maintaining a collections management database (EmbARK) that is fully integrated into all collection movement and activities.
- Maintaining a digital asset management system (MediaBin) that is equipped as an institutional repository for all still and moving collection images.

HISTORY OF THE PROJECT

In 2009, when SFMOMA announced its intention to expand its museum building, comprehensive planning for the design of the expanded museum and its programs began. Photography collection initiatives called out in the museum's 2012-2018 strategic plan will be realized in the expansion project. The photography galleries will double in size on the museum's 3rd floor. The existing Study Center will be moved from the museum's lower level to a prominent location adjacent to these galleries in order to provide an increased level of education for all ages, including expanded family and K-12 school offerings and a large-scale adult learning program.

The rigorous building standards required by San Francisco's Green Building Ordinance led the curators and collections team at SFMOMA to analyze the nature and use of its collections, the building envelope, the museum's environmental criteria and the local climate as well as energy use and environmental impact. The group identified the need for a cohesive plan that balances preservation effectiveness, cost, and environmental impact. This project for photography collection storage systems is the result of thorough, in-depth planning that has taken place over the last three years.

Almost immediately, it was apparent that contemplating photography cold storage as part of the overall photography storage systems would detract from the energy efficiency mandated by the Green Building Ordinance. This meant that SFMOMA's systems for photography storage, if allowed to include cold storage, had to be viewed within a larger integrated plan for energy efficiency.

SFMOMA contracted Atelier Ten (A10), a leading sustainability consultant, to work with the construction planning team to identify opportunities to improve energy efficiency. In 2010, A10 identified two critical areas of collaborative exploration and study: environmental conditioning guidelines for the museum and LED (light-emitting diodes) lighting options for the galleries, study rooms, and storage vaults.

Considering environmental conditioning guidelines

In 2011 SFMOMA thoroughly reviewed the conservation literature on museum climates (Appendix C for full bibliography). Next, conservation staff conducted a survey of colleagues who had completed museum construction projects within the last five years. Through this survey SFMOMA learned which institutions had engaged in progressive discussions about museum climate and energy consumption. To consider further the environmental guidelines for the museum expansion, SFMOMA consulted the following experts: Nancy Bell, Head of Collections Care, The National Archives, London; Judith Nesbitt, Head of National and International Initiatives, Tate Modern, London; and Pamela Hatchfield, Head of Objects Conservation, Museum of Fine Arts, Boston. The museum hired Taylor Engineering, a firm with a distinguished list of LEED certified projects, as the engineers for the HVAC systems in the building expansion. After careful review of the SFMOMA collection and the local climate of the Bay Area, the collaborative SFMOMA building team (SFMOMA staff, architects, engineers and sustainability consultants) agreed on a recommended environmental guideline for SFMOMA that holds temperature set points consistent throughout the year to $72.5^{\circ}\text{F} \pm 2.5^{\circ}\text{F}$ while allowing for seasonal adjustments in relative humidity (RH) to track according to monthly seasonal changes ($55\% \pm 5\%$ RH in San Francisco's cool summer months and $45\% \pm 5\%$ RH in the mild winter months). For a thorough description of the energy benefits of this mechanical conditioning strategy, see Appendices D and E.

In 2012, SFMOMA engaged in two stages of peer review to assess this recommendation. First the museum hosted a one-day **Sustainability Roundtable** to discuss and critique the proposed environmental guideline. Invited experts who have been engaged in national and international leadership initiatives on the topic of museum environments included: Jerry Podany, Senior Conservator, J. Paul Getty Museum; Matthew Siegal, Chair of Conservation and Collections Management, Museum of Fine Arts, Boston; and Dr. Greg Smith, Senior Conservation Scientist, Indianapolis Museum of Art. SFMOMA Deputy Head of Conservation Michelle Barger then brought the proposed guideline for review by colleagues at the *Climate Control Standards: Fact or Fallacy* roundtable at the 2012 American Institute for Conservation annual meeting. The group voted to use ASHRAE Class A category as the basis of a new guideline for museum climate, which is scheduled to go before the membership for approval at the end of 2012. The SFMOMA guideline sits within these parameters and was referenced in the discussion as an example of an acceptable solution within the Class A category. When the SFMOMA guideline is operational, the museum will track energy consumption and develop methods of monitoring the condition of artworks as the basis for substantive contributions to the museum field.

Gallery mock-up to explore solid state lighting

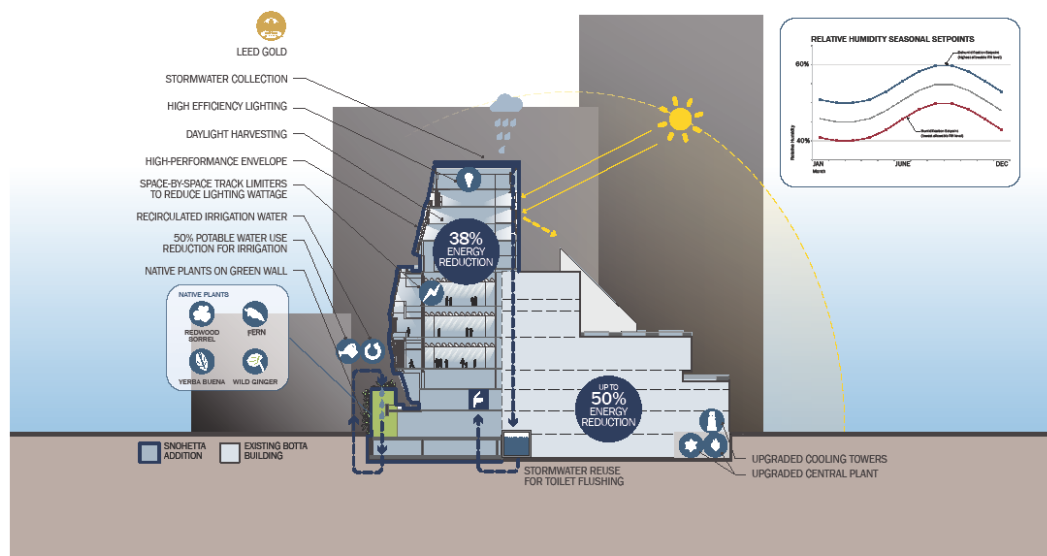
LED (light-emitting diodes) lighting has long been a promising alternative to the incandescent, fluorescent, and cold cathode sources the museum uses now. For many years, LED sources have been installed as tests in the museum's current galleries. In 2011 SFMOMA conducted a thorough review of the conservation literature on museum lighting (Appendix C) and began speaking with museums that had undertaken this conversion. ARUP, a world-renowned firm distinguished for their work in green building, joined the expansion team as lighting consultants.

For the relatively mild climate of the San Francisco Bay Area the greatest energy savings potential is in the selection of lighting. To realize this potential, which is contingent on many associated factors such as ceiling configuration, ambient light setting, dimming control, track infrastructure and use of daylight, SFMOMA worked with Snøhetta, the expansion building architects, and ARUP to construct a complete gallery mock-up, including floors, walls, ceiling details and the short-listed LED lighting options under consideration. From February 2013 to May 2013, select works from the SFMOMA collection will be installed within this **Mock Gallery** for viewing to build broad interdepartmental consensus around the LED lighting option that provides the optimal balance between aesthetic qualities of viewing, long-term preservation of artworks, and overall energy efficient design.

In August 2012, Atelier Ten submitted an update to SFMOMA and reported that SFMOMA is on a path to exceed LEED Gold requirements while incorporating photography storage systems that include a cold vault for color photography (Appendix F, *Environmental Design – 100% Design Development Summary*). The proposed Cold Storage Vault has been captured in the whole building energy model as a refrigeration load, and is included in the overall strategy to achieve LEED Gold certification and 15% energy reduction. The design team is moving through construction documentation, and the energy model will be updated again in Spring 2013 based on further detailed specification information, with the intention to capture even finer grade energy efficiency than is being achieved now. In addition to the anticipated energy savings from the revised environmental conditions and LED lighting, this LEED certification is accomplished by critical upgrades to the cooling towers and central plant of the existing museum building. The Snøhetta-designed expansion of the museum's building will employ a number of additional innovative strategies such as daylight harvesting, a high-performance envelope, storm water harvesting, and native plants on a green wall that will be irrigated using recirculated water.

Sustainable Design Strategies

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METHODS AND STANDARDS

This specific plan for state-of-the-art storage of the museum's photography collection—purchase and installation of storage furniture in a Cold Storage Vault and a Study Center Storage Vault—is characterized by the same principles that guide SFMOMA's approach to storing its entire collection:

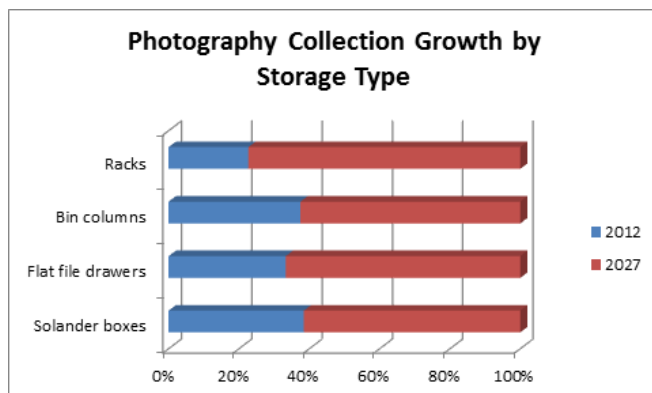
- an informed knowledge of material science in the preservation of collections;
- a dedication to making the collection "...a vital and meaningful part of public life" and a plan for its controlled but generous access and use; and
- a commitment to first-rate collection care and energy efficiency that is suited to SFMOMA.

Having achieved LEED Gold certification for the museum building expansion using sustainable preservation methods, professional standards and research discussed already, SFMOMA extended and applied these practices to inform every aspect of design for the two proposed photography storage vaults: mapping efficient floor plans; selecting art storage furniture; setting temperature and RH set points for cold storage; establishing agreed-upon cold storage access protocols; and rehousing the collection.

The first step was to determine the size and location of the new photography storage vaults. SFMOMA studied photography collection growth in four discrete size categories in order to project growth of the photography collection as a whole over the next 15 years, from 2012 through 2027, as directed by its Board of Trustees.

Further analysis allowed the museum to identify specific projections for growth of the collection of color photography that will need to be stored in cold storage as recommended by IPI research (chromogenic prints, dye destruction prints, dye diffusion prints, dye transfer prints, diazotype, carbro prints, color slide works of art and digital prints such as inkjet). These calculations formed the basis for the 15-year growth projections that guided vault design. Locating one vault, the Study Center Storage Vault, directly adjacent to the photography galleries and the Study Center will make the collection immediately available to artists, scholars and classes in ways that

are consistent with the ambitions detailed in the 2012-2018 strategic plan. The Cold Storage Vault will be located on the museum's lower level, where proximity to the building slab and exterior wall will provide insulation that reduces energy consumption. To ensure that 15 years of room for growth in the Cold Storage Vault does not go unused, plastic objects identified in a recent IMLS conservation survey of the museum's architecture and design collection will be stored in this reduced temperature vault until photography needs the space. At that time, SFMOMA will address the need for cold storage of objects from the architecture and design collection at its off-site art storage facility.



SFMOMA worked with Samuel Anderson Architects (SAA) on the design of the Study Center Storage Vault and the Cold Storage Vault to ensure the most efficient use of the designated footprints. SAA has worked on projects that include similar sustainable vault designs for the Allen Memorial Art Museum at Oberlin College and The Agnes Mongen Center at the Harvard University Art Museums. Compact storage, flat files, bins, rack storage, and tables are required for safe and efficient storage of the photography collection; detailed architectural plans, elevations and specifications have been included as Appendix G. With these drawings in hand, SFMOMA developed a short-list of art storage vendors based on three important criteria: 1) the capacity for dense packing to make the most of available cubic feet of space; 2) whether the art storage furniture could be installed without piercing the cold storage envelope in order to maximize energy efficiency within the Cold Storage Vault; and 3) how the vendor's fabrication methods aligned with the sustainable preservation goals of the project.

San Francisco Museum of Modern Art
Furnishing Sustainable Photography Storage

SFMOMA's short-list of vendors for art storage furniture included Spacesaver, (b) (4), and (b) (4). SFMOMA narrowed the choice to two vendors, (b) (4) and Spacesaver, because these companies supply all of the different storage furniture types required. Spacesaver was determined to be the best fit for this project. Spacesaver's very thorough bid reflected the attentiveness and care they dedicated to the entire planning process (Appendices H and I). They were able to meet the high-density storage demands required. Spacesaver's local representative has been and will continue to be readily available throughout the planning and construction process. They have an impressive list of satisfied local clients, including the Asian Art Museum, San Francisco and the California Academy of Sciences, San Francisco. A letter of support from Susan Steckline, Head of Registration at the Asian Art Museum is enclosed as Appendix J. The company is ISO 9001 certified, and they are committed to environmental sustainability, having implemented measures such as use of recycled water, solvent-free powder-coat painting, lean manufacturing, steel and aluminum recycling, and brownout participation to minimize the ecological impact of manufacturing processes. All of Spacesaver's products are made in the United States. With Samuel Anderson's design and Spacesaver's storage furniture, it is possible to accomplish the following sustainable preservation goals:

- consolidate storage for the entire photography collection within the museum's building expansion (including cold storage for color photography)
- anticipate 15 years of collection growth
- only increase the total square footage of vault storage from 2,500 square feet (in the existing Study Center) to 4,210 square feet (in the proposed Study Center Storage Vault and the Cold Storage Vault)
- mat 10% of the photography collection, as described below
- exceed LEED Gold certification for the museum expansion

SFMOMA worked with Taylor Engineering to develop the temperature and RH set points for the Cold Storage Vault, taking into account three factors to balance optimal collection preservation and use with optimal energy consumption (Appendix K). These factors are: the substantial published research already cited on aging of photographic materials; the practical experiences of institutions already operating cold storage vaults; and SFMOMA's programmatic use of the photography collection. A three-zone system, as outlined below, best preserves the photographs in the collection while providing the ready access artists, curators, scholars, and students rely on. While the preservation benefits of an even colder vault cannot be denied, for a collection in such high use as SFMOMA's the colder vault is not a cost- or energy- efficient solution.

Zone 1:	Cold storage	40°F ±4°F and 40%RH ±5%
Zone 2:	Cool storage	55°F ±4°F and 45%RH ±5%
Zone 3:	Museum climate	72.5°F ± 2.5°F (55% ± 5% RH summer and 45%± 5% RH winter)

Human processes for accessing the collection have been designed to keep energy draw to a minimum. To accomplish this, SFMOMA staff has developed a plan for the Cold Storage Vault whereby the vault will be accessed only three days per week. In order to keep door openings to a minimum, requests for access will be centralized through the Registration Department, with access coordinated by this same department. This plan will minimize fluctuations in temperature and will therefore extend the usable life of the photography collection while also limiting unnecessary energy draw (Appendix L).

Currently, more than 90% of the photography collection is housed in enclosures, such as all-rag, pH-neutral mats that are stored in solander boxes, flat files, or frames. During the museum's building expansion construction period, SFMOMA will mat and properly house the remaining 10%. The fully inventoried collection will be transported from the museum to the new off-site art storage facility in air-ride, climate-controlled vehicles starting in Spring 2013. During

San Francisco Museum of Modern Art
Furnishing Sustainable Photography Storage

the museum construction period, interim offices for the project conservator, registrar, art handler, and framer will be located at the off-site facility where this rehousing project will be conducted.

Finally, SFMOMA's sustainable preservation strategies include the re-location of all existing art storage furniture in the current museum building to the off-site art storage facility for sustainable re-use. Prior to actually transporting the photography collection to the off-site art storage facility for the period of museum construction, the photographs will be stored in vacant museum galleries for three weeks while the existing compact storage units and racks are de-installed and reinstalled in the off-site art storage facility. When the photographs arrive at the off-site art storage facility, they will be placed literally on the exact same shelves on which they were stored in the museum. When the photographs ultimately return to the museum in 2015, these storage systems will be used for small objects and paintings.

WORK PLAN

Furnishing Sustainable Photography Storage	Planning period												
						Year 1					Year 2		
						10/13	1/14	4/14	7/14	10/14	1/15	4/15	7/15
General energy compliance													
SF Green Building Ordinance													
develop & refine SFMOMA LEED Gold compliant strategy													
Environmental conditioning criteria													
SFMOMA Sustainability Roundtable													
2012 AIC Climate Control Standards: Fact or Fallacy													
Solid state lighting review and selection													
create mock-ups for lighting options													
select LED lights for galleries, study center & vaults													
Collection move to off-site facility													
Design, install and assess storage vaults													
design furniture layout													
order furniture - fabrication and delivery													
install furniture - 2 phase process (rails + furniture)													
assess vault furniture & systems													
Collection rehousing and move back to the museum													
Results and dissemination													
2013 AIC Annual Meeting Collaborating in Design panel													
2013 Greenbuilt Meeting													
2014 AIC Photographic Materials Specialty Group													
2015 AAM Annual Meeting													

The proposed project period spans two years, from October 2013 to October 2015. Art storage furniture will be ordered in November 2013 by the Expansion Coordinator, Sam Fox, and it will take 6 to 9 months for fabrication and delivery. Spacesaver will begin a phased installation process in July 2014 that will continue for one year following the larger building construction timeline. The final installation will be assessed in June 2015.

Rehousing 10% of the SFMOMA photography collection will begin in October 2013 at the off-site art storage facility. From October 2013 through September 2014 Photography Conservator, Theresa Andrews, will examine the

San Francisco Museum of Modern Art
Furnishing Sustainable Photography Storage

photographs and undertake necessary conservation treatment. From October 2014 through March 2015 Senior Preparator, Greg Wilson, will secure photographs into all-rag, pH-neutral mats and frame works that will be stored in frames. Linda Leckart, Assistant Registrar, and Doug Kerr, Senior Preparator, will oversee art movement and location tracking. In April 2015 the entire photography collection will be packed for return to the museum, and these transits will begin in July 2015 under the supervision of Tina Garfinkel, Head Registrar, and Layna White, Head of Collections Information and Access. Works will be installed directly into the Study Center Storage Vault and the Cold Storage Vault on a phased schedule from July through September 2015.

The project's dissemination plan includes professional outreach at four different professional meetings over the course of the two-year grant period: 1) 2013 AIC General Session, Indianapolis, (already scheduled); 2) 2013 Greenbuild Conference, Philadelphia (proposed); 3) 2014 AIC Photography Materials Specialty Group (PMG), San Francisco; and 4) 2015 American Alliance of Museums Annual Meeting.

PROJECT TEAM

SFMOMA Staff

Jill Sterrett, Director of Collections and Conservation, will act as Project Director. Ms. Sterrett has been with SFMOMA since 1990. She holds an MA in Art Conservation from the Cooperstown Graduate Program and a BA in Art History and BS in Chemistry from Denison University. She will work closely with an interdepartmental leadership team including **Corey Keller**, Curator of Photography; **Sam Fox**, SFMOMA Expansion Coordinator; and **John Brennan**, Director of Facilities. Ms. Keller holds an MA in Art History from Stanford University and is a doctoral candidate there as well; she holds a BA in American Studies from Yale University. Mr. Fox joined the museum in 2011 and has a BA in Architecture from University of Southern California and an MA in Art Business from the Sotheby's Institute of Art. Mr. Brennan joined SFMOMA in 2000 and has a BA in Biology from the University of California, Berkeley.

An interdisciplinary team including **Tina Garfinkel**, Head Registrar, **Linda Leckart**, Assistant Collection Registrar, **Theresa Andrews**, Conservator of Photographs, **Doug Kerr** and **Greg Wilson**, Senior Museum Preparators (art handling and framing), and **Layna White**, Head of Collections Information and Access will ensure that all aspects of photography collection packing, transit, conservation treatment, rematting/rehousing, and location tracking are managed throughout the project. Ms. Garfinkel has been with SFMOMA since 1984 and has a BA in Art History from University of California, Berkeley. Ms. Leckart joined the museum in 2005 and has a BA in Anthropology from University of California, Los Angeles and an MA in Museum Studies from SF State University. Ms. Andrews has been the Photography Conservator at SFMOMA since 1998 and she has a BA in Art History from San Diego State University and MA in Art Conservation from the State University College at Buffalo. Mr. Kerr has a BFA from University of Texas. Mr. Wilson studied art at the Kansas City Art Institute and the San Francisco Art Institute. Ms. White has a BA in Art History from California State University at Long Beach and an MLS from the University of California, Los Angeles.

Spacesaver will provide the art storage furniture for the two photography vaults and take responsibility for all aspects of furniture design, fabrication, shipping, installation, and assessment. **John Brennan** and **Tina Garfinkel** will oversee the assessment of the finished installation.

Jill Sterrett and **Michelle Barger** will implement the plan for interdisciplinary dissemination of the museum's project. Ms. Barger has been the museum's Conservator of Objects since 1998 and the Deputy Head of Conservation since 2007. She holds and MS in Art Conservation from the University of Delaware and a BA in Art History from the University of North Carolina, Chapel Hill. Résumés for the project team are enclosed as Appendix M.

Outside Consultants

Samuel Anderson Architects (SAA) has earned a distinguished reputation in the museum and conservation community, having completed a number of gallery and art storage projects at museums such as The Abby Aldrich

Rockefeller Folk Art Museum, the Allen Memorial Art Museum at Oberlin College, and The Agnes Mongen Center at the Harvard University Art Museums. They are committed to achieving creative and responsible solutions for each client, and they specialize in sustainable design. SAA is a member of the US Green Building Council.

ARUP is a global firm of designers, engineers and technical consultants that has put sustainability at the heart of their work. Within the arts and culture arena, their approach to lighting has won acclaim at the New Acropolis Museum, Athens and the Modern Wing at the Art Institute of Chicago. Their work in San Francisco at the California Academy of Sciences secured ARUP's reputation in the area of green building design.

Sustainability consultant **Atelier Ten** has won multiple awards for its work, including Building Services Consultancy of the Year Awards from the CIBSE (Chartered Institution of Building Services Engineers) and the Sustainable Consultancy of the Year Award from the UK Green Building Council. The firm's director, Nico Kienzl, was recently named LEED Fellow of 2012, one of only 43 building professionals worldwide to be so honored. Among Atelier Ten's past clients are the Grand Rapids Art Museum; Museum of the Moving Image, New York; the Holburne Museum, Bath; and the Canadian Pavilion at the Venice Biennale, among others.

Spacesaver has recognized space, energy conservation and productivity as three storage priorities in industry and has provided over 250,000 successful storage installations since 1972. The company's distinguished list of museum clients includes: the Asian Art Museum, San Francisco; the Peabody Essex Museum, Massachusetts; the Milwaukee Art Museum; and the California Academy of Sciences, San Francisco. Spacesaver will provide the art storage furniture for the two photography vaults and take responsibility for all aspects of furniture design, fabrication, shipping, installation and assessment.

Project engineering firm **Taylor Engineering** specializes in mechanical systems design and construction, energy conservation, indoor air quality, controls, and system commissioning. The LEED projects in its portfolio include the Capitol Area East End, Sacramento; Gap Embarcadero, San Francisco; Vista College, Berkeley, CA; and others.

PROJECT RESULTS AND DISSEMINATION

The proposed project is an essential component of the larger initiative to reassemble the entire photography collection, currently dispersed in four locations, in the SFMOMA building. Access to the collection for scholars and the general public will be greatly expanded through the project. The implementation of storage systems for SFMOMA's photography collection is a sustainable preservation measure with the following outcomes: consolidation of storage for the entire photography collection within the museum's building expansion (including cold storage for color photography); anticipation of 15 years of collection growth; only increasing the total square footage of vault storage from 2,500 square feet (in the existing Study Center) to 4,210 square feet (in the proposed Study Storage Vault and the Cold Storage Vault); matting 10% of the photography collection not currently housed in enclosures; exceeding LEED Gold certification for the museum expansion.

Dissemination of Lessons Learned

The processes of sustainable design and preservation described in this proposal have already sparked interest to the field of conservation. The General Session Planning Committee of AIC has invited members of the SFMOMA project team to participate in the AIC General Session in Indianapolis in May 2013. The panel entitled *Collaborating in Design: Expanding the San Francisco Museum of Modern Art* will bring Craig Dykers, Principal Architect, Snøhetta; Samuel Anderson, Samuel Anderson Architects; Ruth Berson, SFMOMA Deputy Director of Curatorial Affairs; and Jill Sterrett to present and discuss the project with conservators.

The museum's plan is to extend this dialogue to include the diverse and complementary expertise represented on the project team in a line-up of speaking opportunities that will allow the team to assess and reflect on the lessons learned from this project. Atelier Ten has invited SFMOMA to collaborate in presenting the project at the Greenbuild Conference in Philadelphia, November 2013, a conference that attracts professionals from all aspects of the building

San Francisco Museum of Modern Art
Furnishing Sustainable Photography Storage

industry including architects, engineers, facility managers, students, and product manufacturers to share ideas and promote greener building. SFMOMA will offer a more focused project presentation to the Photographic Materials Specialty Group (PMG) at the 2014 Annual Meeting held in San Francisco, and this paper will appear in *Topics in Photograph Preservation*, a biannual publication of the conference proceedings. The final presentation is proposed for a broad museum audience at the 2015 Annual Meeting of the American Alliance of Museums (AAM). After the expanded museum opens to the public in 2016, SFMOMA plans to evaluate and disseminate information about the effectiveness of the building and storage systems for the photography collection through formal evaluation of the operational cost savings and through monitoring of the preservation of the collection to ensure its continuing access for humanities programming.