



**CITY OF BIRMINGHAM
MUSEUM BOARD AGENDA
556 W MAPLE
Thursday, June 6, 2024
5:00 PM**

Mission Statement: *The Birmingham Museum will explore meaningful connections with our past, in order to enrich our community and enhance its character and sustainability. Our mission is to promote understanding of Birmingham's historical and cultural legacy through preservation and interpretation of its ongoing story.*

1. Call to Order

2. Roll Call

3. Approval of the Minutes

Minutes of May 2, 2024

4. New Business

- A. Strategic Plan: Research
 - Review process
 - Board member summaries of materials (for July 11 meeting)
 - August 1 meeting

5. Communication and Reports

- A. Director Report
- B. Member comments
- C. Public comments

6. Next Meeting: July 11, 2024

7. Adjournment

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**CITY OF BIRMINGHAM
MUSEUM BOARD MEETING
556 W. Maple
Thursday, May 2 2024
5:00 PM**

Members Present: Kristy Barrett (Alternate), Alexandra Harris, Judith Keefer, Marty Logue
Members Absent: Bev Erickson, Pat Hughes, Jay Shell
Administration: Museum Director Leslie Pielack
Guests: Brian Devlin, Nagy Devlin Land Design

The meeting was called to order at 5:00 PM by Chairperson Logue.

**Approval of the Minutes
Minutes of April 4, 2024**

MOTION: by Keefer, seconded by Barrett:

To approve the minutes of April 4, 2024.

VOTE: Yeas, 4
Nays, 0

Unfinished Business

Historic Landscape Architect Brian Devlin returned to finalize plans with the Museum Board. He provided a color perspective sketch showing the design from the northeast looking southwest, which included the appearance of the mature plantings he is proposing and the viewing platform and boardwalk.

The Museum Board appreciated the color sketch and asked some clarifying questions about the trees and plantings; placing two elm trees along Willits is not prohibited by the City. Also discussed was the visual suggestion of the former N/S wall across the pond with a partial retaining wall (which is functional) into the pond at the platform, and whether any further indication of the former wall is needed. Overall, the board consensus was very positive about the final design and appearance.

Mr. Devlin presented the inverted U bike rack used by the Parks Department for the bike rack area, and the board agreed with that option. Mr. Devlin indicated that a meeting is needed with AEW (engineers) to verify the water levels noted in the engineering plan and to identify options for installing the raised viewing platform and addressing the groundwater seeps. An EGIL permit is also going to be needed. Museum Director Pielack will follow up to schedule the meeting and with the City's Engineering Department to find out how to proceed with the permitting. Director Pielack reiterated the importance of breaking the project into discrete phases in order to plan for adequate funding. Federal funds have been approved for the ADA components of the project, and the City is planning funds in this year's recommended budget (not yet approved by the City Commission) to

be available to implement the next viable phase in the overall plan. (Park bond funds are not available for this project.)

MOTION: by Logue, seconded by Keefer:

To approve the phased landscape design for the John West Hunter Park as presented by Nagy Devlin Land Design, and to proceed with its phased implementation.

VOTE: Yeas, 4
Nays, 0

Communication and Reports

Museum Director Pielack highlighted portions of the Director's Report, and mentioned two displays in the new transportation exhibit that will be jointly designed with two area historical societies; the Rochester Hills Museum (The DUR light rail display) and the Southfield Historical Society (Harry Brooks and early aviation/the Ford Flivver).

Member Comments

Ms. Keefer acknowledged Museum Director Pielack's admission to the American Association for State and Local History's History Learning Institute in June, and thanked her for her hard work on behalf of the museum.

Public Comments

None.

The next Regular Meeting is scheduled for Thursday, June 6, 2024, at 5:00 PM.

Ms. Logue adjourned the meeting at 6:36 PM.

Proposed Strategic Plan Revision Process, 2024/2025 for 2025-2028

July 2024-September 2025

I. Review and Assess Museum's Status, Role, and Goals

Months 1 to 3: Background and Orientation for Museum Board Members

1. Review information on current and future trends in the museum field
 - a. National trends and reports; American Alliance of Museums, American Association for State and Local History
 - b. Leslie's input from History Leadership Institute
2. Develop 2 or 3 general directions for next ten years derived from national trends

Months 4 and 5: Assess status of Birmingham Museum in context

1. Review and discuss mission and vision as well as ordinance definitions
2. Review Birmingham Museum's accomplishments, past ten years (since 2013)
 - a. Objectives met
 - b. Objectives revised
 - c. Objectives unmet but still applicable
 - d. Objectives abandoned
3. Review possible new objectives
4. Establish current and future audiences
5. Identify Birmingham Museum current strengths and needs in light of vision, mission, and ten year goals
6. Identify opportunities, partners, and capacity-building possibilities, and challenges

Months 6 to 9: Develop assessment tool/s and process for community input

1. Identify most important areas of feedback
2. Identify audience segments and means to engage with each segment
3. Develop process and tools for seeking input

II. Analyze and Develop Plan

Months 10-12: Community Feedback and Analysis

1. Gather and analyze data
2. Review ways/methods of incorporating data into a ten-year plan for the museum

Months 13-15: Develop plan and present to City Commission

1. Draft document; review; finalize
2. Send Museum Board approved plan to City Commission

DATE: June 4, 2024
TO: Museum Board
FROM: Leslie Pielack, Museum Director
SUBJECT: Director Report

Museum Board Opening—An article in the June 1 Around Town featured a brief article on the opening on the Museum Board and that the board will be undertaking the strategic planning process over the next year.

School Tours—477 students and 182 adults visited the schoolhouse this year. Among them were Mayor Pro Tem Katie Schafer, who reported on the experience at a recent commission hearing and how enjoyable it was to tour the museum and library area walking with the children on the city's sidewalks.

Special Tours in June—Some of the special group tours the museum will be providing in June include:

- A tour of about 15 people from the Fred Hart Williams Genealogical Society of Detroit, who will be visiting (including Joy Young) to see our diversity exhibit and learn what we have been doing regarding Underground Railroad research and other Black history matters
- A tour of approximately 20 students and faculty from the U of M who are being hosted by the Planning Department on a sustainability tour of Birmingham. At the museum, the group will hear from Donna, Justin, and Caitlin about the intersection of sustainability, history, and transportation in the physical growth and shape of the town
- A 20-person tour for an architectural history group from Troy Historic Village who are interested in learning about the architecture and historic features of the Allen and Hunter Houses

3-D Printing in Transportation Exhibit—Museum staff is working with the Baldwin Public Library's Idealab to create 3-D models of a 1910 DUR trolley car that was used in Birmingham on the line that ran from Detroit to Rochester. Our exhibit will be jointly curated with the Rochester Hills Museum and the 3-D model will be created from their large-scale model of the same car. Staff is also working with the Southfield Historical Society to create a special display of Henry Ford's 'Flivver' aircraft flown by Birmingham/Southfield early aviator Harry Brooks. The SFH is loaning us a vintage 2' scale model from their collection, as well as other artifacts relating to Brooks. We will share digital content from items in our collection with them as well, and we will get smaller 3-D models of the Flivver for both museums that can be handled by the public.

Hunter House Interpretive Items—Donna Casaceli is creating a new display for the Hunter House that will include historic textiles, fabrics, and tools used during the pioneer period for creating and repairing clothing. This includes wool that she personally sheared, cleaned/boiled, combed, spun, and wrapped; early sewing needles, thread spools, and other items to display handwork used from about 1800-1860. She will also include items that demonstrate local plant-based dyes used by pioneers and additional information about the native plants right on our site that were used to create the various colors. Staff are planning to create a video of Donna introducing and explaining the items and how they were used for our YouTube channel.

"What Were They Thinking" Videos Returning This Fall—Staff is ready to reboot the popular and seriously fun videos featuring historic menus of strange-sounding foods and dishes that would be sampled on camera. More to come!

2024 POTENTIAL COLLABORATIVE PRESERVATION PROJECTS-City and Allied Organizations

	Museum	Friends of the Museum	Parks	Baldwin Library	Bham Shopg Dist	Greenwood Cem (Clerk's)	Planning / Hist Dist Comm	Planning/ Hist Dist Study Comm	Bham Public Schools
Historic building plaque development	X							X	
Heritage home certificate/plaque program-update/expand	X							X	
Promotion of new properties for historic designation	X							X	
Audit/update records-designated historical buildings	X							X	
Raise awareness of Birmingham historical assets-press/articles/promotion, etc.	X				X			X	
Historic walking tours-update/expand	X				X			X	
Develop local/Bham historic tourism materials	X		X		X			X	
Historic headstone inventory and condition assessment/repairs						X		X	
Update Greenwood biographical info and online access/ FindAGrave	X	X				X		X	
Preserve/improve Allen/Hunter Houses	X	X					X		
Bham preservation project Certified Local Gov (SHPO) grants	X						X		
Preserve/improve Museum site and trails for enhanced public access/explore grants	X	X	X						
Integrated/continuity of park signage/wayfinding	X		X						
Park/site interpretive materials	X		X						
Enhance/expand adult and child history-related enrichment programs	X	X		X					X

Strategic Planning Readings Attached

The following items are important to keep on hand during the entire strategic planning process. Please keep them in a quick reference location electronically, or bring print versions with you to Museum Board meetings.

1. Museum Ethics and Standards
2. Code of Ethics for Museums
3. Building a More Human-Centered Future (4 pp)
4. Museums and Society (20 pp)
5. Trends Watch, 2022 (58 pp)
6. Trends Watch, 2024 (87 pp)

There will be additional assigned readings as we move along, but these are important foundational readings that will be part of our ongoing discussions.

Thank you!



Code of Ethics for Museums

Adopted 1991, amended 2000.

Please note that the Code of Ethics for Museums references the American Association of Museums (AAM), now called the American Alliance of Museums.

Ethical codes evolve in response to changing conditions, values and ideas. A professional code of ethics must, therefore, be periodically updated. It must also rest upon widely shared values. Although the operating environment of museums grows more complex each year, the root value for museums, the tie that connects all of us together despite our diversity, is the commitment to serving people, both present and future generations. This value guided the creation of and remains the most fundamental principle in the following Code of Ethics for Museums.

Code of Ethics for Museums

Museums make their unique contribution to the public by collecting, preserving and interpreting the things of this world. Historically, they have owned and used natural objects, living and nonliving, and all manner of human artifacts to advance knowledge and nourish the human spirit. Today, the range of their special interests reflects the scope of human vision. Their missions include collecting and preserving, as well as exhibiting and educating with materials not only owned but also borrowed and fabricated for these ends. Their numbers include both governmental and private museums of anthropology, art history and natural history, aquariums, arboreta, art centers, botanical gardens, children's museums, historic sites, nature centers, planetariums, science and technology centers, and zoos. The museum universe in the United States includes both collecting and non-collecting institutions. Although diverse in their missions, they have in common their nonprofit form of organization and a commitment of service to the public. Their collections and/or the objects they borrow or fabricate are the basis for research, exhibits, and programs that invite public participation.

Taken as a whole, museum collections and exhibition materials represent the world's natural and cultural common wealth. As stewards of that wealth, museums are compelled to advance an understanding of all natural forms and of the human experience. It is incumbent on museums to be resources for humankind and in all their activities to foster an informed appreciation of the rich and diverse world we have inherited. It is also incumbent upon them to preserve that inheritance for posterity.

Museums in the United States are grounded in the tradition of public service. They are organized as public trusts, holding their collections and information as a benefit for those they were established to serve. Members of their governing authority, employees and volunteers are committed to the interests of these beneficiaries. The law provides the basic framework for museum operations. As nonprofit institutions, museums comply with applicable local, state, and federal laws and international conventions, as well as with the specific legal standards governing trust responsibilities. This Code of Ethics for Museums takes that compliance as given. But legal standards are a minimum. Museums and those responsible for them must do more than avoid legal liability, they must take affirmative steps to maintain their integrity so as to warrant public confidence. They must act not only legally but also ethically. This Code of Ethics for Museums, therefore, outlines ethical standards that frequently exceed legal minimums.

Loyalty to the mission of the museum and to the public it serves is the essence of museum

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Membership is the foundation for excellence and unites the field.

Professional Resources

Reference guides, articles and tools to help you and your museum succeed.

work, whether volunteer or paid. Where conflicts of interest arise—actual, potential or perceived—the duty of loyalty must never be compromised. No individual may use his or her position in a museum for personal gain or to benefit another at the expense of the museum, its mission, its reputation and the society it serves.

For museums, public service is paramount. To affirm that ethic and to elaborate its application to their governance, collections and programs, the American Association of Museums promulgates this Code of Ethics for Museums. In subscribing to this code, museums assume responsibility for the actions of members of their governing authority, employees and volunteers in the performance of museum-related duties. Museums, thereby, affirm their chartered purpose, ensure the prudent application of their resources, enhance their effectiveness and maintain public confidence. This collective endeavor strengthens museum work and the contributions of museums to society—present and future.

Governance

Museum governance in its various forms is a public trust responsible for the institution's service to society. The governing authority protects and enhances the museum's collections and programs and its physical, human and financial resources. It ensures that all these resources support the museum's mission, respond to the pluralism of society and respect the diversity of the natural and cultural common wealth.

Thus, the governing authority ensures that:

- all those who work for or on behalf of a museum understand and support its mission and public trust responsibilities
- its members understand and fulfill their trusteeship and act corporately, not as individuals
- the museum's collections and programs and its physical, human and financial resources are protected, maintained and developed in support of the museum's mission
- it is responsive to and represents the interests of society
- it maintains the relationship with staff in which shared roles are recognized and separate responsibilities respected
- working relationships among trustees, employees and volunteers are based on equity and mutual respect
- professional standards and practices inform and guide museum operations
- policies are articulated and prudent oversight is practiced
- governance promotes the public good rather than individual financial gain.

Collections

The distinctive character of museum ethics derives from the ownership, care and use of objects, specimens, and living collections representing the world's natural and cultural common wealth. This stewardship of collections entails the highest public trust and carries with it the presumption of rightful ownership, permanence, care, documentation, accessibility and responsible disposal.

Thus, the museum ensures that:

- collections in its custody support its mission and public trust responsibilities
- collections in its custody are lawfully held, protected, secure, unencumbered, cared for and preserved
- collections in its custody are accounted for and documented
- access to the collections and related information is permitted and regulated
- acquisition, disposal, and loan activities are conducted in a manner that respects the protection and preservation of natural and cultural resources and discourages illicit trade in such materials
- acquisition, disposal, and loan activities conform to its mission and public trust responsibilities
- disposal of collections through sale, trade or research activities is solely for the advancement of the museum's mission. Proceeds from the sale of nonliving collections are to be used consistent with the established standards of the museum's discipline, but in no event shall they be used for anything other than acquisition or

direct care of collections.

- the unique and special nature of human remains and funerary and sacred objects is recognized as the basis of all decisions concerning such collections
- collections-related activities promote the public good rather than individual financial gain
- competing claims of ownership that may be asserted in connection with objects in its custody should be handled openly, seriously, responsively and with respect for the dignity of all parties involved.

Programs

Museums serve society by advancing an understanding and appreciation of the natural and cultural common wealth through exhibitions, research, scholarship, publications and educational activities. These programs further the museum's mission and are responsive to the concerns, interests and needs of society.

Thus, the museum ensures that:

- programs support its mission and public trust responsibilities
- programs are founded on scholarship and marked by intellectual integrity
- programs are accessible and encourage participation of the widest possible audience consistent with its mission and resources
- programs respect pluralistic values, traditions and concerns
- revenue-producing activities and activities that involve relationships with external entities are compatible with the museum's mission and support its public trust responsibilities
- programs promote the public good rather than individual financial gain.

Promulgation

This Code of Ethics for Museums was adopted by the Board of Directors of the American Association of Museums on November 12, 1993. The AAM Board of Directors recommends that each nonprofit museum member of the American Association of Museums adopt and promulgate its separate code of ethics, applying the Code of Ethics for Museums to its own institutional setting.

A Committee on Ethics, nominated by the president of the AAM and confirmed by the Board of Directors, will be charged with two responsibilities:

- establishing programs of information, education and assistance to guide museums in developing their own codes of ethics
- reviewing the Code of Ethics for Museums and periodically recommending refinements and revisions to the Board of Directors.

Afterword

Each nonprofit museum member of the American Association of Museums should subscribe to the AAM Code of Ethics for Museums. Subsequently, these museums should set about framing their own institutional codes of ethics, which should be in conformance with the AAM code and should expand on it through the elaboration of specific practices. This recommendation is made to these member institutions in the belief that engaging the governing authority, staff and volunteers in applying the AAM code to institutional settings will stimulate the development and maintenance of sound policies and procedures necessary to understanding and ensuring ethical behavior by institutions and by all who work for them or on their behalf.

The Code of Ethics for Museums serves the interests of museums, their constituencies, and society. The primary goal of AAM is to encourage institutions to regulate the ethical behavior of members of their governing authority, employees and volunteers. Formal adoption of an institutional code promotes higher and more consistent ethical standards.

American Alliance of Museums
1575 Eye Street NW, Suite 400, Washington DC 20005
202-289-1818



Ethics, Standards and Best Practices

As the national organization representing museums of all kinds, we bring together museum professionals in order to formulate voluntary ethical guidelines, standards and best practices that inform museum operations. The [Characteristics of Excellence for U.S. Museums](#) and [Code of Ethics for Museums](#) provide the foundation for museum excellence. They address “big picture” issues about how museums should operate and put forth broad outcomes that can be achieved in many different ways based on an institution’s discipline, type, budget, governance structure and other unique circumstances.

These standards are directly informed by the field. They are filtered through the dialogue, debate and data generated by our excellence programs, professional networks, conferences and seminars, national studies and relationships with other museum service organizations. We recognize the great diversity of the museum field and the importance of the ethical codes, standards and best practices developed and issued by various discipline/interest-specific museum associations. Taken together, they work in concert to ensure museums hold themselves accountable to their peers and their publics.

Importance

Ethics and standards help foster common vocabulary, expectations and assumptions. They foster informed decision-making, which contributes to an accountable and credible museum field. Adherence to mutually agreed-upon standards also enables museums to self-regulate, to a large extent, in a flexible and appropriate way that accommodates the huge diversity of our field, rather than have regulations imposed by lawmakers.

We encourage all museums to commit to these standards, best practices and ethical guidelines in order to fulfill their roles as essential educational and community institutions. This commitment to excellence is necessary to secure the support, trust and recognition we need to advance our goals with lawmakers, funders, other community groups and the general public.

Resources

Field-Wide [Ethics](#) and [Standards](#)

Read more about ethics and standards issued by the Alliance and other organizations.

National Standards and Best Practices for U.S. Museums

This guide is an essential reference work for the museum community, presenting the ideals that should be upheld by every museum striving to maintain excellence in its operations. This publication is available as a free PDF to all museum members.

[Standards Assessment and Recognition Programs](#)

Learn about programs that support, motivate and recognize your pursuit to uphold standards and best practices.

[Professional Resources](#)

Join the Alliance

Membership is the foundation for excellence and unites the field.

Take the Pledge

Demonstrate and communicate your commitment to standards and ethics.

National Standards & Best Practices for U.S. Museums



An essential reference work for the museum community, this publication is available as a free PDF to all museum members.

12/12/12

Museum Ethics Standards and Best Practices

Reference guides, articles and tools to help your museum understand and apply standards and best practices.

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Building a More Human-Centered Future for Museums

Mike Murawski

Highlighting the imperative shift towards a human-centered approach, this paper underscores the role of museums as community-centered institutions. It delves into the necessity for self-inquiry among museum professionals, advocating for a leadership transformation based in empathy, care, and vulnerability. Furthermore, it calls for a reevaluation of traditional power structures and a commitment to fostering human connection and empathy within museum settings.

Let me start with an idea that, for me, is absolutely foundational: museums are human-centered and community-centered endeavors. They are not simply buildings or collections of objects. They are, first and foremost, about people and made up of people. Museums are us.

And the need for a human-centered approach to museum practice has never been more urgent.

Artist Andrea Fraser stated: »Every time we speak of the ›institution‹ as other than ›us‹ we disavow our role in the creation and perpetuation of its conditions.«¹ Fraser's work as an artist explores forms of institutional critique that problematize the museum as a complex social site, a view that can be expanded upon as we envision museums as agents of social change.

Considering a museum as a monolithic entity might make it easier to criticize from the outside, yet gaining an understanding of a museum as ›us‹ certainly sparks a direct sense of the possibility of change from within as well as a clear sense of responsibility for those working in and with museums. As the people involved in the work of a museum, we have a responsibility to understand our role in the system of policies, practices, and power dynamics as well as our role to change that system.

We Are All Agents of Change

A human-centered approach to museums is an important basis for any discussion of museums, social change, and community involvement, since it defines the vision, mission, and work of a museum as the vision, mission, and work of *the people* who are part of that museum. Critiques of museums are critiques of us, and any necessary changes in museums must start with the people of that museum and its community. Each and every one of us has a role to play as an agent of change in shaping a better future for museums.

My own passion for change in museums comes from a place of love that has grown over the past two decades through countless experiences of togetherness, connection, pain, sharing, learning, and healing – both within and outside the walls of these institutions. I've worked with museum professionals and community leaders to advance a more human-centered approach and push institutions beyond being just a collection of objects. I've seen museums being places where people learn from each other, see their lives from a completely new perspective, and come together to heal. I've worked to bring communities into the center of planning exhibitions, programs, and projects and seen institutions begin to be shaped by these communities in meaningful and powerful ways.

Museums worldwide strive to be agents of positive change in their local communities and beyond. It is essential to recognize that becoming an agent of change does not happen because of a single program or temporary exhibition project, and it certainly does not happen with just one person (no matter how passionate they are). The transformation happening right now at so many museums is the result of the passionate dedication of staff across departments as well as rapidly growing networks of community partners. By recognizing the power of human relationships and proactively building communities of change, we can collectively face the many barriers and challenges that prevent positive change.

This work involves an enormous amount of listening, developing trust, and a focus on building relationships – both within a museum as well as with audiences and communities. It involves growing a community of change and advocacy from within and embracing a human-centered mindset in everything an institution does.

As obvious and straightforward as it sounds to think about museums as human-centered institutions, this idea has faced a legacy of rather fierce opposition grounded in outdated traditions and histories. For example, consider the following questions:

- How many museums still have mission statements that prioritize collecting and preserving objects rather than fore-fronting the people-centered work of building community, growing empathy and understanding, celebrating human creativity, and cultivating engaged citizenship?
- How often do museum leaders and boards make decisions that value objects and collections over staff, volunteers, and museum visitors? We certainly saw evidence of this during the pandemic through targeted budget cuts and staff layoffs, and we continue to see evidence of this in pay inequities and severe workplace burnout.
- What if those in positions of power and authority considered human relationships and human impact first and foremost when making decisions about exhibitions, interpretation, programs, facilities, policies, and practices?
- What if the core values of an institution reflected the core values held by its staff?

Becoming More Human-Centered

At its foundation, being a more human-centered museum involves shaping and productively debating a set of core values that reflect a commitment to care, empathy, and human connection. When we put people first – above collections, above

endowments, above budget spreadsheets – we are making a commitment to advance compassion, human potential, and collective well-being as integral elements to our institution's values and culture.

The process starts with individuals engaging in deep/ deeper self-inquiry. What matters most to us? What are the ideas and people that have shaped our core values? If our institutions and workplaces could create environments based on deeper human values, what would that look like? How can we more bravely and consistently align our practice with our core values?

Self-inquiry is crucial to making institutional change, and it requires work. Spend time asking yourself these questions. Share them with others and start larger conversations with colleagues in your department and across your institution.

Through facilitating workshops and talking with museum leaders during the past few years, I have learned how common it is for people to skip this step. We're so anxious to jump into the work of making change happen that we don't take the necessary time to understand who we are, where our beliefs come from, and what is motivating our desire for change. It can even be important to pause and reflect on our own relationship with change itself, thinking about how we react and respond to change happening in our own lives – not just through our museum work.

Community organizer and activist Grace Lee Boggs wonderfully wrote, »Transform yourself to transform the world«.² So the first step may be recognizing the change we need to make within ourselves. Our own life and work can be the first place we start practicing a more human-centered approach.

In his book *Moving Icebergs: Leading People to Lasting Change*, Steve Patty argues that in order to create lasting change within an organization, we need to dive below the surface to engage our deeper values and beliefs. »Every organization«, he writes, »needs to hold candid conversations about values and beliefs, purpose and meaning.«³ Too often, the institutional culture of museums – as well as that of many nonprofits, businesses, and corporations – undervalues these more personal conversations and the vulnerability required to connect with each other in deeply human ways. We avoid talking with each other about our personal core values because it's »too personal« and best left to private reflection outside the workplace.

Being a more human-centered museum, however, means creating an environment where we can all be more human with each other, understand each others' beliefs and convictions, build trust, and treat each other with care, respect, and dignity, *especially* in the face of crisis. This requires rethinking an organization's hierarchy, developing a shared sense of leadership, and engaging in equity across every aspect of the organization. To bring a human-centered approach into museums, we need to question everything and leave the status quo mindset in the past.

Leading Means Being More Human

During the first few months of the pandemic back in 2020, I participated in a reading group on *leadership in times of crisis*. We were asked to read *Who Do We Choose To Be?* by Margaret Wheatley, a teacher and leadership consultant best known for her classic 1992 text *Leadership and the New Science*. One quote early in Wheat-

ley's book resonated with me, and has helped me understand the vital importance of transforming leadership, specifically, as part of the work to change museums. She writes: »I know it is possible for leaders to use their power and influence, their insight and compassion, to lead people back to an understanding of who we are as human beings, to create the conditions for our basic human qualities of generosity, contribution, community, and love to be evoked no matter what.«⁴

Embracing a human-centered mindset in museums asks us to elevate care, relationship building, and collective well-being as integral elements to our institutions' values and culture. It is about putting all human beings, not just visitors or audiences, at the center of our organizational thinking rather than collections, big donors, endowments, curatorial silos, or shiny capital projects. For those in leadership positions, I think this means setting aside ego, stepping back, learning to listen in radical ways, and making decisions based on care and deeply-held human values and doing this all while it runs counter to conventional thinking, entrenched legacies of leadership, and the expectations of funders.

In his 2019 book *Reboot: Leadership and the Art of Growing Up*, leadership development expert and executive coach Jerry Colonna writes about how the habits and behavioral patterns of CEOs have been detrimental to their own well-being and the well-being of others. On page one, he states: »believe that better humans make better leaders. I further believe that the process of learning to lead well can help us become better humans.«⁵

In my copy of Colonna's book, these two sentences are heavily underlined. I remember reading this for the very first time, and just sitting with it. I was in the middle of a particularly challenging decision, and I was looking for guidance on how to move forward. Much of Colonna's book and practice is focused on radical self-inquiry and finding ways to listen deeply to our own hearts.

Being a more human-centered leader – and leading from a place of deeper human values – requires us to resist this pressure to perform the rigid expectations of leadership that are harmful. It requires us to slow down and ask ourselves a series of meaningful questions:

- What is my work to become a better person?
- What is my own power and privilege within society and within the structures of this institution?
- How can I break free from existing and traditional expectations, and lead from my heart and from a place of humanity?

This process of self-inquiry is ongoing, and we need to practice holding space for qualities such as care, compassion, healing, deep listening, emotional maturity, and a sense of interconnectedness with other human beings and with our planet. It is a practice that we can cultivate and grow through journaling, meditation, mindfulness, dialogue with others, building a community of support with those who truly value these qualities, and learning from the work being done outside the field of museums in social justice, restorative justice, community organizing, nonviolent communication, climate activism, and healing practice. These are not *soft* skills, as they have often been called, in order to write them off and devalue them. These are *essential* skills. At a time when our society is in desperate need of care and healing, being a more human-centered leader means making a commitment to creating the conditions in which these qualities – and the people who hold them – can flourish.

An Opportunity for Change

In her widely watched 2010 TED talk entitled *The Power of Vulnerability*, researcher and author Brené Brown talks about connection as a fundamental human experience. »Connection is why we're here«, she says, »it's what gives purpose and meaning to our lives.«⁶ At a time when we are surrounded by increasingly fragmented societies and growing socio-political divisions, museums have the potential to be powerful catalysts for empathy and human connection. The challenges of our time have given us the perfect opportunity to radically rethink museums and create a path forward that is deeply grounded in care, kindness, courage, patience, resilience, and love. I've seen these values practiced by activists and changemakers across our field, yet so many institutions still cling to outdated power structures, oppressive legacies, and harmful dominant cultures.

As we move forward, we need to reflect inward as individuals and develop a strong grounding, a North Star. Let's take the time to ask ourselves who we are and how we want to bring our truest and fullest selves to the collective work of transforming museums and into our human responsibility to change our institutions.

I know what museums look and feel like when they begin to live up to their full potential as open-hearted spaces of care, humanity and love. My demands for change are rooted in these experiences. Museums everywhere have the potential to take action and be the places that bring people together and change people's lives.

A different future is possible, and it is up to us to make this happen together.



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- 1 Cutler, Anna: *Who Will Sing the Song? Learning Beyond Institutional Critique*. In: Tate Papers, p. 19, <https://tate.org.uk/research/tate-papers/19/who-will-sing-the-song-learning-beyond-institutional-critique> [24.01.2024].
- 2 Brown, Adrienne Maree: *Emergent Strategy: Shaping Change, Changing Worlds*. Chico 2017, p. 53.
- 3 Patty, Steve: *Moving Icebergs: Leading People to Lasting Change*. Portland 2012, p. 51.
- 4 Wheatley, Margaret: *Who Do We Choose To Be?: Facing Reality, Claiming Leadership, Restoring Sanity*. Oakland 2017, p. 8.
- 5 Colonna, Jerry: *Reboot: Leadership and the Art of Growing Up*. New York 2019, p. 1.
- 6 Brown, Brené: *The power of vulnerability*, TEDx Talks, 6.10.2010, <https://youtu.be/X4Qm9cGRub0> [25.01.2024].



an initiative of the
AMERICAN ASSOCIATION OF MUSEUMS

MUSEUMS & SOCIETY 2034: TRENDS AND POTENTIAL FUTURES

VERSION 1.0
DECEMBER 2008

“The goal of forecasting is not to predict the future but to tell you what you need to know to take meaningful action in the present.”

— Paul Saffo, futurist

Oracle bones, Ouija boards, Tarot, crystal balls, tea leaves, Magic 8-Balls—humanity has always been obsessed with predicting the future. The unknown scares the pants off us, as well it might! Knowledge is power, and knowing what is coming around the corner would be immensely reassuring. Unfortunately, that isn't going happen. And predicting the future is not, in fact, the goal of futurism. We can't determine what will happen, but we can take a thoughtful look at what might happen, and the attendant consequences. This awareness of potential futures enables us to choose which future we most want to live in, and figure out how to bring it into being. The American Association of Museums has established the Center for the Future of Museums (CFM) to help with that task.

CFM commissioned a trends paper by Reach Advisors to kick off this discussion. The condensed version presented here introduces the major themes that will be explored in more depth in a white paper to be released in 2009. We asked Reach Advisors to be edgy and provocative, and they have obliged. Sure, we hope that things will turn out fine without our active intervention, but do you really want to take that chance? Complacency breeds complacency, and thinking about potentially dark futures is a very effective

motivator. Our hope is that this paper stimulates lively discussion, and we look forward to incorporating your input both into the forecasting and into exploring how museums might respond. Working together we can help create a healthy, stable society in which every person has the leisure and ability to enjoy what museums have to offer.



Elizabeth Merritt
Founding Director

Center for the Future of Museums

The Center for the Future of Museums (CFM) helps museums explore the cultural, political and economic challenges facing society and devise strategies to shape a better tomorrow. CFM is a think-tank and research and design lab for fostering creativity and helping museums transcend traditional boundaries to serve society in new ways. CFM is an initiative of the American Association of Museums.

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Museums are often viewed as conservators of the past, but some have always been in the business of the future—even going so far as to enshrine it in their mission statements.

But what will the future look like? How much can we really anticipate about the world of 2034?

To address those questions, Reach Advisors pored over nearly a thousand articles, data sets, interviews and discussion forums to identify the trends that are most likely to change U.S. society and museums during the next 25 years. Our quarry was the emerging structural changes that are highly likely to reshape society and highly likely to affect museums.

Of course, there will be other trends that impact the future of museums. But some of these trends might not be apparent yet; others may have a huge impact on some museums but not a broad cross-section of the field; others might have profound impacts on museums if they come to pass, but the likelihood of that happening is low. This report focuses on demographic trends, changes in the geopolitical and economic landscape, shifts in technology and communications, and the rise of new cultural expectations.

To assess how each of these trends might shape the future, we start by stepping back 25 years to 1984, to identify some of the emerging structural shifts that shape what we see today. With the full benefit of hindsight, it becomes clearer which of today's emerging trends are most likely to shape the world of 2034.

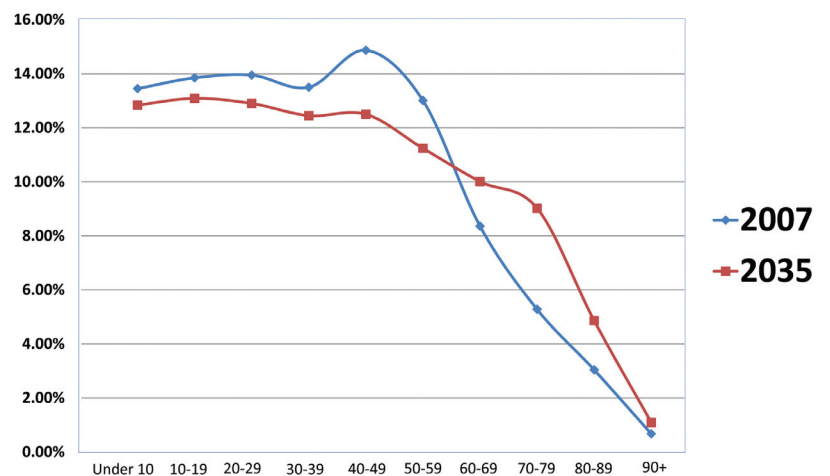
I. THE CHANGING FACE OF AMERICA

In 1984, signs of dramatic demographic and socioeconomic shifts in American society were already apparent. For the first three-quarters of the 20th century, minorities constituted 10–13% of the American population. By the early 1980s, thanks to changes in immigration laws and enforcement policies, the minority population had climbed to 20%. (Today, minorities represent 34% of the population.) At about the same time, the youngest of the Baby Boomers reached adulthood and participation rates in postsecondary education rose sharply. Each of these demographic trends will continue to shape American society by 2034.

an aging population

As the Baby Boomers age, their sheer numbers tell a story of future change in U.S. society. Today, 1 in 8 Americans are older than 65. In 2034, the ratio will jump to 1 in 5. This is a generation that has reshaped lifestyles and the U.S. consumer landscape at every stage of life. The upcoming stage will be no exception.

What this means for society: A 50% jump in the post-retirement population will require greater focus on healthcare and other services for the aging and a subsequent strain on the existing services. How will the government pay for unfunded entitlements such as Social Security and Medicare? Already, those unfunded commitments exceed the national debt, with more pressure to come on everything else that depends on federal funding. Another big unknown is how the Baby Boomers will spend their time in the traditional



Age profile of the American population, 2007 and 2035 (U.S. Census Bureau).

post-retirement years. Surveys consistently show that Boomers are far more interested than their parents in continuing some form of work after retirement—and many will do so out of necessity.

What this means for museums: How will the Baby Boom engage with museums in retirement? Can museums position themselves as employers of choice for post-career bridge jobs? Perhaps one of the most important things to consider is how museums can reinvent the role of the post-retirement volunteer, simply because this is a generation that has rarely followed in lock-step with the preceding generations. (Actually, it rebelled against them.) The Boomers constitute a large talent pool working its way towards the golden years of volunteerism, at least among those who can afford to do that.

In 2034: Exhibit labels have bigger print and museums are easier to navigate with a walker or wheelchair. Universal design is a given in even the smallest museums. Museums are at the forefront of the “brain exercise” movement, helping to maintain the cognitive powers of an older population. Museums play an important role in addressing the increased demand for all services for the aging and are an increasingly desired partner for existing senior service organizations, which are under pressure to serve a larger and more active senior population. And just as 2008 witnessed a presidential campaign that reinvented civic involvement for a new generation of young adults, museums will take the lead in reshaping civic involvement for a new generation of aging citizens.

Looking ahead a quarter century, the U.S. Census Bureau projects that the U.S. population will reach the 400 million mark, up from 300 million today. While the population will grow at a healthy clip, the growth rate of the Caucasian population is projected to grow only 4% by 2034—not 4% annually, but 4% in total. Virtually zero growth.

Instead, almost all of America’s population growth will come from minority populations. By 2034, minorities are likely to comprise just under half of the population. Four states in America have already become majority minority, with five more states projected to reach that level in the next decade.

Among America’s children, the majority will be minority within 15 years. After analyzing survey responses from 30,000 core museum visitors, Reach Advisors has identified a group that we call “Museum Advocates.” Museums are not just places that they visit on occasion, but are especially important places in their lives where they truly enjoy spending their leisure time. And what distinguishes Museum Advocates from other people? Nearly all have a distinct memory of a specific, seminal museum experience, usually between the ages of 5 and 9. The number of Caucasian 7-year-olds is projected to decline by 4% over the next 25 years. The number of blacks of the same age is projected to increase by 5%, Asians by 49%, mixed race children by 72% and Hispanics by 73%.



Changing composition of America (U.S. Census Bureau/Reach Advisors).

multi-ethnic america

One of the most striking changes in the composition of America since 1984 has been the dramatic expansion of the minority population. For most of the prior century, just 1 in 10 Americans was a minority, accelerating rapidly to 1 in 5 Americans in the early 1980s to 1 in 3 Americans today.

What this means for society: The obvious answer is that America will look very different in 2034 than it does today. Communities will need new and better ways to promote integration and develop understanding across cultures. For many parts of the country, this is more than a mere “cultural sensitivity” issue—it is socially and economically vital to sustain healthy communities given the dramatic shift in racial composition. What else does this mean? Just as 2008 saw a major expansion

of African-Americans in political power, by 2034 the U.S. Congress and other elected bodies across much of the country will be much more Hispanic.

What this means for museums: The fundamental challenge is that while the population is already one-third minority, heading towards majority minority, today only 9% of the core visitors to museums are minorities and approximately 20% of museum employees are minorities. If museums want to remain relevant to their communities, the museum audience will have to look dramatically different as well, particularly in the western and southern U.S. and in most of the larger cities across the country. If 5 to 9 is the critical age for converting children into lifelong museum-goers and advocates, how can museums attract minority children in this age range whose support they want in 2034? And are museums cultivating relationships with minorities serving as community organizers, political staffers, on local school boards (now a targeted entry point by some of the more savvy Hispanic political organizations)? It's a safe bet that a number of those individuals will be voting on local, state and federal museum funding 25 years from now.

In 2034: More museums will be places of cultural exchange in their communities; they won't have any other choice. Museums will be primary sites for civic dialogues about community interests and the policies that affect communities. They will be one of the most powerful agents in helping *all* children understand the future and ensuring they are prepared to take leadership roles in various sectors.

a new gender gap

Circa 1984, 55% of girls who completed high school enrolled in college. Today, almost 70% who complete high school enroll in college. Over that time, the trajectory of educational attainment

has remained relatively stable for men while arcing higher for women. As a result, women now outnumber men on most college campuses by a 60:40 ratio. The most stunning change is in the attainment of professional and doctoral degrees. When looking at the current holders of those degrees, men outnumber women by a 2:1 ratio. But the majority of those now graduating with professional and doctoral degrees are women.

When it comes to income, the old gender gap persists. As of 2007, women who work full time earn only 79% of their male counterparts, but this gap is closing rapidly for well-educated women. For example, the number of women earning over \$50,000 more than their spouses has doubled in the past ten years, and in most major U.S. metropolitan areas that draw an influx of college-educated employees, women in their 20s now earn 100% to 120% of what men of the same age earn.

We see no signs of this trend letting up over the next decade or two. Current national test scores show girls starting to pull away from boys academically as early as the fourth grade, starting down a long-term path towards higher educational attainment.

What this means for society: One implication of this ongoing shift is that the average age at which women marry and have children will likely continue to increase, at least among the women who earn college degrees. If that trend continues—carrying the next generation of mothers even further into careers where they are likely to outearn their male partners—then we also anticipate a dramatic shift in gender role expectations. This may prove to be one of the biggest social challenges in America over the next 25 years as this generation of women moves through college into the workforce and family life.

What this means for museums: Given that museums traditionally attract college-educated audiences, the impact of this change may be felt in a number of ways. When women hold the lead in educational attainment, will they constitute the majority of visitors? In many cities across the country, the mothers visiting with young children will be even more likely to be in their 30s and 40s, rather than their 20s—how will this affect museum programming? With more couples working full time and splitting childcare duties, who will have the time and inclination to become museum volunteers?

In 2034: Museums have developed many new strategies to attract both men and women as visitors. With educational attainment becoming a more visible tool of social mobility than ever, museums provide more opportunities than ever for girls (and boys) from less-educated families to gain exposure to topics that drive academic interest and carry them to college. As the percentage of two-income parents continues to increase, museums meet the demand for a more robust network of community support for the young children of mid-career parents. With more women serving as primary breadwinners, museums provide convenient, welcoming venues where families have rich experiences during their increasingly scarce time together. As important players in the formal and informal education system, museums work hard to meet the rising expectations that highly educated moms have for their children.

II. A SMALLER, FLATTER WORLD

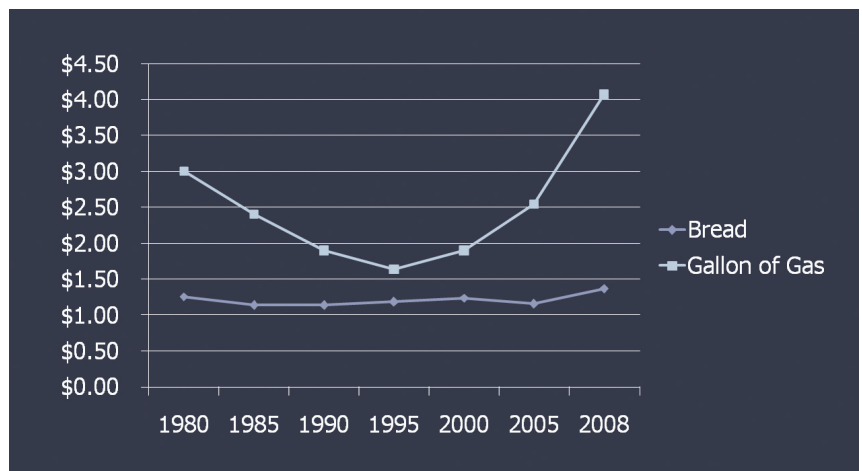


Major economic and geopolitical trends that shape the world we live in today were already evident in 1984. The United States was slowly recovering from the OPEC embargo that forced us to confront the limitations of dependence on foreign oil. It took the better part of a decade but, as a result, automotive fuel efficiency started to increase with the introduction of more fuel-efficient cars (e.g., the Ford Escort became the best-selling car in the country)—at least until fuel prices stabilized again. In related shifts, the U.S. economy experienced a period of rapid globalization and American wealth became more concentrated in the hands of its richest citizens and foreign investors.

As we look forward to 2034, these structural shifts provide clues for how the future is likely to play out in the next 25 years. Let's start with one trend that dominated most Americans' thoughts during the summer of 2008.

energy price volatility

As gasoline prices began stabilizing in the 1980s, the demand for fuel conservation eased. Sales of fuel-efficient vehicles in America were flat; the memory of the oil shocks faded, and Americans increased their consumption of larger trucks and SUVs. In the current decade, oil prices have destabilized again compared to such other staples as bread.



Bread vs. Gas (in today's dollars).

Worldwide oil consumption is projected to increase by 34% over the next 25 years. How will we plug that gap? Domestic oil production is only a small part of the answer: The largest known reserve in America, the Alaska National Wildlife Refuge, according to best-case projections can produce a total 21 billion barrels of crude oil, the equivalent of just one year of domestic consumption.

What will a gallon of gas cost in 2034? Our projection is based on conservative assumptions (i.e., a stabilized pricing environment rather than the peak prices from the summer of 2008). Extrapolating from a 25-year period of relative price stability when gas prices rose at about the same rate as the historical inflation rate, gasoline could cost \$4.91 per gallon in 2034. But if we extrapolate the price increases from just the last five years, when gas price increases far outstripped the inflation rate, then gas could cost \$25.47 per gallon in 2034. At either price, we can safely assume that consumer behaviors would change significantly.

PRICE OF GASOLINE IN 25 YEARS?

Price increase trajectory:	Avg. annual increase:	Price/gallon in 2034
Using the past 25-year price trajectory (relatively stable pricing between 11/83–11/08)	2.8%	\$4.91
Using the past 5-year price trajectory (reflects increased volatility between 11/03–11/08)	9.8%	\$25.47

What this means for society: If we reduce oil consumption significantly or see production increase dramatically, gas price increases may parallel the rate of inflation, in which case, the impact over the long term is not major. It is far more likely, however, that the volatility of the past five years will prevail, and energy costs will play a major role in how the future plays out. This will demand dramatic changes in all aspects of society, including the technology of energy production and distribution, transportation, distribution of the population between suburban and urban areas, work-at-home policies and architectural design.

What this means for museums: Volatile energy prices will have a major effect on museum operating budgets, heightening the tension between conservation and historic preservation standards and energy use. It could play a larger role in decisions about museum expansion. It will also have a major effect on consumer behavior:

- Two-thirds of car travel is currently discretionary. As energy costs rise, travel costs will become an ever more important factor in Americans' decisions about how to spend their leisure time and dollars. This effect may be buffered for local museums that are plugged into their communities. "Life list" museums that are distant but major tourist attractions will face challenges with increased gasoline prices, but not fatally as they continue to offer greater value to balance the higher costs of reaching them. Museums that require significant gasoline consumption and are not major tourist destinations will face enormous pressure.
- Home prices and sales volume in the outer suburbs and exurbs has turned down much more sharply than in close-in suburbs and urban areas, and that trend is likely to continue if gasoline prices continue to rise. Overexpansion of new housing supply in those areas created dramatic oversupply that will take the next decade to absorb, and as those prices continue to drop, they will become increasingly attractive to the growing minority population. Museums in these outer suburb and exurban locations will often find that their almost uniformly Caucasian community has turned significantly minority, due in part to confluence of the home construction bubble and the aftermath of fuel price increases.

In 2034: Museums will educate the public on how past societies coped and adapted to tectonic shifts in their resources. They will help society learn from history as we cope with a new era of more expensive energy, lower consumption, carbon constraint and climate change. Museums have uniformly adopted green design as a mark of excellence, leading by example and integrating green practices into operations. Some museums operate joint storage facilities designed to minimize energy costs while providing appropriate climate control. More museums establish satellite locations to serve outlying communities, reducing their audiences' need to travel.

the threat of recession

The current recession might prove to be a blip that doesn't impact our world in 2034—most recessions tend to run far shorter courses. But could this time be different?

As we trace back the steps leading to the current crisis, we find relaxed credit standards ... leading to overheated real estate and stock markets ... leading to increased consumer spending and debt growth ... leading to a collapse of a bubble ... leading to trillions of dollars of assets lost ... leading to a slowdown in consumer and corporate spending ... dragging the country into recession ... followed by the government subsidizing failing banks and industries.

Did we just describe America in the fall of 2008? Actually, this same scenario played out in Japan in 1989, followed by a deflationary economy that lasted the entire decade of the 1990s. The Nikkei stock index finally bottomed out in 2003. That recession was not a short-term cycle—it had decades-long impact.

What this means for society: Any recession creates some dislocation, but a Japan-scenario recession would be particularly painful for the

United States. In Japan, the prolonged recession drove fundamental restructuring of traditional employment and career expectations and resulted in a significant increase in the poverty rate. A recession extending a decade or more might have even greater social impact in America as the nation's largest generation of adults approaches retirement. More than half of Baby Boomers will retire without the benefit of a pension and hence are more vulnerable to the effects of a long-term downturn on their retirement savings.

What this means for museums: A recession extending well beyond a decade would turn everything upside down. Admissions revenue would be at risk if museums aren't able to provide greater value amidst declining household budgets. Donations, pledges, endowments and government support would be in jeopardy as well. School field trips are already being eliminated in states hit hard by the current fiscal crisis, and this could become the norm rather than a temporary round of budget cutting.

In 2034: Museums are stable oases in the midst of turmoil. Building on their tradition of offering low-cost or free access and programming, museums play an even greater role in sustaining the well-being of their communities during a prolonged downturn. Whether for the retiree managing a lower post-retirement income than anticipated, or for schools with fewer enrichment opportunities for their students, museums are there for their communities—even in periods when financial support from the community wanes.

it's a small world after all

In 1984, the United States was in the midst of transformational change. At the start of the 1980s, the global market was disproportionately U.S. dominated. But the U.S. trade imbalance quickly grew five-fold, driven primarily by an exchange

rate imbalance that fueled a rapid increase in Japanese auto imports and consumer preference for Japanese electronics. Today, the U.S. trade imbalance is six times higher than in 1984, and the U.S. is just one of many players in the global economy. We are now seeing a dramatic increase in the prominence of oil-producing countries and the growing economic powers of Brazil, Russia, India, China (the BRIC nations). Looking forward 25 years, it is clear that the OPEC and BRIC nations will play an even greater role in our lives here in the United States.

What this means for society: As the U.S. trade deficit continues to grow and other countries expand their presence in the American economy, more high-wage jobs will flow out of the country. As the dollars earned by foreign entities are reinvested in the U.S., more of the nation's most prominent assets and companies end up with foreign owners (e.g., the IBM PC division is now owned by the Chinese firm Lenovo, while the Abu Dhabi sovereign wealth fund holds significant U.S. assets ranging from the Chrysler Building to AMD's computer chip fabrication division). As wealth continues to increase in oil-producing and BRIC nations, 43% of the national debt is now held by foreign investors and governments. While the global economy is not necessarily bad for the United States, an increasing percentage of profits will continue to flow overseas.

What this means for museums: As a result of these ongoing trends, the increasing pace of globalization could continue to erode the current base of corporate philanthropic support. At the same time, larger museums will see the opportunities to ride the tide by going global themselves, opening more outposts in rapidly developing countries with an appetite for museums. The increase of wealth abroad (and among émigrés) may create new sources of funding for exhibits and programs about cultures growing in global prominence.

In 2034: Museums play an important role in helping communities with job losses reinvent themselves in the new knowledge-based economy. Responding to society's need for greater global awareness, museums increase their efforts to promote dialog and understanding about other cultures and our place in the global economy. Some museums serve as ambassadors to the rest of the world not just through overseas outposts but through traveling exhibits and more directed Web presence, helping interpreting U.S. culture to countries of growing influence.

the growing divide

Wealth has never been distributed evenly in the United States but rarely as unevenly as today: The top 5% of households generate a third of all earned income in the United States and the top 0.5% (roughly 500,000 American households) generate 14% of earned income. These are the highest ratios of income concentration since 1929, another auspicious year in American economic history.

The current concentration of wealth may be fundamentally unsustainable. Or it may simply reflect that well-educated people with a global outlook have significantly more ways to generate large incomes than those with less education and a more parochial perspective. And this is unlikely to change by 2034. Either way, the distribution of wealth in the U.S. will have an impact on museums.

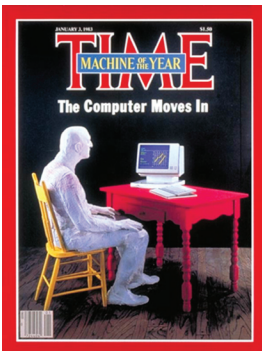
What this means for society: The political effects of an economic divide are a wild card in any speculation about the future. During the past decade, the mean income in America has increased but the median income has declined; in other words, almost all the growth in American income occurred on the highest end of the spectrum. If this trend continues, some Americans will have much more wealth but most will have relatively less. But if the concentration of wealth reverses, it might lead to an erosion of the base of philanthropic support

for nonprofits, undermining the independent sector that currently performs so many vital functions. Extreme polarization of wealth may destabilize society and erode the civic process.

What this means for museums: A growing segment of society with relatively less money could result in fewer discretionary purchases like museum admissions, reinforcing the perception that museums exist only to serve the elite. Concentration of wealth also affects the potential size of the donor base. The recent wave of museum expansion was funded, in large part, by the accumulation of wealth among the highest earners rather than an increase in the number of wealthy Americans. In the wake of the recent economic crisis, many nonprofits are already concerned about their ability to collect on pledged donations. When Japan suffered a long-duration economic downturn in the 1980s, it led to a dissipation of corporate and individual support for the arts. Will the same happen in the United States? Museums may have to reconsider their funding models either way, relying more on donations from the economic elite if wealth continues to concentrate or on earned income and a wide base of donor support if the concentration of wealth reverses.

In 2034: Museums are among the few institutions that bring together people of all economic classes. They are increasingly valued for their ability to redistribute wealth in the form of access to scientific, cultural and artistic resources, mitigating the culture gap that arises from income disparities. Museums promote global education for the nation's children and global perspectives for all Americans. In the process, museums literally enrich America, because income is correlated with education and the ability to profit from economic globalization.

III. PERMANENT REVOLUTION IN COMMUNICATIONS



1982



2006



2034

By 1984, the first signs of a technological revolution were already evident with structural changes that continue to shape how we communicate and engage with others and will still shape our interactions in 2034. Traditionally, newspapers were the glue of most local communities but the total circulation for daily newspapers reached its peak in 1984 and started down the path of permanent decline. In part due to the rise of cable television, viewership for the three major television networks also started its descent. A wider range of entertainment and information options meant that fewer families were starting the morning with the newspaper and ending the evening by watching the same television programs. As a result, the common knowledge of Americans became much less universal and much more fragmented.

Household Penetration	Jan 1980	Dec 1984
Big 3 network audience	91%	80%
Number of TV channels	4	17
Cable TV	17%	40%

As traditional mass communications shifted, a new form of information management emerged, and America entered the golden quarter-century of personal computing. In 1981, IBM introduced the PC and hired Microsoft to develop the operating system. In 1982, two software companies released the first mainstream personal productive applications, the word processor (WordPerfect)

and the spreadsheet (Lotus 1-2-3). In 1983, the Department of Defense opened up broader access to the ARPANET, a distributed computing network designed to survive nuclear attack, and this network of a few hundred connected computers would eventually become known as the Internet.

Just over 25 years ago, *TIME* magazine named the PC as “person” of the year, marking the start of a truly seismic shift in how we work, play and interact with the world. We can’t provide a crystal ball regarding technological advances 25 years from now, but there’s one area in which we can see the seeds of change. Most of us reading this report learned to use technology as a productivity tool and continue to accept new technology as it marches forward. But as we examine the generation of young adults that grew up knowing nothing other than a connected world, we see major structural shifts underway that will reshape the expectations and behaviors of the American adult population in 2034.

digital = practically free

The trend of near-zero variable cost for storage and distribution has bypassed some museums, many of which continually race to catch up with technology. But this trend has already enabled companies such as Google and YouTube to emerge as dominant repositories for digital assets. As a result, we have witnessed a dramatic structural shift in the expectations of the public (particularly among young adults), which now expects anything that can be digitized to be digital—and usually free.

What this means for society: While these expectations are not quite as extreme for older audiences, they are inevitable for younger audiences simply because they have come to expect it from every single entity that they encounter. And that expectation has toppled industries and economic models in many information and entertainment fields from record labels, rock bands, telephone companies, Yellow Pages publishers, classified ads, stock brokerages and travel agencies. It's unlikely that the progression will stop.

What this means for museums: It is highly probable that this structural shift will change expectations for museum engagement as well.

- Already, Google, YouTube and Flickr have established themselves as museums of the digital world and are actively trying to redefine the idea of curating content. Who knows what emerging entities (Web 3.0? Web 10.0?) will encroach even further on the traditional (and future) functions of museums?
- According to research by the Institute for Museum and Library Services, 43% of museum visits in 2006 were remote, predominately via museum websites. This percentage is likely to rise, and the content of remote visits to museums will continue to shift from basic information gathering to more complicated forms of engagement.
- Museums and exhibit planners already confront questions about whether some aspects of the museum experience should be delivered entirely in digital format, if only to reach different audiences. These questions will not go away. Digitizing collections and other assets is a relatively simple challenge compared to what's ahead. While it is hard to predict the likelihood and impact of technical breakthroughs, our

interviews with technology visionaries point to advances in processing power and virtual rendering that will push us to view and engage with representations in entirely different ways.

In 2034: Museums confront many decisions about the collection, presentation and preservation of new forms of virtual objects. Meanwhile, as the world continues to go digital (and progressively virtual)—and as the cost of storage, distribution and processing power continues to plummet—people find themselves further divorced from the real. Yet the fundamental human condition responds to a variant of Newton's Third Law of Motion: The prevalence of the digital, virtual world raises public awareness of the increasingly rare world of non-digital assets that help tell the story of how humans got where we are. Museums play a more critical role than ever as purveyors of the authentic, addressing a human desire for the real as the wonders of technology march us towards the opposite path.

fragmented consumption and distribution of digital information



With the advance of technology across the media landscape, Americans today consume a personalized entertainment diet. Long gone are the

days when the entire country shared a collective conversation about slavery while watching Alex Haley's mini-series *Roots* on ABC. Under more pressure than even the television networks, newspapers have become an endangered species as the Internet ether continues to seep into the air we breathe. Profound structural shifts can be seen in a little-noticed Facebook byproduct. In Facebook's quest to serve as the operating system for a new generation, it has created a tool that generates the first truly personalized newspaper, with almost perfect editorial decisions, edited by a cloud of the members' peers and personal affiliations. Most people under 25 have never learned to pick up a daily newspaper, but consumer surveys by Reach Advisors show that members of this generation still feel pretty well informed.

What this means for society: The role of the expert that has existed for decades or centuries is quickly eroding and has been supplanted in many fields: sometimes by a network of peers (Facebook news instead of newspaper editors), sometimes by the digital masses (Yelp instead of the published Zagat guide), sometimes by a new set of collective experts (Wikipedia instead of the *Encyclopaedia Britannica*). This trend has led to an explosion of accessible information; in its own way, it has even expanded civic engagement. But it has diminished the role and responsibility of prior generations of experts (Walter Cronkite, Bob Woodward, Alex Haley) who used to help shape the collective experience of Americans. It becomes increasingly difficult for average users to assess the credibility of information accessed via the Web. Due to self-selection of sources of information and social networks, people rarely engage with those who hold opposing views. This further polarizes society and makes it more difficult to achieve political consensus regarding crucial policies.

What this means for museums: The effects of this structural shift are already emerging, even in some of the most expert-driven areas like medicine. The decline of the expert is already being played out in museums as well with multiple challenges to the authority of the curator. Will curators become irrelevant, like many of the other public expert roles? Or can museums rethink how they curate and interpret their collections, how they make those collections more accessible and how they involve diverse audiences in the meaningful work of museums?

In 2034: The collective experience is more fragmented than ever. But museums provide common experiences for diverse audiences, serving as safe public spaces for civic dialogue. As one of the most trusted sources of information, museums help people navigate the vast new world of information by filtering and validating credible content.

IV. myCULTURE

a creative renaissance

Along with increased computing power and the decreasing costs of technology came the advent of the personal computer as a recording or animation studio, movie-editing suite and publishing house. That was just the beginning. With increased digital connectivity came the advent of much more effective town squares and marketplaces, providing creative participants places to access better tools and information, and enabling creative producers to share and sell their output more efficiently.

Based on Reach Advisors' national survey work with young adults on issues outside of the museum field, we are seeing the emergence of a cultural shift that may prove to be a full-blown creative renaissance. The result will be a generation of young adults with more extensive creative pursuits than any other recent generation. This generation grew up with a broad palette of digital tools and creative resources; as a result, they are demonstrating an extraordinarily high level of creative output *and* creative consumption.

What this means for society: We project that significant new economic value will be produced by these pursuits, thanks to a far bigger base of creative producers, a wider range of creative output (including forms that we can't even envision today) and significantly better distribution opportunities for their creative product—matched by a broader base of creative consumption. Already, marketplaces such as Etsy are supplanting the need for artisans to travel to sell their handmade

works, and creating an audience of consumers who are used to looking for distant artisans before they turn to mainstream retailers.

What this means for museums: Museums have traditionally served as incubators and repositories of creative expression. While many of the trends discussed in this report present significant threats to museums, this is one shift that will allow museums to flourish as facilitators of the emerging creative renaissance.

In 2034: As incubators of creative expression, museums flourish as facilitators of the ongoing creative renaissance. They play a vital role in nurturing, documenting, organizing, interpreting and making accessible the new realm of creative output. Museums play an even greater role as economic engines in their communities, helping harness the value generated by the emerging wave of creative-driven commerce and exchange. They are repositories of knowledge about traditional craft, sources of inspiration for new designs and processes, and through their collections and exhibitions, validators of new artists and new art forms.

shifting conceptions of narrative

For most adults over the age of 30, “narrative” is a passive experience. To be sure, there have been models of self-directed narrative in a wide variety of media, from interactive *Star Trek* games on mainframe computers in the 1970s to fanzines, mix-tapes, the *Choose Your Own Adventure* book

series, even *The Matrix* movies, but these were mainly consumed by small groups of connoisseurs. For Americans under 30, there's an emerging structural shift in which consumers increasingly drive narrative.

A key factor has been the expansion of video gaming, now approaching almost universal consumption by American teens. And gaming is now more likely to be about the user as protagonist, driving the narrative. Some games are simply structured that way, while others enable *modding* (modifications of the software or hardware for unintended purposes driven by the user), and on the edge lies *Machinima*, virtual gaming worlds where players collaborate in person or online to produce and record their own narratives.

Moving one step younger, Scholastic has been shifting many of its new series of books (e.g., *The 39 Clues* for children ages 6–14) in the direction of enabling the reader to serve as the protagonist through websites and games that extend the experience with readers driving their experiences with the book series.

Once again, we're seeing an emerging structural shift where technology is fundamentally enabling and wiring expectations differently, particularly among younger audiences, this time when it comes to the concept of narrative.

What this means for society: One of the fundamental concerns is how the core driver behind this shift, video gaming, affects the development of children and young adults. On one hand, there is an uncannily strong correlation (although not necessarily causation) between the increase in video gaming and the decrease in school test score performance of boys over the past 15 years. On the other hand, video games have become increasingly complex, with engaged

role-playing, complicated problem-solving and components that players can design themselves. It's likely that this shift in narrative structure and expectations will drive a lot of how the next generation of adults expects to engage in the world.

What this means for museums: Over time, museum audiences are likely to expect to be part of the narrative experience at museums. While the overall story might not change, how it is presented may change to allow visitors to take on a role as a protagonist themselves. While this is a dramatic departure from how some museums structure narrative, it provides an opportunity to create deeper, more immersive experiences for visitors. For a glimpse of the future, an intriguing example of the emerging you-as-the-protagonist concept can already be seen at Conner Prairie Living History Museum's "Follow the North Star" program, where participants play the role of a fugitive slave on the Underground Railroad over the course of a mile of rough terrain at night, constantly confronted by friend or foe. We project this kind of immersive, interactive programming will be more of the norm than the exception as the generation coming of age now brings its own children to museums.

In 2034: While some educators still decry the impact of video gaming on academic development, museums provide unique opportunities for today's youth to exercise their gaming skills and satisfy their expectations for immersive narrative. This increases their engagement with museums but also with the community and the world, providing levels of social and global awareness they might not otherwise absorb while sitting in front of a screen.

respite and retreat

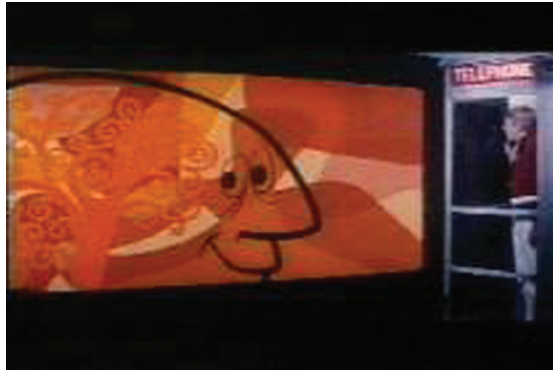
During Reach Advisors' interviews with technology visionaries across the country, it became evident to us that the U.S. will become even more technology-laden and hectic in the future. Just one example:

Many of the technology visionaries projected for us that core telecommunications technologies are coming to the point where cell phones will be small enough to fit inside our ear canals like a hearing aid, with near-perfect voice recognition that will negate the need for a keyboard. When this comes to pass, we will be living in a much noisier world than 1984 or even 2008.

What this means for society: While technological progress has brought much value to society, one byproduct of these emergent structural shifts in communication technologies is almost certainly going to be a world with fewer and fewer places where the public can find respite and retreat.

What this means for museums: At the same time, we're also seeing increasing backlash to the proliferation of technology in our research for museums and among the general public. Instead, our consumer research is finding indications of a longing for a retreat, particularly among women over 50 years old, a sentiment that we expect to expand as technology advances. The challenge will be the balancing act of positioning museums as exciting and engaging places to go, while providing a special spot to disengage from the day-to-day.

In 2034: In an increasingly atomized and digitized world, people still have a core desire for human engagement and authenticity. Museums will be oases of the real in an increasingly virtual world. Along with the outdoors and places of worship, museums represent the best opportunities for getting away from it all.



In 1967, *The President's Analyst* predicted that phones would become small enough to inject directly into the brain. By 2034, cell phones will certainly be small enough to hide in the ear canal.

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AFTERWORD: SHAPING THE NEXT 25 YEARS

With a better understanding of emerging trends that are shaping society, museums can do a better job of preparing for the impact of these trends on their own institutions. The trends discussed in this report are external to museums, requiring museums to react—whether early or late—if they want to benefit from the emerging structural shifts (or simply avoid the harms of inaction).

Responding to these trends may call for actions that seem tangential to or even divorced from the missions of many museums. It would be dangerous, however, for museums to focus on narrowly defined missions and trust that someone else will grapple with these challenges facing society. Whether a museum is in an urban core or a rural area, if its community is struggling, the museum is not going to be able to reach its full potential. A museum's viability is tied to its community's health. The good news, as we suggest in the snapshots the future, is that quite often there are actions that are central to museums' purpose, draw on their unique resources and can help society deal with seismic shifts in demographics, the economy, technology and culture.

This report is not the definitive word on the future—it is the starting point for conversation. We look forward to input from you over the coming year as we debate, refine and expand on these projections. And we look forward to hearing your ideas on what museums will look like in 2034 as they adapt to this new world.

Elizabeth Merritt
Center for the Future of Museums

TrendsWatch

MUSEUMS AS COMMUNITY INFRASTRUCTURE



Center for the Future
of Museums

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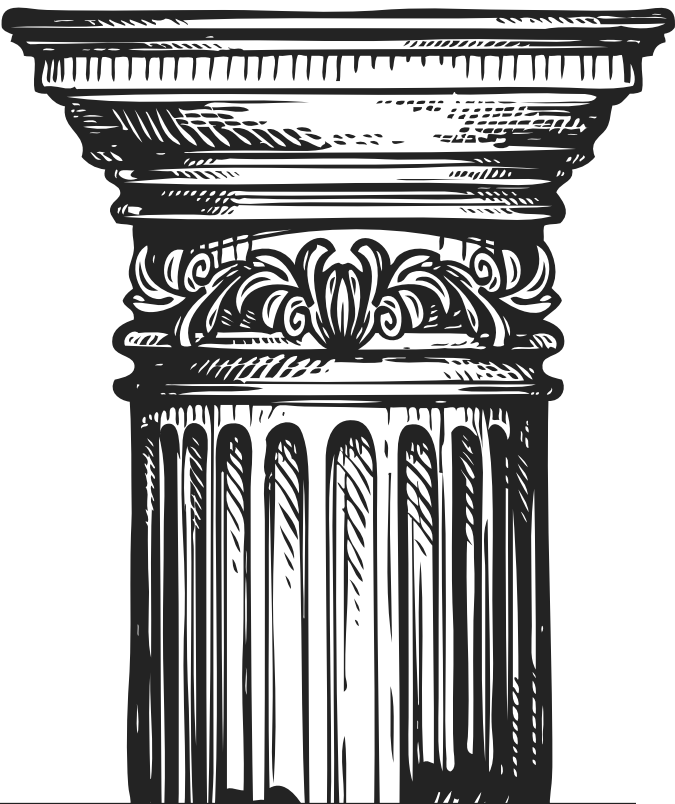
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Introduction

Crises function as stress tests—pitilessly exposing any weakness in how systems are designed, implemented, and maintained. Over the past two years, the COVID-19 pandemic has tested America on a massive scale, and many of our systems—health, education, housing, childcare, elder care, emergency response, and others—have fallen short. In the wake of over five million deaths worldwide, with over eight hundred thousand deaths in the US alone, it would be a profound moral tragedy if we did not use what we’ve learned from this test to rebuild our systems to be stronger, more resilient, and more equitable.

“System” comes from the Greek “systema,” referring to entities that interact in an orderly and organized fashion. The infrastructure that supports our communities encompasses “entities” of all types: public schools and small businesses, churches and American Legion posts, local governments, and private foundations. This edition of TrendsWatch makes the case that museums are vitally important entities in that infrastructure as well, by virtue of their contributions to five pillars of community strength and resilience as outlined in this report:

- ❖ Education for our children
- ❖ Livable communities for our elders
- ❖ Mental health
- ❖ Emergency response in the face of disasters
- ❖ A human-centered culture of sustainability

Making the Case for Museums as Essential Community Infrastructure

Some people intrinsically care about nature—animals or habitats—and passionately believe it is worthy of public support. However, many people don’t value nature as a thing in and of itself. To make an effective case for conservation that sways this latter group, advocates have learned to focus on nature’s contributions to people (aka “ecosystem services”). This approach works: research shows that when people understand how nature improves their own health and wallets, they are more likely to support funding and legislation that protects the planet.

Similarly, there are some people who simply “get” museums—they visit them regularly and value the role they play in preserving and presenting art, science, history, and myriad other topics. But many people don’t: data on the general public from Wilkening Consulting’s [Annual Survey of Museum-Goers](#) consistently shows that 70 to 75 percent of US adults have not visited a

“You can’t fund infrastructure with bake sales.”

— Anonymous



single museum in any given year. Even people who do appreciate and use museums on a regular basis may not understand why they should go beyond paying admission or becoming members to support museums through government funding and their own philanthropy. This edition of TrendsWatch focuses on the good museums do for people and communities whether or not that contribution is directly tied to their missions. This is about the value of museums not as museums per se, but as big bundles of assets that make their communities better, stronger, and more resilient through how they choose to operate.

Prioritizing Community Impact

As Americans rally around the need to strengthen our networks of community support, we are beginning to see some awareness that museums are essential components of those systems. Here's one example: in its [2021 National Risk Assessment Report](#), the First Street Foundation acknowledged the importance of social infrastructure, including museums, that help communities develop "a sense of belonging." This statement captures only a small portion of the truth. It's up to museums, working together, to expand that insight, helping the public, government, and funders realize the full scope of how museums support their communities.

There have always been museums that foreground a community-centered approach to their work. When the [Wagner Free Institute of Science](#) opened its doors in 1865, for instance, it took the form of a natural history museum, rather than a club or society, as means to make science education accessible to everyone in its community, regardless of class, income, or gender, in an age when education was a vital resource for social and economic advancement as well as individual enrichment. Over a century and a half later, the original buildings and collections are still used as tools for providing educational enrichment for children and adults in Philadelphia. [Project Row Houses](#) (PRH) is a contemporary example of a community-centered museum, created in 1993 by seven visionary Black artists to serve the community of Houston's Third Ward. These founders saw historic preservation as a means to foster art, and art as a means to "empower people and enrich communities." Now, this self-described "community platform" is a nexus of support for underserved neighbors, including young single mothers, local small businesses, and socially minded artists. While PRH employs some traditional museum formats (e.g., exhibitions, historic preservation, and artist residencies) they have also at various points in their history hosted a community laundromat, a residential program for young mothers, a business incubator, and tutoring services—doing whatever needs to be done.

Organizations like the Wagner Free Institute and Project Row Houses may seem like extreme examples of museums shaping themselves around community needs. But look closely at almost any museum and you will find programs and services that support communities in "non-traditional" ways: [raising](#) and [distributing](#) food, creating [housing for homeless artists](#), providing [self-care programs](#), fostering [happiness](#), keeping [teens out of prison](#), supporting [childhood health](#), providing [art therapy for military veterans](#), and serving as [voter registration centers](#) and [polling stations](#). However, seldom do individual museums, much less the field as a whole, get the credit they deserve for all the good they do. While we can build a strong case around the role museums play in local systems, that case would be even stronger if more museums measured these impacts and touted them as metrics of success.

Building on Success

One of the principal goals of the American Alliance of Museums is advocating for museums: helping legislators understand the value museums provide to society and encouraging them to provide commensurate support. Some legislators are already on board, reliably helping to secure robust funding for the Institute of Museum and Library Services, the National Endowment for the Arts, and the National Endowment for the Humanities, even in difficult times. Their support has been critical in ensuring that museums have been included in pandemic relief funding as well, such as the \$1.2 billion for museums in Shuttered Venue Operators Grant funds and more than \$1 billion from the Paycheck Protection Program. As another example, the bipartisan \$1.2 trillion [Infrastructure Investment and Jobs Act \(IIJA\)](#) recently signed into law by President Biden includes \$50 million in grants for museums and other nonprofits to upgrade their facilities for energy efficiency and \$65 billion to support broadband access for all. As I discuss later in this report, while some people [simply “get” museums](#), others will support our field only when they understand the tangible, quantifiable benefits museums provide to society. This is true of our elected representatives as well—by framing museums as essential community infrastructure, we can convince more legislators to support museums, not as amenities that are merely “nice” to have, but as essential contributors to their constituents’ health, education, and safety.

Raising the Stakes

In addition to making an effective case for support, quantifying the benefits museums provide to their communities will influence museum practice as well. This is a good thing, because as much good as museums do now, they could do even more. As I discuss in chapter five, “Right-Sizing the World,” the way we choose to define success shapes the systems we create. A narrow focus on traditional metrics such as attendance, collections size, and square footage constrains the potential of what museums can achieve. It is my hope that this report will inspire you to reexamine how your organization defines success and create metrics that challenge you to expand your thinking about what the museum can achieve.

In 1910, [Daniel Burnham](#) exhorted city planners to “make big plans; aim high in hope and work.” Museum planners should have equally lofty goals: to become vital players in the complex systems that help their communities thrive in the face of crises yet to come.

Yours from the future,



Elizabeth Merritt

VP Strategic Foresight and Founding Director, Center for the Future of Museums
American Alliance of Museums

“Museums, aquariums, and zoos are key partners with cities, states, and the federal government as we work together to build a more sustainable and equitable future. These institutions are national treasures—serving as centers of conservation and research, while also helping to educate and inspire future generations ... These institutions, located across the country in thousands of cities and towns, represent our cultural heritage and are social, economic, and educational pillars of our communities.”

—US Representatives Mike Quigley (IL-05) and Jesús “Chuy” García (IL-04), in an April 19, 2021, letter to the House Committee on Transportation and Infrastructure calling for strong support for museums in infrastructure funding

How to Use This Report

This edition of *TrendsWatch* frames the case for museums as essential community infrastructure. The format is designed to help you start discussions among your museum's board and staff, consider how you might maximize the "positive externalities" of your work, and make the case to funders and legislators for support commensurate with the good you do.

Each chapter is devoted to one "pillar" of infrastructure, and:

- ❖ Introduces the **issue**
- ❖ Suggests **critical questions** for museums
- ❖ Describes the **challenge**
- ❖ Summarizes how society, and museums, are **responding**
- ❖ Presents a **framework for action**
- ❖ Documents **examples** of museums tackling these issues
- ❖ Shares a **"signal of change"** (story, report, or event) to help you explore the future
- ❖ Provides additional **resources**

We know that each download of *TrendsWatch* is shared, on average, with ten other readers. This year, please double down on that practice. Share the report with:

- ❖ Everyone on the museum's board, staff, and volunteer corps to provide a starting point for tackling these difficult topics.
- ❖ Funders, to support a conversation about how they can sustain the museum, and how you, in turn, can help them achieve their goals.
- ❖ Journalists, to help them do a better job of reporting about your museum and the field as a whole.
- ❖ Policymakers, to help them understand how museums can be integrated into a "whole-of-society" approach to critical infrastructure.
- ❖ Local leaders and government officials, to build awareness of the essential roles your museum does and can play in supporting the community.

Here are some suggestions for how to use the report with board and staff:

- ❖ Share a printout of the report in a breakroom, or a digital copy in a workspace online, and encourage staff to annotate with questions, observations about how it resonates with their experience, and ideas about how what the museum might do.
- ❖ Dedicate a board meeting to discussion of the five “pillars” explored in this report, or parcel them out as agenda items across a series of meetings.
- ❖ Use individual chapters as the basis for a deep dive with staff into issues of concern to your museum.
- ❖ Use the critical questions to guide discussions.
- ❖ Document how your museum contributes to the five pillars of community infrastructure explored in this report and use these metrics in reports to your members and the community in support of your advocacy efforts.

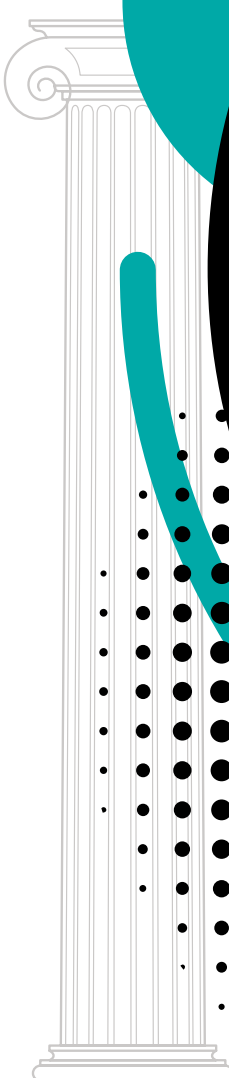
DON'T leave this report to languish on a digital shelf. Think of it as a museum PFD (Personal Futurist Device)—it can't help you stay afloat if it's left in the closet at home.

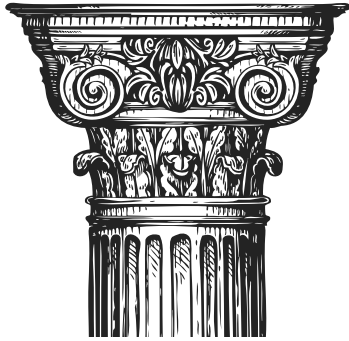
I look forward to connecting with you in the coming year to explore these topics more deeply. Please share your thoughts and questions by:

- ❖ Tagging [@futureofmuseums](#) on Twitter.
- ❖ Posting to the Alliance discussion forum [Museum Junction](#). (Directors are welcome to join the CEO Forum on Museum Junction.)
- ❖ [Submitting guest posts](#) to the [CFM blog](#).
- ❖ Emailing CFM at emeritt@aam-us.org.

My colleagues and I are available to support your work via speaking engagements, workshops, moderating discussions, and consulting. For more information on those services and to request our help, visit [Alliance Advisors and Speakers Bureau](#) on the AAM website.

Five Pillars of Community Infrastructure





Pillar One:

Education for Our Children

Twenty years into the new millennium, the US is still struggling to create a P-12 education system that provides each child with the support they need to become a healthy, well-balanced, self-sustaining adult. [Copious research](#) suggests that the system we inherited from the last century, with its focus on age-based cohorts and standardized curricula, is poorly suited to foster critical thinking, problem-solving, synthesis, innovation, creativity, teamwork, and collaboration—skills widely seen as essential for thriving in the twenty-first century. The COVID-19 pandemic has added to these challenges by exposing the fragility of our educational infrastructure, widening existing educational disparities and demonstrating that alternate forms of learning can be better, more effective, and more accessible for some. Museums have been living the educational future for decades, providing the kind of self-directed, experiential, social, and distributed learning that is proving to be both effective and resilient. Building on these strengths, the museum sector can play a vital role in rebuilding and transforming P-12 education to be better, stronger, and more equitable for all of America's children.

The Challenge

Like so many US systems, from finance to justice to government, the existing education system is structurally inequitable in its design. As currently constituted, our public and private systems of education reinforce and perpetuate advantages based on race, gender, sexual orientation, culture, ability, and socioeconomic status. This structural inequity exists not only because of zip-code-based allocation of resources (which could theoretically be fixed by giving more and better access to historically marginalized groups), but because the system is fundamentally designed to favor a specific, narrow range of abilities and learning styles. To paraphrase education critic Sir Ken Robinson, the whole system of public education has been created in the image of higher

“Given the challenges we face, education doesn't need to be reformed — it needs to be transformed.”

—Sir Ken Robinson, author, speaker, and international advisor on education

Critical Questions for Museums

- Working with traditional schools (public and private), how might museums help create better educational experiences for all students?
- How can museums provide alternative educational pathways for learners who aren't well served by the current system, including homeschooled students?
- How can museums capitalize on their expertise in fostering twenty-first century skills like critical thinking, problem-solving, synthesis, innovation, creativity, teamwork, and collaboration?
- How can museums ensure they are recognized, valued, and supported for the essential roles they play in education?



Solar ovens at the Little Scholars Program, Fort Worth Museum of Science and History. Photo credit: Nadia Fuentes.

education, and treats primary and secondary school as a protracted university entrance exam. “The consequence,” he explains in a [TED talk](#), is that “many highly talented, brilliant, creative people think they’re not [brilliant and talented], because the thing they were good at at school wasn’t valued, or was actually stigmatized.”

In the past decade, top-down educational reform has largely focused on creating a common set of standards and doubling down on standardized testing. These efforts have been, at best, unsuccessful, and may have actually made things worse for both students and teachers. The Common Core standards, introduced in 2010, have cost billions of dollars without resulting in [any measurable improvement in results](#). Many critics feel that the emphasis on testing has disempowered and demoralized teachers, helping fuel a chronic shortage of qualified, skilled educators, especially in low-income communities and hard-to-staff roles.

We already knew that a one-size-fits-all approach doesn’t work for many children, and the COVID-19 pandemic threw that into stark relief. While prolonged disruption set back student learning overall, the effect was especially severe for [Black, Hispanic, and Indigenous communities](#). Low-income families were less likely to be able to provide the internet access, devices, and dedicated, quiet study space needed for successful online learning. [As of spring 2021](#), nearly one-fifth of households with school-age children did not have consistent access to the internet for education, and this lack of access was highest for Latinx, Black, and mixed-race households, with predictable results. A [study](#) by the consulting firm McKinsey suggested that students of color lost three to five months of math learning over the 2019-2020 school year, compared to one to three months lost by white students. A metadata analysis by the US Department of Education’s Office for Civil Rights found that pandemic learning disruptions

were also particularly severe for students learning English as a second language, students with [disabilities](#), LGBTQ+ students, and students who are caregivers for their families.

The pandemic was devastating for educators as well, placing them in the role of front-line emergency responders with limited training or support. Teachers found themselves working even longer hours, learning how to teach online, and in many cases juggling both in-person and online teaching simultaneously. While [teacher turnover](#) actually declined in 2020 (because, heroes), the pandemic took a heavy toll on morale, with one-third of teachers saying it has made them more likely to leave teaching or retire early. [Almost twenty-five thousand people quit](#) the public education sector in August 2021, and the Bureau of Labor Statistics [forecasts](#) that the annual turnover rate for experienced educators and school principals will rise to 42 percent.

But the pandemic also surfaced important signals of potential positive change. While distance education was a disaster for some children who thrived in traditional schools, it proved to be a superior option for some kids disadvantaged by the established system. A number of students, including some with [ADHD, autism, or other neurodivergent conditions](#), found it easier to concentrate when they were not around classmates. Teachers who work with the online learning platform Edutopia reported that some “[shy kids, hyperactive kids, and highly creative kids](#)” are doing better with remote learning than they did

Student at the Great Lakes Science Center’s Learning Lab. Photo credit: Courtesy of the Great Lakes Science Center.



Second-grade student from Butler Elementary School engaged in a scavenger hunt at the Kidzeum as part of the STEAM Residency Program, December 2021. Photo credit: Kari Bedford.

in physical classrooms. Others noted that some students who have been the victims of physical or verbal bullying at school found home to be a safer space for learning. (Some of these beneficial aspects of remote learning mirror strategies that promote [health and wellbeing in the workplace](#) as well, including being flexible about where, when, and how work gets done, and revisiting what constitutes a reasonable workload.)

How can we take what we learned from pandemic-era innovations and use it to improve education long-term? How can we use this disruption as an opportunity to build back better and stronger, transforming the systems we know to be damaging to so many young people?

The Response

In Society

Pre-pandemic, the US was already shifting away from the top-down, federally driven reform efforts characterized by No Child Left Behind (NCLB). Guided by the 2015 successor to NCLB, the Every Student Succeeds Act, states began promoting flexibility in setting goals, making improvements, and supporting students through a wide range of approaches. As the KnowledgeWorks Foundation observed in a [2018 report](#), “These shifts, some of which have been gaining ground for several years, are creating a more decentralized environment in which changemakers of every stripe have increasing ability to influence public education—and in more ways than before.”

A Framework for Action

To embed themselves in the educational infrastructure of their communities, museums may want to:

- Invest in their capacity to work with schools: for example, by dedicating one or more full-time staff positions to developing and sustaining museum-school partnerships.
- Develop resources that help educators, parents, and students integrate museum assets into school curricula (with particular attention to research documenting [what educators want from digital museum resources](#)).
- Build learning networks that connect diverse educational nodes: museums, libraries, after-school programs, and schools. These learning organizations can work together to reinforce each other's efforts, meet the needs of all learners, and provide formal credit for learning that occurs across the community.
- Double down on digital. Museums can help bridge the digital divide in education by providing internet access and teaching digital skills as well as enriching education with their own digital learning materials and experiences.
- Create permanent “learning labs” to serve diverse learners, including public school, charter school, or homeschool students needing internet access, equipment, quiet, and mentoring to support successful online learning, as well as home-based learners looking for classroom space.
- Consider joining the growing number of “museum schools,” whether by offering a home for an independent school in museum space, helping a school create its own student-run museum, or starting their own schools run by museum staff.



At the Grand Rapids Public Museum School, students use the museum's exhibits—and the city of Grand Rapids—as their campus. Photo credit: Grand Rapids Public Schools.

The disruptions created by COVID-19 demanded innovation and flexibility, and it is widely recognized that education will not simply reset to pre-pandemic norms. Having been essentially drop-kicked into the future, schools have begun to build the infrastructure they need to support distance learning and online instruction. These efforts were given a boost by funding from the [Consolidated Appropriations Act of 2021 and the American Rescue Plan](#) to improve broadband access and close the digital divide. The extended pandemic educational experiment bolstered teachers' confidence in trying out new ideas for how to teach, collaborate with their colleagues, communicate with families, and use technology to engage with students. Now more than two-thirds of teachers [surveyed in 2021](#) say they intend to incorporate tools they adopted during the pandemic into their ongoing teaching repertoire.

This extended, forced experiment in remote learning accelerated some shifts in education policy that were already underway. In 2012, [thirty-six states](#) had already disconnected “seat time” (time spent in the classroom) from the awarding of educational credit. States are waiving seat time in [many different ways](#) (including basing credits on mastery of material and allowing for individual seat-time waivers) and for students with many different needs (including those who have fallen behind, those

who excel, those who don't do well in traditional academic environments, etc.) Asynchronous distance learning can be used to reinforce this trend, empowering students to spend as little or as much time as they need to master the material, and to be evaluated on outcomes rather than facetime.

The pandemic also accelerated parents' search for educational alternatives. Prior to 2020, the US had already seen a slow but steady growth in homeschooling and in the number of students attending charter schools. The COVID-19 pandemic supercharged this trend. [Homeschooling](#) is projected to increase by at least 10 percent, and [charter school](#) enrollment rose by over 7 percent. Non-charter public school enrollment dropped 3.3 percent, representing 1.5 million students. As school funding follows students, such shifts in enrollment will create a sizeable drain on the public education system.

In Museums

The seminal AAM report [Building the Future of Education: Museums and the Learning Ecosystem](#) (2014) chronicled the steady evolution of museums from "informal" educational extras to critical players in mainstream education.

In addition to supporting schools, teachers, and learners with content, field trips, and after-school programs, museums are experimenting with ways to be the primary education provider for some children. The past two decades have seen the creation of a growing number of museum schools of various forms, including schools that operate museums or use museums in their community as classrooms and learning locations, schools co-locating in museum space, and museums founding and operating schools. As we point out in the *Building the Future* report, museums are preadapted for the next era of education, as they are already expert in the kind of self-directed, experiential, distributed learning that fosters the twenty-first century skills of critical thinking, synthesis of information, innovation, creativity, teamwork, and collaboration. They bring these strengths to museum-school partnerships of all types.

The pandemic gave museums the opportunity to demonstrate their educational expertise by stepping in to fill many of the gaps created by the fragility of traditional education systems. Over the past two years, many students lacked critical resources for successful online learning: quiet space, good internet connectivity at home,

During the pandemic, this sixth-grade class from Woodstock Elementary School used a restored barn at Billings Farm & Museum as its classroom. Photo credit: Courtesy of Billings Farm & Museum.



mentors to help with technology and assignments. Many museums responded by creating study halls and providing learning mentors. When some schools needed more room to practice safe physical distancing, local museums, closed to the public, made their buildings and grounds available as classroom space for months on end. Museum educators turned their time and talent to creating virtual field trips, online classes, curricula, and lesson plans to support teachers and parents who were trying to provide a rich learning experience for children cut off from normal schooling. These efforts introduced many teachers to the wealth of digital resources provided by museums, and taught museums that they can serve educators and students across the country, not just in their geographic communities.

Like teachers, museums may make long-term changes based on what they learned during the pandemic. Many museums found that their digital offerings reached people who were unlikely to visit the museum even in normal times, because of time, distance, or other barriers to accessibility. (These anecdotal reports are bolstered by data from the [Culture and Community in a Time of Crisis](#) project, which found museums of all types reached significant numbers of non-museum-goers through digital experiences.) Museums may also decide to continue some of the place-based learning innovations sparked by the pandemic. For example, the Fort Worth Museum of Science and History, which provided space for students engaged in virtual learning, has decided to launch a new museum charter school focusing on STEM (science, technology, engineering, and math). Classroom teachers have told the [Pacific Science Center](#) that they want virtual field trips implemented during the pandemic to stay, because it is an efficient use of class time, simplifies logistics, and can more easily be customized to teacher and student needs.

Museum Examples

Museums Supporting Pandemic Education

During the pandemic, some museums, closed to the public, have hosted schools needing more space. [The Children's Museum of Fond du Lac](#) housed students from Treffert Way for the Exceptional Mind, a public charter school that “seeks to teach to children’s individual strengths



Children reading at the Fort Worth Museum of Science and History's Little Scholars Program. Photo credit: Courtesy of the Fort Worth Museum of Science and History.

and emphasizes experiential learning.” The [Louisiana Children's Museum](#) in New Orleans gave exclusive access to its building and grounds to pre-K and kindergarten classes from the Langston Hughes Academy, a FirstLine charter school whose students are 98 percent Black and 74 percent eligible for free lunch. Sixth graders from Woodstock Elementary in Vermont found themselves studying at [Billings Farm and Museum](#), in close proximity to the museum’s exhibits and award-winning herd of Jersey cows.

Many schools went virtual, leaving students in need of quiet spaces with good internet connections to support successful virtual learning. Many museums responded by adapting some of their space as in-person learning labs. The [Great Lakes Science Center](#) hosted learning camps during the summer of 2020, with museum staff leading STEM-based activities as well as helping students complete online work assigned by their schools. [The Fort Worth Museum of Science and History's](#) Little Scholars program allowed first- through fifth-graders to do their virtual classes from inside the exhibit halls. The museum provided laptops and Wi-Fi, and museum facilitators were on hand to answer children’s questions and help them get online. The [Phillip and Patricia Frost Museum of Science](#) in Miami created the Pods Program to host kindergarten through fifth-grade students accessing virtual school, with museum educators providing homework

assistance and technical support.

Museums Providing Formal, Credentialed Learning Experiences

Futures-oriented organizations such as KnowledgeWorks, Big Picture Learning, and Ashoka envision the [future of education](#) as being distributed across the community, with learning taking place in a variety of organizations that are empowered to grant formal credit to students. In 2013, Vermont launched the Flexible Pathways Initiative (Act 77), giving secondary school students the right to create personalized learning plans that include educational experiences outside the formal school setting. Now some museums in that state, including [Shelburne Farms](#) and the [Lake Champlain Maritime Museum](#), are marketing programs as place-based learning that can integrate into personalized learning plans and meet proficiency-based graduation requirements. During the pandemic, [The Besser Museum for Northeast Michigan](#) worked with teachers and homeschool parents to award extra credits for free, independent field trips to the museum's planetarium programs.

Four Kinds of Museum Schools

Schools Using Local Museums as Classrooms

Some examples include the [New York City Museum School](#) (a magnet school in Manhattan for grades nine through twelve), [Normal Park Museum Magnet School](#)

Junior Curators work with collections at the John Early Museum Magnet Middle School. Photo credit: Becky Verner.



(a magnet school in Chattanooga, Tennessee, for kindergarten through eighth grade), and [The Museum School of Avondale Estates](#) (a public charter school in Decatur, Georgia, for kindergarten through eighth grade). These schools build their curricula around “learning expeditions,” using their local museums as extensions of classroom learning, enabling students (either as a full grade level or a single class) to structure learning around in-depth interactions with exhibits and artifacts.

Schools Creating Museums

The [John Early Museum Magnet Middle School](#) (a magnet school in Nashville, Tennessee, for grades five through eight) and The Webb Schools (a private school in Claremont, California, for grades nine through twelve) have created full-fledged museums that engage students in the process of creating exhibits, curating collections, and conducting research. The Webb Schools' [Raymond M. Alf Museum of Paleontology](#) is accredited by the American Alliance of Museums.

Schools Hosted on Museum Campuses

The [Manchester Academic Charter School](#) middle school is sited on the campus of the **Pittsburgh Children's Museum** and makes extensive use of its Museum Lab. The [Dr. Charles R. Drew Science Magnet Museum Site](#) houses grades three through eight at the **Buffalo Museum of Science**. The [Lincoln Nursery School](#) is integrated into the **deCordova Sculpture Park and Museum**, and the [Wonder School](#) preschool collaboration uses the **Columbus Museum of Art** as one of its campuses.

Museums Creating or Co-Creating a School

At the [Grand Rapids Public Museum High School](#) (GRPMHS), students work with staff of the **Grand Rapids Public Museum** to catalog and research collections and curate exhibits while using the museum exhibits for place-based learning. GRPMHS, which was one of ten schools internationally to receive the XQ Super School grant in 2016, is an ongoing collaboration between the Grand Rapids Public Museum, Grand Rapids Public Schools, Kendall College of Art and Design of Ferris State University, Grand Valley State University, the City of Grand Rapids, Downtown Grand Rapids, Inc., [XQ Super School](#), and the Parent Teacher Community Council.

[The Henry Ford Academy](#) is a public, tuition-free charter high school hosted by **The Henry Ford**. Founded in 1997 and developed in partnership with The Henry Ford and the Ford Motor Co., it serves five hundred students grades 9-12 split between The Henry Ford's **Museum of American Innovation** and historic [Greenfield Village](#).

For a map identifying museum schools across the US, visit the website of the [National Association of Museum Schools](#).

Explore the Future

Signal of Change:

A “signal of change” is a recent news story, report, or event describing a local innovation or disruption that has the potential to grow in scope and scale. Use this signal to spark your thinking about how museums might engage with the education system in the future.

[Are Microschools the Future of Online Learning?](#)

WGBH, June 28, 2021

The coronavirus pandemic dramatically changed the way tens of millions of kindergarten through twelfth-grade students “do school,” and for some families, it was the push they needed to find alternative educational models tailored to their students’ unique needs and interests. An Arizona-based company called Prenda is helping parents to set up “microschools” in their homes for small groups of students. During the pandemic, Prenda’s enrollment multiplied by four times, and the company now supports more than four hundred microschools. Starting this fall, the New Hampshire Department of Education will partner with Prenda to provide learning pods, in multi-age small-group settings, to help up to five hundred students who struggled with setbacks during the pandemic.

Explore the implications of this signal:

Ask yourself, what if there was more of this in the future? What if it became the dominant paradigm? Write and discuss three potential implications of this signal:

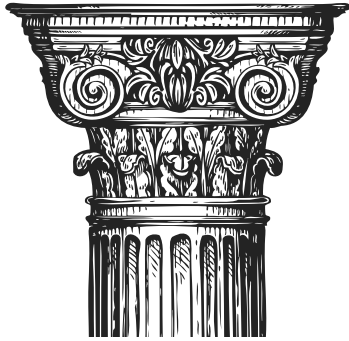
1. For yourself, your family, or friends
2. For your museum
3. For the United States



Students in the ten-day residential Junior Scholars Summer Paleontology Program at the Raymond M. Alf Museum of Paleontology at The Webb Schools. Photo credit: Nancy Newman/The Webb Schools.

Additional Resources

- [Shaping the Future of American Public Education: What's Next for Changemakers?](#), Katie King and Katherine Prince (KnowledgeWorks Foundation, 2018). This paper presents four scenarios of educational changemaking to explore how and why education changemakers might influence American public education over the next decade.
- [Building the Future of Education: Museums and the Learning Ecosystem](#) (American Alliance of Museums, 2014). This white paper summarizes the content and ideas coming out of a 2013 assembly of over four dozen educational policy experts, practitioners, funders, education innovators, reformers, student activists, and others shaping the conversation about US education, convened by the American Alliance of Museums and hosted by the National Building Museum in Washington, DC.



Pillar Two:

Livable Communities for Our Elders

By 2030, one in five Americans will be over the age of sixty-five, and in some states that figure will top one-quarter. By 2034, older adults will outnumber children in the US population. As the AARP has pointed out, in the past seventy years our primary focus, as a society, has been on meeting the needs of families with children. This focus has shaped every aspect of our lives, from the design of buildings, transportation systems, and neighborhoods to the policies behind zoning and human resources. The unintended result has been the creation of physical and social systems that isolate and marginalize people as they age. This separation is unhealthy for people of all ages. Younger people are deprived of valuable wisdom and expertise, as well as role models for their future selves. Isolating older people from society creates grave risks to their mental and physical health. Museums can play a vital role in creating “age-friendly” communities that support physical activity, social connection, and intellectual stimulation, as well as providing pathways for elders to contribute to their communities and to following generations.

The Challenge

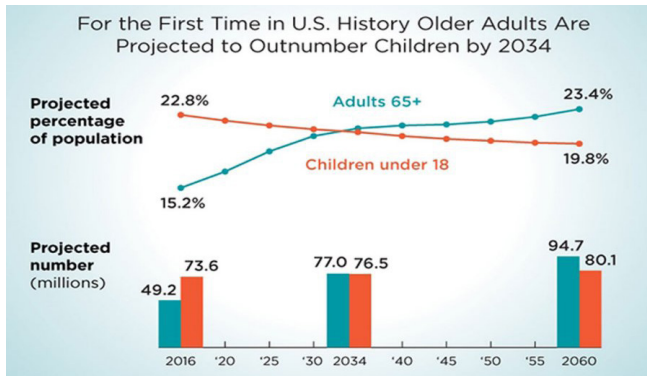
A woman born today in the US can expect to live to be eighty-one years old, a man seventy-six, and those averages are rising with time. Though Baby Boomers (born between 1946 and 1964) have long expressed their intent to work until age sixty-eight, the COVID-19 pandemic has impelled a wave of early retirements, meaning many people face a decade or more of “post-work” life, while continuing to want opportunities for meaningful engagement and to give back to their communities. This stage of life is not without challenges. Even though the [Age Discrimination in Employment Act](#) protects

“Ageism is a prejudice against our own future selves and takes root in denial of the fact that we’re going to get old.”

—Ashton Applewhite, author and age-activist

Critical Questions for Museums

- What aspects of conventional museum design and operation pose barriers to access for older audiences?
- How can museums elevate the power, voice, and status of older individuals, helping to create a culture that honors, values, and empowers elders?
- How can museums promote the creation of age-friendly communities and integrate themselves into a seamless network of support?
- How can museums make volunteer opportunities accessible to a broad diversity of older individuals?
- How can museums address ageism in the steps they take to promote diversity, equity, accessibility, and inclusion in their own work cultures?
- How can museums shift older adults from the group least likely to use museums to one of their biggest audiences?
- How might museums bolster their own sustainability by serving older adult audiences better?



Data from the U.S. Census Bureau.

people age forty or older, those who want to remain in or rejoin the workforce often face discrimination in hiring and on the job. [Forty percent](#) of people over the age of sixty-five have some kind of disability—whether that involves mobility, cognition, hearing, vision, or barriers to independent living. About [20 to 25 percent](#) of older adults have mild cognitive impairment, and about 10 percent experience dementia (though that rate seems to be [falling over time](#)).

Regardless of underlying health or ability, everyone who lives to grow old in the US at some point joins the ranks

of people subject to the pervasive, corrosive bias of [ageism](#), a form of discrimination that itself contributes to depression, cognitive decline, ill health, and (perverse-ly) a shorter life span. And [ageism combines](#) with other “isms”—racism, sexism, homophobia, and class prejudices—to create a toxic brew of intersectional damage.

It is increasingly common for older Americans to face these challenges without a network of family or social support. In the US, 27 percent of adults over the age of sixty [live alone](#) (more than double the figure for adults age twenty-five to sixty), and social isolation has a negative impact on health as severe as [smoking up to fifteen cigarettes a day](#). Older Americans are also much less likely than their counterparts elsewhere in the world to live in a household without young children, which contributes to generational isolation as well, denying children access to the care, mentoring, and role modeling that can be provided by older adults. The safety net woven by family relationships will fray even more in coming decades, as the US birthrate drops. In 2010, there were, [on average](#), seven potential caregivers for every senior. The AARP



At the Speed Art Museum, Toya Northington led workshops on making art from memories. Photo credit: Courtesy Speed Art Museum.

A Framework for Action

To help create age-friendly communities, museums can:

- Inventory barriers to access or use. This might include physical barriers (including stairs, ramps, handrails, and restrooms), comfort (including seating, acoustics, lighting, and readability of signage), cultural or social barriers (including attitudes and behavior of staff and ageism reflected in marketing, exhibits, and programming), and transportation (including availability and location of parking and access to public transportation). Ensure that digital design is age-friendly as well.
- Provide age-equitable opportunities for employment and volunteering. Consider training managers and human resources staff on how to avoid ageism in hiring and employment, establishing a working group of paid and volunteer staff to identify how to value and support older volunteers, including age and ageism in the museum's DEAI plans and policies, and addressing age-related stereotypes and assumptions in DEAI training.
- Assess how older adults are represented in your content, from exhibits to marketing, and work to ensure that elders are both seen and valued.
- Identify older adults in your community who are "culture-bearers" and give them platform, power, and authority to transmit the knowledge, experience, skills, and stories that they care for.
- Design programs and services that actively foster intergenerational connections: In addition to creating rewarding relationships, dialogue between older adults and youth has been shown to be an [effective tool](#) to reduce ageist attitudes and behaviors.



Teaching artist Baba Luther Gray leads a course on the influences and rhythms of New Orleans music at the Louisiana State Museum. Photo credit: Courtesy of the Louisiana State Museum.

expects this number to drop to four by 2030, and to fewer than three by 2050. Nearly 90 percent of Americans over the age of fifty want to "[age in place](#)." However, the lack of family caregivers, and the absence of any nationally funded and organized substitute, will make it difficult for people to remain in their own homes rather than moving to assisted living facilities. In any case, by the end of this decade, 54 percent of seniors will [not be able to afford either assisted care or independent living](#), precipitating crises in both housing and health.

Meanwhile, we've created communities and environments both online and in real life that seem almost intentionally designed to make it hard for elders to remain actively engaged with the world. Only 1 percent of [housing stock](#) in the US features universal design elements such as no-step entrances, single-floor layout, and space designed to accommodate wheelchairs. Some developers create "senior communities" for people over a given age, ranging from housing co-ops to entire suburbs. Though these environments may address challenges of physical accessibility and social isolation, they can become "age bubbles" that isolate residents from a richer spectrum of community assets. The internet can, theoretically, connect the housebound to the world, but it comes with its own set of challenges, as digital design often features illegible text, tiny icons, and other [age-unfriendly features](#).

Museums have room for progress in becoming age-friendly as well. Though there is a widespread assumption that older individuals are among the most frequent visitors to museums, research shows the opposite to be true. In the US, [fewer than a quarter](#) of people age sixty or older visit a museum in any given year. (Older adults may



Similarly, in the broader population, adults over 50 are the *least* likely to visit museums.

So do the math. We are actually under-served, and with our growing population there are a lot more of us that could be museum-goers.

15% of population today are 65 or older

22% will be 65 or older by 2040



You've already got us. To get to all of *them*, you have to address *their* needs, and *their* concerns.



Such as:

- Multi-generational places for family time
- Places that encourage health and well-being
- Increasing social needs
- And more research with non-visitors to learn more about their needs and interests



(BTW, YOU NEED TO DO THAT TRANSFORMATIONAL STUFF TOO!)

Otherwise, you are missing a big opportunity to serve us and our communities more effectively. To really matter.



Data Stories are created for *The Data Museum*, where research conducted by Wilkening Consulting is released. Sources include:

- 2016 Wilkening Consulting broader population sampling
- 2017 Wilkening Consulting Annual Survey of Museum-Goers
- AAM's Museums and America 2017 (in partnership with Wilkening Consulting)
- US Census Bureau

*Data Stories are about regular museum-goers, who visit multiple museums each year and who responded to a survey about museum-goers. They do not represent casual museum visitors.

Visit TheDataMuseum.at.wilkeningconsulting.com/datamuseum for supporting context and data.

Data Story courtesy Wilkening Consulting. Graphics courtesy of Longnamedgirl Design.

seem to make up a larger share of the audience because those that do go to museums tend to be frequent visitors.) Many aspects of traditional museum design are [age-hostile](#), including the [lack of seating](#), sensory overload, and barriers to physical accessibility. Even museum programming can add to generational segregation, if older people are funneled only towards offerings (like passive lectures) that museum staff believe they will want.

More than [60 percent](#) of people over the age of fifty-five engage in some sort of volunteer activity, formal or informal, and the opportunity to volunteer is one of the major benefits nonprofits provide to society. Copious research [documents](#) that volunteering helps individuals expand their connections, feel good about themselves, improve their physical well-being, combat social isolation, reduce stress, and learn new skills—benefits that are particularly helpful in supporting healthy aging. [In museums](#), volunteers typically outnumber staff by a factor of six to one, performing a wide range of work including stocking the gift store, preparing research specimens, working as greeters, planning and running fundraising events, and giving tours. However, the benefits afforded by volunteering are often not equitably shared with a museum's community. Historically, the corps of museum volunteers have skewed towards older adults with the time, inclination, and financial resources that enable them to volunteer. As a result, their demographics typically mirror that of museum personnel (both staff and board)—which is often disproportionately white, well-educated, and relatively well-off. Volunteerism can exacerbate inequality if, as in many museums, it is only accessible to people who are already comparatively privileged.

The Response

In Society

There is growing consensus that the most robust solution to the isolation of aging is to bake better design into the landscape and infrastructure of towns and cities. In 2006, the World Health Organization introduced a [framework for age-friendly cities](#) that encompasses eight domains: health care, transportation, housing, social participation, outdoor space, respect and social inclusion, civic participation and employment, and communications and

information. As of 2017, over five hundred cities around the world had signed on, pledging to make their communities better places to grow older, and AARP has worked with WHO to extend this practice to 207 communities in the US. As is invariably true of inclusive design, creating age-friendly communities is good for everyone—increasing access to employment, arts and culture, critical services, community participation, and affordable housing. As [AARP points out](#), “Age-friendly communities foster economic growth, and make for happier, healthier residents of all ages.”

In Museums

Museums play many roles in making communities age-friendly as places of social connection, employment,

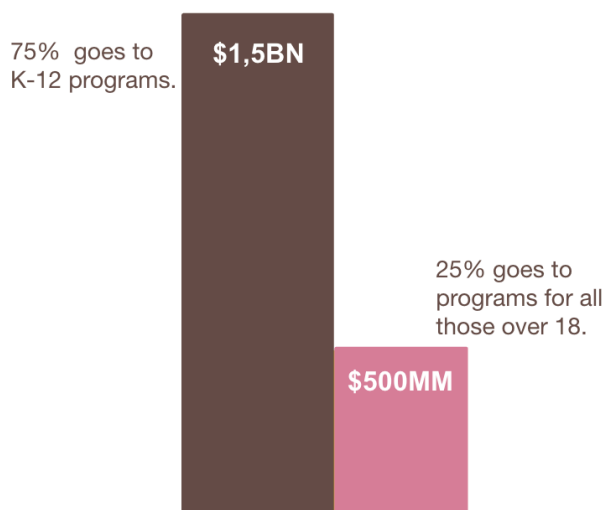
mental and physical engagement, and as influential forces in combatting ageist stereotypes. Since the early 2000s, museums have helped fuel the creative aging movement—using the power of arts engagement to foster healthy, active aging and improve the lives of older people. [Research](#) from the Seeding Vitality Arts initiative of Aroha Philanthropies documents that sustained, meaningful arts engagement supports healthy aging, increases the self-confidence and mental engagement of participants, and fosters social connections.

Museums also step in to meet the needs of the many people experiencing health-related challenges as they age. Programming specifically designed for [people with dementia](#) and their caregivers has been shown to reduce

Richard Walter, PhD, MIM’s curator for United States/Canada and Europe, takes participants through some of the popular instruments and musical styles of Ireland. Photo credit: © 2021 Musical Instrument Museum.



AMERICAN MUSEUMS SPEND \$2 BILLION A YEAR ON EDUCATION PROGRAMS, BUT...



Source: *Building the Future of Education* (AAM, 2014).

levels of depression and improve cognitive functioning and overall quality of life. Engaging with art through viewing, making, and movement can help people coping with Parkinson's disease or other debilitating illnesses to maintain their mobility and social connections.

Museums are also an important component of age-friendly communities regardless of the specific programs they offer. [Recent research](#) shows living in a community with various cultural resources confers a five-year advantage in cognitive age, with museums and similar cultural organizations providing the biggest boost to cognitive health. (However, that benefit is skewed by race, with Black populations experiencing less protective benefit from museums, pointing to the need to improve equitable access to museum space.)

The museum sector is still searching for a good model to reconcile the tensions that sometimes arise between volunteers (often older individuals) and paid staff. Some of the approaches being tried include creating a long runway (even a decade or more) to implement structural changes in volunteer programs, and including volunteers in the process of addressing DEAI and social justice goals. Others focus on creating an organizational culture,

backed up by appropriate procedures, that foster a volunteer corps that is diverse with respect to age, race, and other elements of personal identity.

Museum Examples

Fostering Age-Friendly Design

Recently, the [Design Museum](#) and the [Design Age Institute](#) launched a project to establish a new infrastructure for collaboration and co-creation around design and aging. [Designing a World for Everyone](#) will bring together researchers, designers, innovators, and policymakers to share the latest research and insights into how design can be used to transform public spaces, cities, and communities to support the aging population. Associated programming includes [The Wisdom Hour](#), a creative storytelling space celebrating positive stories of aging, facilitated by [This Age Thing](#). Over the course of a year, the project will place local community groups at the heart of the decision-making process, respond to the needs and concerns of underrepresented groups, and create social impact by removing and reducing barriers to participation.

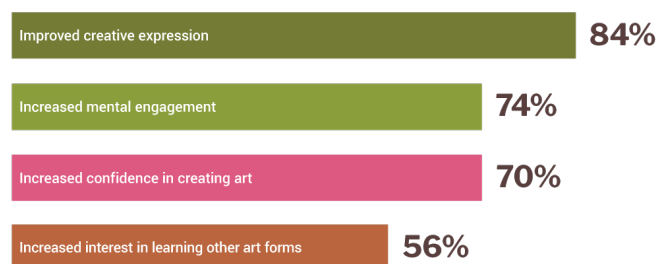
Cultivating Social Connection

During the COVID-19 pandemic, the [Musical Instrument Museum](#) (MIM) in Phoenix partnered with Arizona State University to create virtual programming for senior communities who could not visit the museum in person. The initiative produced two Senior Wellness video series, one for active seniors and one for people in memory care. Teams of music therapy students from ASU developed music therapy interventions that complement virtual tours of MIM's galleries, with a focus on physical skills (drumming, dancing, and other movement), cognitive skills such as attention and memory, and psychosocial components related to self-expression through music.

Creating Intergenerational Connections

The [Museum of Contemporary Art in Tucson's](#) Stay Gold program supports the intergenerational LGBTQ+ community, connecting generations through creativity and making and using contemporary art to explore relevance and meaning in the lives of the participants. In 2018, older adults from Stay Gold proposed creating an intergenerational version of the teen School of Drag performance. Local drag performers taught the workshops

Increased Creativity + Mental Engagement



Data from post-program surveys of participants in Seeding Vitality Arts programs between 2017 and 2019.

and a youth drag performer emceed the show. During the pandemic, museum staff adapted the Stay Gold programming to an [online format](#), offering artmaking prompts inspired by LGBTQ+ artists to maintain the connection so badly needed during this time of heightened isolation. This work was supported by a Seeding Vitality Arts in Museums grant from Aroha Philanthropies.

Cultivating Creative Aging

In 2016, Aroha Philanthropies launched a major multi-year initiative, Seeding Vitality Arts, to foster creative aging programs in a variety of settings, including museums. In 2018, the American Alliance of Museums partnered with Aroha Philanthropies to support a museum-specific cohort through [Seeding Vitality Arts in Museums](#) (SVA), providing twenty organizations with training and resources to develop and implement high-quality, intensive arts learning opportunities for older adults. The resulting programs included an Expressive Movement workshop at the [Anchorage Museum](#) building on Indigenous knowledge and life-ways; “Viva la Vida” artmaking at the [National Museum of Mexican Art](#); and traditional drumming and Mardi Gras beading at the [Louisiana State Museum](#). When the COVID-19 pandemic forced museums to close their doors, leaving elders at even greater risk of isolation, the SVA museums reinvented their work to engage with

participants over remote platforms. The [Olana State Historic Site](#), for example, remastered its plans for a place-based eight-session playwriting workshop. Kicking off with a virtual tour of the historic house, participants spent more time on research using digital documents, and seven professional actors read the finished student scripts over Zoom.

Meeting the Needs of Older Audiences

In 2014, noting that only 3 percent of older adults in New York City visit senior centers, the **Museum of Modern Art** created the [Prime Time Collective](#), a diverse group of adults ranging from sixty-one to ninety-four years old, to help identify and address financial, physical, informational, and attitudinal barriers to participation in museum programs. In the past decade, the museum has partnered with community organizations to offer specialized programming for LGBTQ+ older adults, individuals and caregivers coping with Parkinson’s or Alzheimer’s disease, and for teens and older adults to come together (for example, the 2016 program Act Your Age). In collaboration with the Martha Stewart Center for Living, the museum launched a “social prescription” program, in which physicians and social workers can write a prescription for art programming at MoMA. For housebound seniors, the museum offers online programming in partnership with the [Virtual Senior Center](#).

Supporting Older Adults with Dementia

Since 2010, the **Frye Art Museum** has partnered with the Alzheimer’s Association and the Seattle nonprofit Elderwise to develop and implement participatory arts experiences for people living with dementia and their care partners. In the ensuing decade, the museum has fostered a large community of practice by offering professional development to individuals engaged in similar work, and conducting research that adds to the growing body of literature documenting the contribution of arts engagements to healthy aging. One of the signature programs of this effort is the annual [Creative Aging Conference](#), an interdisciplinary exploration of topics related to art, creativity, and aging.

Explore This Future

Signal of Change:

A “signal of change” is a recent news story, report, or event describing a local innovation or disruption that has the potential to grow in scope and scale. Use this signal to spark your thinking about how museums might support age-friendly communities in the future.

Creating an Age-friendly City

In 2021, the [Purposeful Aging Los Angeles Initiative](#) (PALA) issued [recommendations](#) to advance its goal of making the Los Angeles region “the most age-friendly in the world.” One of the recommendations is to make all tourist attractions and buildings in the Los Angeles region age-friendly. “As new building construction occurs (and buildings are updated over time), it is critical that they provide welcoming, functional environments for all generations. This is especially important for stadiums, **museums**, studios, convention centers, major public facilities, and other tourist attractions that draw a high-volume of visitors, including older adults. The County and City will partner with these institutions/facilities, as well as the Los Angeles Tourism and Convention Board, USC School of Gerontology, and other partners to develop a **ranking system for major regional tourist attractions**. We anticipate generating awareness of, and attention around tourist facilities that have taken steps to become age-friendly.” (Emphasis added.)

Explore the implications of this signal:

Ask yourself, what if there was more of this in the future? What if it became the dominant paradigm? Write and discuss three potential implications of this signal:

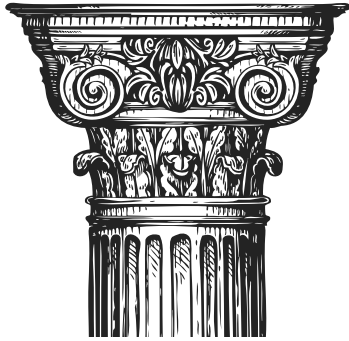
1. For yourself, your family, or friends
2. For your museum
3. For the United States



Retirees donate thousands of hours every year to museums to give back to their communities. Photo credit: Courtesy of Oakland Museum of California / Odell Hussey Photography.

Additional Resources

- [Museums and Creative Aging: A Healthful Partnership](#) (AAM, 2021). This report, authored by Marjorie Schwarzer, opens with an overview of aging and ageism in our country, documents actions being taken to foster positive aging, profiles the work of museums providing creative aging programming, and shares lessons learned from the Seeding Vitality Arts in Museums initiative, funded by Aroha Philanthropies, now known as E.A. Michelson Philanthropy.
- [Age-Friendly Standards for Cultural Organizations](#) (The Family Arts Campaign, 2017). These standards are designed to help cultural organizations provide a welcoming and positive experience for everyone, regardless of their age, and to facilitate intergenerational interactions.
- [Global report on ageism](#) (World Health Organization, 2021). This report outlines a framework for action to reduce ageism for use by governments, the private sector, and civil society organizations, and includes a toolkit for the Global Campaign to Combat Ageism.
- The [Old School Anti-Ageism Clearinghouse](#) is an online compendium of free resources to educate people about ageism and help dismantle it. It includes information about and links to blogs, books, articles, videos, speakers, and other tools (workshops, handouts, curricula, etc.) accessible to the general public.



Pillar Three:

Mental Health for All

The United Nations' [Sustainable Development Goals](#) identify “good health and well-being” as critical elements in creating a peaceful and prosperous future. Within that broad mandate, the need to foster mental health is particularly acute. The stigma attached to mental illness inflicts additional damage through bias and exclusion, and if people do seek help, they may face financial, geographic, or social barriers to accessing care. COVID-19 may amplify this challenge in the coming decades, with long-term impacts including increased rates of depression, anxiety, and PTSD. A deep body of research has already documented the role museums can play in a resilient and equitable infrastructure of health writ large. The stress test of the COVID-19 pandemic showed that museums can be essential partners in a network of support for mental health as well.

The Challenge

In Western society, the theory and practice of mental health has been shaped by history, philosophy, and traditions that view the mind and body as separate entities. Only recently have we begun to recognize the duality of body and mind as false, and to acknowledge that people experiencing mental illnesses should receive the same respect, compassion, and access to care as people coping with physical challenges.

This welcome step toward a rational and caring approach to mental illness comes none too soon. Mental health has been [declining in the US](#) since the early twentieth century. Some research suggests one culprit is a cultural shift from intrinsic to extrinsic goals. Other contributing factors include the cumulative effects of racism and discrimination, the rising number of people living alone, and (especially for teens) the dark side of social media, including

“What mental health needs is more sunlight, more candor, and more unashamed conversation.”

—Glenn Close, actress

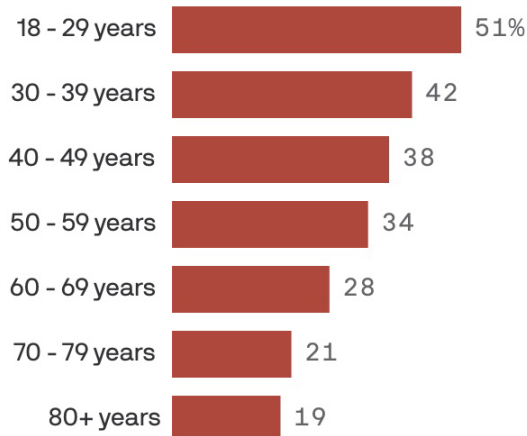
Critical Questions for Museums

- What groups, on the museum's staff and in its communities, are at high risk from stress, isolation, and other factors that can damage mental health?
- How can museums combat the stigma, prejudice, and discrimination attached to mental illness?
- How can museums foster mental health among their own staff and volunteers, create a healthy work culture, and support people in managing mental illness for themselves and their families?
- How can museums equip their staffs with the training, tools, and support they need to address the topic of mental health safely and effectively?
- How can museums play a meaningful role in the network of support and services that address mental health in their community?

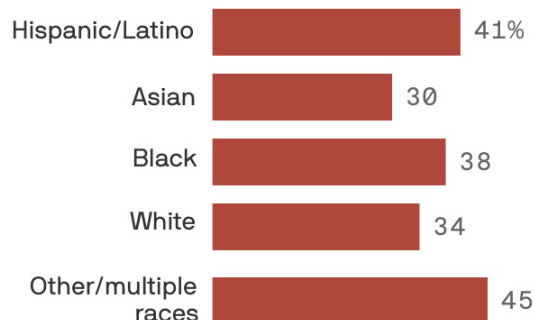
Percentage of population who have reported symptoms of anxiety or depressive disorder

Survey of U.S. adults conducted between April 23, 2020, and October 11, 2021

By age group



By race/ethnicity



Data: CDC; Note: Asian, Black, and white respondents identified as non-Hispanic, and are of a single race. Chart: Jacque Schrag/Axios.

bullying and body-shaming. Whatever the cause, by 2018, one in five Americans were experiencing challenges to their mental health, and one in twenty faced serious mental illness.

Then came the additional stress, isolation, and fear induced by the COVID-19 pandemic. In 2021, one in every three Americans reported they were [suffering from depression](#), and [anxiety and depression severity scores](#) were one and a half to two times higher than they were in 2019. The pandemic's effects on mental health were particularly severe for people disadvantaged by or excluded from existing networks of support, including [women](#); people who are unmarried; low-income households; children age eleven to seventeen; LGBTQ+ youth; people who identify as Black, Native American, and Asian or Pacific Islander; and people already experiencing mental illness. Medical historians tracking mental health in the wake of [other large-scale disasters](#), including the Chernobyl nuclear accident in Ukraine (1986), the SARS pandemic (2003), and Hurricane Katrina (2005) have found long-term increases in the rates of post-traumatic stress disorder, depression, obsessive-compulsive disorder, and other mental health problems. The COVID-19 pandemic will likely have a

similar long-term impact on mental health. This damage to individuals translates into damage for critical systems as well. The past two years have been particularly hard on front-line workers, with one result being that many essential personnel, including [health care workers](#) and [teachers](#), may leave their professions, further weakening our ability to support community needs.

Over the course of the pandemic, as museums were forced to close their doors to the public, many museum workers experienced layoffs, furloughs, and financial stress. Others scrambled to move their work online or fill different roles. Reopening brought its own challenges, including increased workloads and the stress of enforcing safety policies with occasionally hostile or combative patrons. The results of a [survey](#) conducted by the Alliance in March 2021 reflected the toll this has taken on people working in the museum sector, with respondents rating the pandemic's effect on their mental health and well-being at an average of 6.6 on a scale of zero to ten (ten being the worst). Fifty-seven percent of respondents were worried about burnout, and, perhaps in consequence, fewer than half were confident they would be working in the sector in three years.

The Response

In Society

Pre-pandemic, America was making slow but measurable progress in improving attitudes towards and support for people experiencing mental illness. Many businesses are making voluntary improvements to policies, procedures, and benefits, for example, by offering mental health days or explicitly defining “sick leave” to include time taken to tend to mental health. Increasingly, employees are encouraged or required to use all their vacation time. And human resources staff have learned that it isn’t enough to simply offer mental health support through an employee assistance program; it’s critical to actively cultivate the use of these services by, for example, educating staff on the benefits, simplifying the enrollment process, and providing assurance that personal information is kept private.

We are making progress at the federal level as well. The Mental Health Parity Act of 1996 and the Mental Health Parity and Addiction Equity Act of 2008 required large-group employer insurance plans to cover mental health services at the same level as medical and surgical interventions. Still, many people fell through the holes of existing safety nets. When the [Affordable Care Act](#) (ACA) passed in 2010, more than forty-eight million people in the US were uninsured, and many individual and small-group plans did not cover mental health treatment at all. ACA has expanded coverage and access to mental health care and seems to be improving outcomes.

But ACA cannot address some fundamental barriers to mental health treatment, including the stigma attached to mental illness and lack of accessible treatment in some communities. Paradoxically, by making things worse, the COVID-19 pandemic may have sparked progress on those fronts, in particular by accelerating the [adoption of telemedicine](#) by practitioners and the public. Between January 2020 and February 2021, mental health televisits [increased by 6,500 percent](#). (That is not a typo.) In addition to connecting to a medical practitioner for a traditional visit over the internet, people in need of counseling can now choose from a burgeoning number of [mental health apps](#) to access therapy and cope with stress, anxiety, addiction, eating disorders, or obsessive-compulsive disorder. Early assessment suggests



Sit, Stay, Heal brings therapy dogs to the museum setting.
Photo credit: Courtesy of Museum of Fine Arts, St. Petersburg.

these digital interventions can be effective and reach people without access to traditional care.

The pandemic may provoke a profound cultural shift as well. The past two years have brought conversations about mental illness out into the open in daily conversation, the press, and social media, as people struggled with their own mental health or to support friends and family facing similar challenges. It is possible that this mass shared experience will have a long-term effect for the better, helping reduce the shame, ostracism, discrimination, and marginalization attached to mental illness. Our national challenge is to build on these advances, making permanent changes that support remote access to appropriate care, elevating the importance of mental health, and destigmatizing mental illness.

In Museums

A large body of research documents that engaging with art (through viewing, making, or museum visits) has tangible psychological benefits, reducing symptoms of anxiety and depression as well as reducing social isolation and loneliness. Building on this work, any museum can find ways to explore and illuminate the experience of mental health in ways consonant with their missions.

Science museums often tackle the topic head-on, as the [Museum of Science, Boston](#), and the [Science Museum of Minnesota](#) did in recent major exhibitions. Historic houses and sites, of which there are an estimated eighteen thousand in the US, also have a compelling opportunity to address the topic, because many of the people they memorialize and interpret faced mental health

challenges. (To name just a few from what would be a very long list: Abraham and Mary Lincoln, Nikola Tesla, Eugene O'Neill, and Winston Churchill). This provides an opportunity to surface and normalize the experience of mental illness, even though that conversation may not be the content visitors expect. Staff may need to navigate public expectations as they reframe how a site interprets the history and current impact of mental health.

Any museum can use the human element behind its topic—art, science, music, literature, natural history, or other—to address mental health in some part of its interpretation. Simply acknowledging the fact of mental illness as an important component in the lives of notable people can help to destigmatize the topic and recognize a range of conditions as part of the human experience.

A Framework for Action

Inward Action

To create a healthy work environment inside the museum, museums may want to:

- Create a [work culture](#) that does not stigmatize mental illness. This includes paying attention to the language used in the workplace, training people to recognize and avoid inappropriate or disrespectful terminology.
- Teach managers how to provide appropriate support and assist the people they supervise in accessing help.
- Have leadership set an example by being open and honest about any challenges they themselves face, and by creating a safe space for others to speak up about their needs.
- Use regularly scheduled surveys to gauge levels of stress among staff and detect early warning signs of burnout.
- Offer staff training around mental health, helping everyone to recognize signals of colleagues who may be in distress, offer appropriate non-judgmental support, and help people to access assistance.
- Implement employment practices that foster stability and resilience. Review the security of employment, e.g., the use of short-term contracts or part-time work that does not include benefits, which can add significantly to employee stress and disproportionately impact front-line workers.

Outward Action

To foster mental health, support people experiencing mental illness, and combat stigma, museums may want to:

- Develop relationships with community resources and agencies, such as health and counseling centers, hospitals, and academic research programs, to explore how the museum can learn from and contribute to their work.
- Familiarize themselves with the research on how arts engagement can foster mental health and assess how to integrate such engagement into their exhibits and programming.
- Provide training for staff and volunteers to support their engagement in the topic of mental health, including how to interface with the public around sensitive and potentially triggering issues and how to manage the personal impact of this work.
- Design safe spaces for the public to explore challenging and potentially uncomfortable or disturbing subject matters. This might include warning visitors about content, providing them with choices to engage or not engage, and providing places designed to support reflection and processing of difficult emotions.
- Consider how the museum will continue to support communities and individuals who collaborate with your organization around mental health. Think about what any given project will produce—information, resources, relationships, etc.—that will continue to benefit these groups after an exhibit or program concludes.



Visitors on a Mood Tour at the Museum of Fine Arts, St. Petersburg. Richard Hall, 1860-1942, *Gathering at Church Entrance*, 1884, Oil on canvas, Gift of Simon Rosen. Photo credit: Courtesy of Museum of Fine Arts, St. Petersburg.

Sometimes museums can also help with struggles that are not just individual, but traumas shared by a community. Many museums have stepped forward to take on this role in the wake of disasters, for example, by fielding teams for rapid response collecting to help the community remember and process what has happened. Some museums are specifically created to help communities memorialize, contextualize, and process the impact of tragic events. These museums often take a trauma-informed approach to their exhibit design and offer programming to support the healing of their communities.

While museums contribute unique strengths to the infrastructure of mental health, they rarely have staff who are experts in dealing with mental illness or in communicating around a topic that can be very sensitive and upsetting. For this reason, museums that address mental health skillfully and powerfully often draw on the expertise of hospitals, university research departments, and social service organizations.

During the pandemic, museums had to look to the safety and wellbeing of their own staffs to create a stable base from which to help their communities. The same AAM research referenced above that explored the damage inflicted by the pandemic on people working in the museum sector also documented what museums were doing to care for their employees. Some of the actions most appreciated by staff included providing clear communications about information and decisions, offering a flexible work schedule, and including staff in decision-making. These lessons can help museums lay the foundation for a healthy work culture in post-pandemic times as well.

During the COVID crisis, museums also looked beyond their walls to support the mental health of their communities in many creative and generous ways. Some created outdoor art installations to boost the spirits of people in nursing homes and hospitals. Others provided online art therapy programs or used their collections and connections to offer mindfulness and meditation experiences online or via podcasts. The success of these programs may ensure they continue to be offered even as the pandemic fades.

Museum Examples

Helping Communities Process Shared Trauma

After the Champlain Towers collapse in 2021, [HistoryMiami](#) staff gathered and preserved hundreds of letters, artworks, and personal items placed by friends and families of victims on an impromptu “Wall of Hope” near the site of the disaster. The [Orange County Regional History Center](#) (OCRHC) filled a similar role after the Pulse Nightclub mass murders in 2016, creating the One Orlando Collection from thousands of objects left at public memorials or donated to the museum. The [Oklahoma City National Memorial Museum](#), the [9/11 Memorial and Museum](#), and—picking up on the work begun by OCRHC—the [National Pulse Memorial & Museum](#) are all dedicated to the long-term work of helping their communities memorialize and process the impact of local tragedies.

Creating Networks of Collaboration

The [National Museum of Mental Health](#) project is a “museum without walls” that works with artists, curators, mental health professionals, and people with lived

experience of mental illness to create touring exhibits, as well as collaborating with community, local, and national not-for-profit, for-profit, governmental, and educational entities interested in creating positive mental health outcomes.

Making Art Therapy Accessible Online

During COVID lockdowns in Ontario, the [Art Gallery of Windsor](#) partnered with the local branch of the Canadian Mental Health Association to offer online art therapy programs to support mental health and wellbeing. The [National Museum of Qatar](#) worked with art psychotherapists, psychiatrists, and physicians to create and pilot a telehealth art therapy program for children to counteract the effects of social distancing and isolation. [The Tampa Museum of Art](#) provides both virtual and in-person sessions for Connections, its free mental healthcare community art engagement program.

Partnering with Community Health Organizations

In 2015, the [Tate Modern](#) collaborated with a range of mental health organizations, including arts networks, art



The travelling exhibit *Mental Health: Mind Matters* creates a safe space for important conversations about mental illness. Photo credit: Courtesy of the Science Museum of Minnesota.

studios, and community service providers, to produce workshops and installations celebrating positive mental health to mark World Mental Health Day. In 2017, [Utica Children's Museum](#) merged with the ICAN Family Resource Center, a nonprofit dedicated to providing "individualized and non-traditional services and care to the highest risk individuals and families with social, emotional, mental health and behavioral challenges." ICAN is in the process of building a new facility that will house the museum together with family services, using trauma-informed approaches to design exhibits and programs to create a welcoming space for all children. Some of the staff at the newly reopened museum will have degrees in social work and will draw on ICAN's clinicians and social workers for additional training.

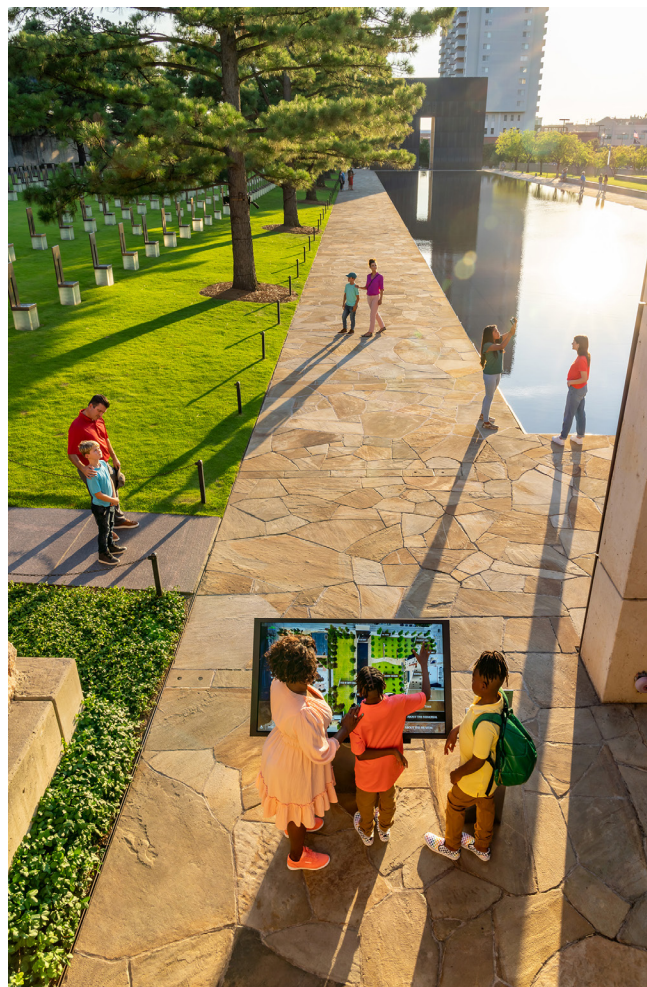
Addressing Mental Illness Through the Lens of Mission

In 2017, the **National Building Museum** opened [Architecture of an Asylum](#), an exhibition exploring the evolution of the theory and practice of caring for the mentally ill through an examination of the history of St. Elizabeth's Hospital in Washington, DC. The exhibit traced how reformers such as Dorothea Dix helped foster the development of a more humane and compassionate approach towards caring for people with mental illness. In 2020, **Kew Palace** opened [George III: The Mind Behind the Myth](#), an exhibit that used historic and contemporary displays to challenge contemporary attitudes towards mental ill health. Members of the public contributed objects and recorded videos documenting their own personal mental health stories. Working with the Campaign Against Living Miserably (CALM), a suicide prevention charity, Kew staff provided items, including beer coasters and postcards, designed to support public conversation, and trained staff on how to talk about mental health and suicide in a museum setting.

Explore the Future

Signal of Change:

A "signal of change" is a recent news story, report, or



"We come here to remember those who were killed, those who survived and those changed forever. May all who leave here know the impact of violence. May this memorial offer comfort, strength, peace, hope and serenity." — Mission statement of the Oklahoma City National Memorial & Museum. Photo credit: Courtesy of the Oklahoma City National Memorial & Museum.

event describing a local innovation or disruption that has the potential to grow in scope and scale. Use this signal to catalyze your thinking about how museums might support mental health in the future.

[Brussels doctors to prescribe museum visits for Covid stress](#)

The Guardian, September 2, 2021

Doctors in Brussels will be able to prescribe museum visits as part of a three-month trial designed to rebuild mental health amid the COVID pandemic. Patients being treated for stress at Brugmann hospital, one of the largest in the Belgian capital, will be offered free visits to five public museums in the city, covering subjects from

fashion to sewage. The results of the pilot will be published next year, with the intention that the initiative can be rolled out further if successful in alleviating symptoms of burnout and other forms of psychiatric distress. The alderman responsible for culture in Brussels said she had been inspired by a scheme in Quebec, Canada, where doctors can prescribe up to fifty museum visits a year to patients. In the Brussels pilot, accompanied visits will be prescribed to individuals and groups of in-patients at Brugmann hospital.

Implications:

Ask yourself, what if there was more of this in the future? What if it became the dominant paradigm? Write and discuss three potential implications of this signal:

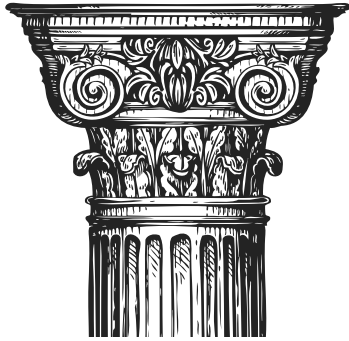
1. For yourself and your family and friends
2. For your museum
3. For your community



In the years since the 2016 mass shooting at Pulse nightclub, the site has become an informal memorial to the lives lost. Now, it will become a permanent memorial and museum, following a long process of community consensus-building. Image credit: Coldefy & Associés with RDAI, Courtesy of onePULSE Foundation.

Additional Resources

- [The Recovery Room](#), created by Rachel Mackay, Manager of the History Royal Palaces properties within the Royal Botanic Gardens Kew, shares resources related to working with staff and the public around mental health. These include [Our Stories, Our Visitors, Our Selves: a model for looking after front-facing teams when telling challenging stories](#), [10 Tools for Supporting Front of House \[Staff\]](#), and a video on [mental health and front-of-house staff](#).
- [The Culture, Health & Wellbeing Alliance](#), a free membership organization based in the UK, provides information, training, and peer support. Its resources include toolkits, fact sheets, case studies, research, and evaluation.
- [Contemporary Collecting: and ethical toolkit for museum practitioners](#) (London Transport Museum, 2020). This toolkit explores some of the ethical judgments that contemporary collectors make and offers case studies, reflection, guides, and further information. One of the chapters addresses the issues inherent in collecting around topics that might prompt or relate to a person's experience with trauma or distress.



Pillar Four:

Emergency Response in the Face of Disasters

America's communities face a multitude of threats in coming decades, including severe storms, cold and heat emergencies, power outages, civil unrest, and resulting disruptions to essential services and supply chains. The systems we've created to respond to these emergencies are fragmented and fragile, and often prioritize the protection and repair of privileged communities. It will take a "[whole-of-society](#)" approach, integrating for-profit, nonprofit, and government entities, to create a robust and equitable system to prepare for and respond to disasters and take steps to reduce future risk. Many of these risks are driven by climate change, and museums can use their nonpartisan credibility and their communications skills to build consensus on climate policy. Through how they do their work and deploy their resources, museums can be an integral part of a collective approach to minimizing the risk of disasters and aiding their communities when disaster does strike.

The Challenge

Communities have always been at risk from natural and man-made disasters, but we are entering an era in which many of these risks will be radically amplified. Much of this shift is being driven by climate change, which is intensifying temperature extremes, thereby causing flood and drought and making severe weather events more frequent. Heat waves are already the leading cause of weather-related deaths in the US, and extreme heat events could increase substantially by the end of the century. Warmer, drier conditions and a longer fire season are projected to result in a 30 percent increase in the areas burned by lightning-sparked [wildfires](#) between 2011 and 2060. Climate change also brings climate instability, with some states experiencing extreme precipitation

"There's nothing like a jolly good disaster to get people to start doing something."

—Prince Charles

Critical Questions for Museums

- How can museums prepare themselves for an era of rising risk?
- How can museums, having secured their own safety in the face of these threats, extend this protection to their community, particularly groups that are neglected by current systems of disaster management?
- How can museums combat climate change and reduce its effect as a [threat multiplier](#) before, during, and after disasters?
- How can museums weave themselves into an integrated network of resilience and response?
- What role can museums play in helping their communities understand the changing landscape of risk and create long-term plans for adaptation?

while others bake in drought. Given the global lack of progress in slowing the climate crisis, climate risk is going to continue to rise in the coming century.

Because climate change is driven by anthropogenic forces, it seems misleading to call flood, storm, and fire “natural,” in contrast to “man-made,” disasters. Be that as it may, the US is experiencing a rise in civil disruptions as well, with 2020 marking [record levels](#) of violent mass demonstrations and rioting. Given our country’s level of political polarization, and the fact that a third or more of citizens regardless of political identity believe that [violence is justified](#) to achieve political goals, this trend is unlikely to slow or reverse anytime soon.

In fact, the rising risks of climate events and civil violence are intertwined. The damage from climate disasters falls disproportionately on poor communities and communities of color, while federal disaster spending [favors the wealthy and white](#). (Indeed, disasters have been shown to [exacerbate wealth inequality](#).) Cities are notorious heat islands, which in turn contributes to heat-related illness and death. [Communities of color](#) experience the highest temperatures because they have fewer public amenities that lower temperatures, such as trees, landscaped medians, and parks, and are less likely to have air conditioning. The correlation between race and temperature is so strong that historic maps of [redlined neighborhoods](#) mirror contemporary urban heat maps. These inequities, the social movements they spark, and the backlash

against calls for reform add fuel to cultural and political tensions that can lead to violence.

Over the next century, climate change will threaten the very existence of some communities. The residents of [Isle de Jean Charles](#), a largely Native American community in the bayous of Louisiana, were tagged as the “first US climate refugees” when the tribe lost 98 percent of its land to rising sea levels. They will not be the last. Climatologists project that, due to flooding and extreme heat, some major cities, including Miami, New Orleans, and Chicago, may become “[unbearable for humans](#)” by 2100. That doesn’t mean humans, being both resilient and stubborn, will abandon their homes, but it does dramatize the level of risk communities face, especially vulnerable communities without sufficient access to protection, relief, or ability to evacuate.

The Response

In Society

In 2020, the US experienced [twenty-two separate billion-dollar weather and climate disasters](#), shattering previous annual records. This roster of destruction included seven disasters linked to tropical cyclones, thirteen linked to severe storms, one linked to drought, and one linked to wildfires. Together, these events inflicted \$95 billion in damages. We don’t, and arguably can’t, maintain a large enough cadre of government workers devoted to disaster response to cope with this level of impact. Instead,

As the country strengthens its disaster response, we also need to reduce inequity and address some of the concerns that underlie social unrest. Some strategies for mustering emergency responders create their own harm. For instance, many states depend on prisoners to supplement their professional firefighting crews, paying them nominal wages and, because Black people are incarcerated in disproportionate numbers, adding to the racial inequity of climate-related risk. (In [California](#), pre-pandemic, inmates made up a third of the wildfire-fighting personnel.) Nationally, we’ve created a perverse system of incentives that lead agencies charged with protecting property and providing relief to maximize their economic impact by prioritizing high-value properties. The Federal Emergency Management Agency’s (FEMA) National Advisory Council has [called on the agency to reform programs that favor victims who are wealthy and own property \(and are more likely to be white\)](#). However, FEMA has yet to implement any of the council’s recommendations.



In February 2021, the International Museum of Art & Science converted itself into a daytime warming center for residents of McAllen, Texas, who lost heat, power, and water during Winter Storm Uri. Photo credit: Courtesy of Vanessa Vasquez, @homeschoolme.

the US relies on networks of response, using reservoirs of paid and volunteer labor to supplement the standing workforce of emergency responders. The [American Red Cross](#) draws on a network of three hundred thousand volunteers to respond to more than sixty thousand disasters every year. In California, which ranks second in the list of [states most likely to experience natural disasters](#), all state employees can be called up and reassigned for emergency response.

Planners increasingly look to systems-level efforts to buffer the risks of climate disasters, integrating protection into the design of neighborhoods and cities. Over time the focus of flood control has expanded from hard engineering (i.e., levees, dams, and reservoirs) to encompass “soft” strategies such as zoning, forestation, and controlled flooding. Cities are setting goals for [tree canopy coverage](#) and [green space](#), including parks and gardens, to lower city temperatures. State and local governments are encouraging or mandating xeriscaping (landscaping

with plants that need little or no water), even paying residents to [rip out their lawns](#), to adapt to drought. More and more often, mitigation is being seamlessly integrated into urban design, for example, in the form of a [skate-park-cum-urban-sculpture](#) in Denver that doubles as a “bioswale” that soaks up stormwater and prevents flooding.

The sheer cost, both human and financial, of responding to climate disasters underscores the wisdom of investing in the largest scale of prevention—slowing the pace of climate change and hopefully staving off the worst-case projections. The US [recently committed](#) to cutting its greenhouse gas emissions by 50 percent or more (compared to 2005 levels) by 2030, and reaching a net-zero emissions economy no later than 2050. While federal action lagged under the previous administration, [state and tribal governments](#) stepped in to take action. Currently fifteen states and territories are implementing plans for a 100 percent clean energy future, and more

A Framework for Action

Inward Action

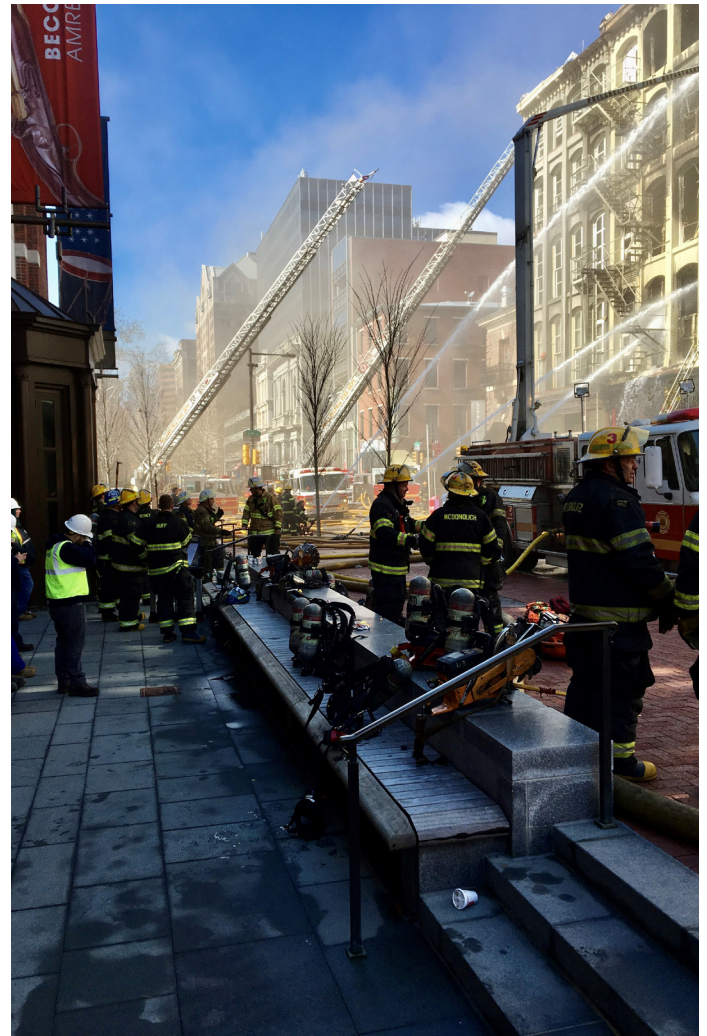
To incorporate community risk mitigation and disaster response into their internal planning, museums can:

- Identify existing assessments of local climate risk, or if there are none, advocate for their development.
- Create risk management and disaster response relationships before the next disaster strikes and maintain them between crises.
- Incorporate design elements into renovations or master planning that help the museum's property buffer the community against risks such as flood, heat, and fire.
- Include community needs in disaster planning and emergency response plans.
- Create policies and procedures for deploying staff as needed (at the level of community, city, or state) as part of larger relief and response efforts.

Outward Action

To become a formal part of our infrastructure of disaster response, museums can:

- Integrate the museum into a larger network of responders, for example by connecting with local and state emergency managers to incorporate the museum and its resources into government or agency response plans.
- Identify the biggest risks to the museum's community and assess how the museum can help with mitigation and relief. In particular, consider how the museum might make disaster preparedness and response more equitable by addressing the needs of communities marginalized by current systems.
- Create and disseminate educational materials that raise public awareness of risk and train people on how to prepare for disasters.
- Help community leaders and residents engage in long-term thinking about how they will respond to a changing landscape of risk. Collaborate with city planners, architects, artists, scientists, and policy-makers to create scenarios, bring them to life via design charrettes and exhibits, and invite the public to use these designs to help envision the future they want to build for their community.



In February 2018, the Museum of the American Revolution sheltered and fed neighbors displaced by a four-alarm fire. Photo credit: ZeeAnn Mason, Museum of the American Revolution.

than fifty tribal climate action plans are in place in North America. Pushed by investors, consumers, employees, activists, and in some cases the courts, a growing number of for-profit companies have [pledged](#) to reduce their emissions (though it can be [difficult to parse](#) which commitments are real and which are “[carbonwashing](#)”). And while focusing on climate-friendly steps individuals can take diverts attention from the critical responsibility of government and industry, it is certainly true that individuals, companies, industry, and government need to be “[all-in](#)” [together](#) if we are to slow the pace of climate disaster.

Even if our united climate action does succeed in steering us towards the best outcome that is still possible, we need to plan for what we can't



Last year, **Brianna Correa**, a guest services cashier from the San Bernardino County Museum, found herself using her museum pro skills to provide support and morale boosts to overworked ICU nurses when California government museum workers were deployed into critical emergency roles. **She shares with us it what it was like.**



change in the face of escalating natural disasters, up to and including [managed retreat](#) from areas that are no longer habitable. States, cities, and communities are making plans for how to adapt to a future of drought, heat, and rising sea levels. Governments and insurance providers are reexamining the policies and subsidies that have masked the risk of living in floodplains and on seaside properties. Many coastal communities are using federal and state funding to raise homes up above flood level, buy out homeowners entirely, or swap public open spaces in the interior for private land on the shore. In the future, more communities may [follow the lead of Valmeyer, Illinois](#), which moved the whole town two miles farther away from the flood risk posed by the Mississippi River. The residents of Valmeyer were overwhelmingly white and well-off. How can we ensure that communities that are less white and less wealthy are able to “manage retreat” as well, while keeping their culture and identities intact?

In Museums

As public-facing organizations, many of which are devoted to the long-term care of heritage, museums are uniquely positioned to help the public in times of

emergency. By expanding their attention from inside the organization to the outside world, museums' disaster response can encompass their community as well. Most museums devote considerable resources to climate control, preadapting them to act as cooling stations for their neighbors during heat emergencies. Many museums in high-risk areas have armored their buildings and property to withstand earthquakes, fire, and flood. Through their own disaster planning, they may have formed connections with local emergency responders. These preparations put them in an excellent position to offer refuge and assistance to their community when disaster strikes—whether that takes the form of opening their galleries and classrooms to provide safe space, serving as a staging area for emergency responders, or helping to distribute relief.

Some museums are, by virtue of their governance, part of a larger network of response, for example, within a university or a state. Others voluntarily integrate themselves into local systems, sharing staff whose knowledge, training, and skills can be adapted to disaster response. Even more step in as need arises, in response to local disasters ranging from fire and flood to tragedies resulting from violence and hate.

A growing number of museums are reshaping their properties to function as part of a larger buffer of protection for their community's green infrastructure: creating plantings that slow runoff, cache water, and reduce flooding; designing green, cooling areas in urban landscapes; or xeriscaping their grounds to reduce water use. The impact of these efforts is magnified through museum education, showing individuals and other businesses how they can follow suit.

One of the most powerful things museums can do to help society tackle systems-level change is to foster public understanding about climate science and risk. As has been widely recognized at the international level, [museums are key sites for climate education, engagement, action, and research](#). Though climate change has become a highly partisan issue in the US, museums enjoy strong, nonpartisan trust on the part of the American public and can use that trust, together with their skills



Photo credit: Courtesy of the Louisiana Children's Museum.

at communicating science and fostering conversation, to create a common basis for a national consensus on climate policy.

Museum Examples

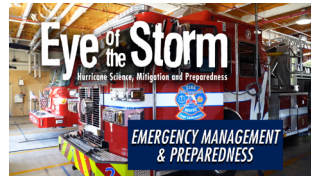
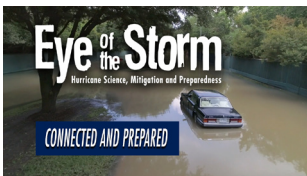
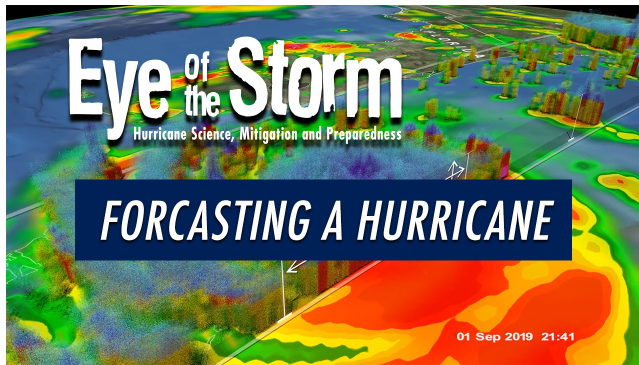
Responding to Immediate Needs

In the early morning hours of Sunday, February 18, 2018, a four-alarm fire broke out in an apartment building across the street from the newly opened [Museum of the American Revolution](#) in Philadelphia. As the blaze escalated, residents and guests from an adjacent hotel evacuated into freezing cold temperatures. At the request of the fire chief, the museum's operations team opened the museum to dozens of displaced neighbors, offering warmth, restrooms, and water. When it became clear the museum would be closed to the public that day, the catering team provided evacuees with a sumptuous brunch, prepared for a now-cancelled event. In the following weeks, the museum collected donations from visitors eager to provide aid, as well as supplying workspace for emergency personnel and staff of the shuttered hotel.

In February 2021, oscillating pressure patterns in the Arctic created a record-breaking “[deep freeze](#)” in Texas and plunged the state into darkness. As the power grid faltered, nearly three million families were left without heat, and as pipes burst, many lacked water as well. In McAllen, the [International Museum of Art and Culture](#) quickly turned itself into a daytime warming center, waiving admission for three days and setting up socially distanced stations for people to work, study, and charge their electronic devices. Staff treated visitors to hot cocoa, led tours, and trotted out the museum's Animal Ambassadors to entertain the children.

Resilient Design as Part of Community Buffering

Following Hurricane Katrina, [the Louisiana Children's Museum in New Orleans](#) reimagined its mission and purpose to meeting the needs of its recovering community. Its new campus, which opened in 2019, models resilient design and contributes to community flood control. The site includes a lagoon edged with native plantings that can retain up to three feet of water from a storm event, reducing flooding in the surrounding neighborhood.



Courtesy of the Museum of Discovery and Science, Ft. Lauderdale.

In 2018, the [Charles H. Wright Museum](#) of African American History in Detroit partnered with the **Michigan Science Center** to launch the [Ripple of Impact: Museum Stormwater Initiative](#) to manage stormwater diversion in the neighborhood that unites their campuses. Through the use of bioswales, urban garden space, and permeable paving, the project reduces runoff, mitigates flooding, and prevents pollution of the Detroit River.

Integrating with Networks of Response

In California, the state government code stipulates that all public employees—including staff of state or county museums—can be called up as disaster service workers in response to “natural, man-made, or war-caused emergencies.” During the COVID-19 pandemic, much of the staff of the [San Bernardino County Museum](#) was reassigned to temporary roles in the community, while the museum itself was closed to the public. Their assignments included working at a regional medical center as contact tracers and supporting the November 2020 election as poll workers and drivers.

The [Wisconsin Historical Society](#) (WHS) set a voluntary goal of supporting agencies at the forefront of the state’s pandemic response. Together with employees of the Wisconsin Department of Workforce Development and the Department of Health Services, more than fifty WHS staff—including archivists, registrars, curators, cartographers, and librarians—formed a joint COVID Response Team. One staff member applied her logistics skills to helping coordinate the distribution of supplies for

testing. The director of one WHS site co-led an Equity in Testing workgroup dedicated to ensuring that Indigenous communities had access to testing and support. WHS’s Cultural Cartographer used his training to build a data model and mapping system to track COVID hotspots for the state.

Public Education

Communities across Florida are at risk from hurricanes from June through November each year, and these storms are growing in frequency and intensity. In 2020, the state experienced a record high of thirty named storms. With a large proportion of the population at risk, it is essential to provide accurate, timely, and trusted information about how to prepare for hurricanes. The **Museum of Discovery and Science** in Ft. Lauderdale works with the International Hurricane Research Center at Florida International University, Broward County Emergency Management Division, and the City of Fort Lauderdale Domestic Preparedness and Emergency Management Bureau to present an annual “Eye of the Storm” hurricane preparedness program, free to the public. In 2020, during pandemic shutdown, the event went virtual, resulting in a twelve-episode [video series](#) available on YouTube, Facebook, and the museum’s own website.

Promoting Long-Term Thinking

From 2009 to 2010, **MoMA PS1** in New York City hosted an architects-in-residence program to [re-envision the coastlines surrounding New York Harbor](#), prioritizing “soft” resilient infrastructure to mitigate the risk from sea level rise. In 2010, the **Museum of Modern Art** presented the resulting designs from five interdisciplinary teams in an associated exhibition, *Rising Currents: Projects for New York’s Waterfront*. The proposed solutions encompassed building spongelike sidewalks, suspending housing over the water, and turning the Gowanus canal into an oyster hatchery.

In 2016, [Catalyzing Newport](#), guided by cultural organizations including the **Newport Art Museum**, **Rhode Island Historical Society**, the **International Tennis Hall of Fame**, and the **Preservation Society of Newport County**, commissioned [Mayor’s Office 2061](#), a pop-up installation imagining what it might be like to live

and work in Newport, Rhode Island, in the future. Working from a scenario written by futurist Jake Dunagan, designers worked with local museum staff, artists, and students to help the public envision the effects of rising sea levels on their community.

Explore the Future

Signal of Change:

A “signal of change” is a recent news story, report, or event describing a local innovation or disruption that has the potential to grow in scope and scale. Use this signal to catalyze your thinking about how museums might play a role in a whole-of-society approach to mitigating risk for their communities.

Phoenix establishes ‘heat office’

Santa Fe New Mexican, November 13, 2021

David Hondula recently got a job he never dreamed of—director of Phoenix’s Office of Heat Response and Mitigation, the first publicly funded municipal office of its kind. Heat is the No. 1 weather-related killer in the US, killing an average of 138 people a year from 1990 to 2019, and in 2020, heat killed 313 people in Arizona alone. Phoenix has committed to stopping that trend. The City Council in May approved a budget that included \$2.8 million focused on climate change and heat readiness. Hondula’s staff of four will collaborate with other city departments, such as Parks and Recreation and Street Transportation. One project will focus on increasing the tree canopy throughout Phoenix, with a goal of reaching 25 percent tree canopy cover in the city by 2030. Another will focus on built infrastructure—increasing shade structures and developing ways to cool structures and streets, particularly at night. Miami-Dade County (Florida); Athens, Greece; and Freetown, Sierra Leone, are the only other places with city officials in charge of managing heat. In Miami-Dade County, the position is funded by the Extreme Heat Resilience Alliance, which aims to reduce extreme heat risk for the most vulnerable populations.

Explore the implications of this signal:

Ask yourself, what if it became common for cities or regions to have dedicated departments tasked with creating an integrated response to heat risk? Or, more broadly, for city or state officials to work with a variety of government agencies and for-profit and nonprofit organizations to mitigate the impacts of climate stress? Discuss three potential implications of this signal:

1. For yourself, your family, or friends
2. For your museum
3. For the United States

Additional Resources

- The National Association of Counties’ [Resilient Counties Initiative](#) strengthens the ability of local government to prepare for and recover from hurricanes, wildfires, economic collapse, and other disasters, natural or man-made. Its reports and tool-kits include resources on public health, flood protection, national data on county emergency management, and use of technology in managing disasters.
- [The Role of Culture in Climate Resilient Development](#) (United Cities and Local Governments, 2021). This report documents the initiatives of cities and local or regional governments from all continents on cultural policies, sustainable cities, and climate resilient development. It includes a diverse pack of case studies from across the world and addressing the whole set of the 2030 Agenda Sustainable Development Goals.
- The Environmental Protection Agency’s [Climate Change Adaptation Resource Center](#) (ARC-X) is an interactive resource to help local governments create integrated information packages tailored to their local needs: risks, adaptation strategies, and case studies. Users of the site can tailor their search for information by region, and by area of interest (air, water, waste, public health, or adaptation planning).



Pillar Five:

Right-Sizing the World

One of the greatest threats facing society today is unsustainable growth: the inequities, damage, and instability created by systems fueled by a philosophy of “more is better.” To date, museums have largely shaped their behavior around for-profit values of power, productivity, and economic metrics of success. As a result, success is often measured by increasing attendance, growing collections, and expanding facilities. But as nonprofits, museums have the freedom to experiment with other models. How can they challenge the paradigm of perpetual growth and model what it looks like to build healthy, sustainable systems based on values of public service?

The Challenge

In the past half-century, as the global population broke record after record, the Western world began to grapple with the realization that unconstrained growth—whether of consumption, tourism, communities, or organizations—is unsustainable. This realization was captured in *Limits to Growth*, a 1972 report commissioned by the Club of Rome, based on computer modeling of five key resources: population, food production, industrialization, pollution, and consumption of non-renewable natural resources. The study’s mathematical models generated three scenarios, two of which foresaw civilization burning through all available resources, resulting in the collapse of civilization in the last half of the twenty-first century. Only the third, in which humanity significantly restricted its resource consumption, resulted in a stable state. Now it is becoming clear that the limiting factor to growth might not be any of the specific resources that *Limits to Growth* examined, but the cumulative effect of human activity on the climate.

“I don’t know why people feel unhappy when the curve of a graph fails to keep going up, but they do. Even when we find something we’d like to reduce, such as highway fatalities, it doesn’t always sound as though we had our heart in it.”

—E.B. White, author and editor

Critical Questions for Museums

- What are the limits of traditional metrics of museum success such as growth in attendance, collections, and endowment?
- What metrics would foster more equitable and sustainable outcomes?
- How can museums contribute to healthy, equitable economies through the jobs they create?
- How can museums help their communities foster sustainable tourism?
- How can museums in shrinking cities “right-size” in a way that prioritizes equity and preserves heritage?



Photo credit: Anonymous.

“It is troubling that only 11% of institutions have adequate storage facilities for all their collections.”

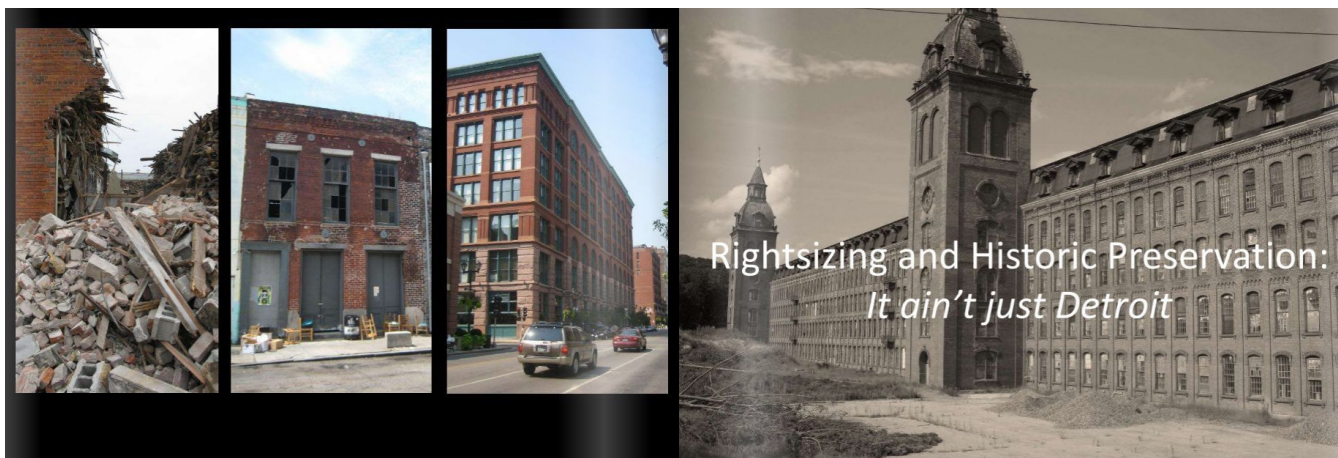
– Heritage Health Index (2005)

On an accounting sheet, growth often seems profitable because many of the underlying costs are offloaded onto ecosystems, vulnerable communities, or society in general. These costs, called “negative externalities,” may be environmental (i.e., waste, pollution, and degradation) or human (i.e., worsened public health and precarity of employment). This formula creates systems that may succeed in the short term as measured by narrow financial metrics, but are in the long term destined to fail, bequeathing the externalized damage they’ve done to future generations.

As the axiom states, you get what you measure, and if the primary measure of success is financial profit, companies are incentivized to minimize costs to improve the bottom line. One of the principal costs is labor, and left to themselves most businesses, particularly large publicly traded companies beholden to stockholders, will try to minimize

wages and maximize the flexibility of their workforce. But subpar wages and precarious work fuel profits while undermining the economy overall, and local communities in particular. In 2020, the Government Accountability Office [issued a study](#) showing that taxpayers effectively subsidize the low wages of major employers including McDonald’s, Amazon, Uber, and CVS through services like Medicaid and food stamps. These companies are in effect relying on society to cover the externalized costs of their labor.

Nonprofits in general, with museums being no exception, generally buy into the dominant for-profit model of success. In the quest for appropriate “KPIs” (Key Performance Indicators), museums have become accustomed to reporting things that are relatively easy to measure: attendance, number of items added to the collections, dollars raised in a capital campaign, and square feet of new space. The assumption, stated or



Courtesy of [PlaceEconomics](#).

unstated, is that success means making these numbers go up. But museums are beginning to grapple with the realization that success lies not on an increasing trendline but somewhere on a numeric bell curve. There is actually such a thing as too much: Too many visitors—to the point the press of the crowds degrades the experience, puts undue stress on staff, and in some cases endangers the collection or the site. Too many collections—to the point that the number of objects exceeds the capacity of museums to care for or make use of them. Too big of a building—to the point that the cost, though a powerful lever for fundraising, does not justify the benefits it provides to the community.

Nonprofit museums are especially vulnerable to economic imperatives that favor outputs at the expense of labor. While there is a clear moral case to be made for prioritizing people over profit, low wages in the nonprofit sector can be framed as prioritizing mission, and the public good, above all. (This has been variously referred to as “[the systematic starvation of those who do good](#)” or the “[nonprofit culture of poverty](#).”) This attitude has been reinforced by a complex mix of history and funder expectations. The nonprofit workforce has long been predominantly female, so nonprofits inherit the gender inequities attached to compensation. For many decades, donors and funders were trained to see “overhead” (largely comprised of staff salaries) as wasteful spending, and to look for a low ratio of overhead to programmatic spending as a measure of a well-run nonprofit. The cumulative result has been pervasively low wages, burnout, and high turnover. Long term, the field is grappling with how to institute reforms that ensure museums cover the true cost of working in a museum, rather than expecting individuals, families, communities, and society to cover the gap.

The Response

In Society

Here is a brief round-up of some of the social and economic movements attempting to reframe American attitudes towards growth and develop sustainable measures of success:

Circular Economy

More industries are trying to create “circular economies”—systems of production and consumption that repair, reuse, and recycle materials to the greatest extent possible, in the interest of reducing the use of scarce resources and the generation of waste. A growing number of makers and vendors are using recycled or upcycled materials to produce their goods, and in turn to market their brand. In 2021, the UK passed a “[right to repair](#)” law that requires manufacturers to provide parts that support the repair of their products (rather than forcing consumers to discard old electronics and buy new). Almost every state in the US is considering similar legislation, and President Biden recently signed an executive order directing the Federal Trade Commission to make third-party product repair easier. Responding to pressure from shareholders, [Apple](#) recently reversed its long-term policies and will start selling replacement parts and tools to make it easier for consumers to make their digital devices last longer than the average four to five years.

Sustainable Tourism

In the past few years, major tourist destinations such as Venice, Barcelona, and Amsterdam have begun to grapple with the downsides of their popularity—overcrowding, unaffordable housing, environmental degradation, and a decline in the quality of life for local residents. In 2018, the mayor of [Dubrovnik](#) declared the city would

cap the number of cruise ships allowed to dock each day. [Venetians](#) have used the pandemic pause in tourism to envision how the city might join the “sustainable tourism” movement by encouraging fewer, longer stays that foster meaningful engagement with art and culture, promote and expand local universities, and build jobs untethered from tourism. In November 2021, the governor of [Yucatán](#) signed a collaborative agreement with UNESCO to develop tourism that protects, promotes, and safeguards the cultural and natural heritage of the state. These efforts may presage a larger cultural and economic shift toward thoughtful management of tourism that measures its full costs and benefits.

Right-Sizing Cities

At least eighty US cities are [shrinking in population](#), due to shifts in manufacturing, demographics, and economic decline. In some cities, this means demolishing thousands of buildings—in some cases buying out and shuttering entire neighborhoods. Others, such as [New Bedford, Massachusetts](#), are trying to compensate for the collapse of traditional industries by reinventing themselves as tourist destinations. For all these communities, the question is how to “right-size” in a way that minimizes damage to people and to heritage and results in a livable, equitable, sustainable urban landscape.

Reshaping For-Profit Culture

We are seeing a slow shift in the attitudes of corporations from a narrow focus on shareholders to a broader responsibility for “stakeholders.” In 2019, the Business Roundtable issued a [statement on “the purpose of a corporation”](#) that, overturning thirty years of precedent, argued that companies should be concerned not only about the profit of their shareholders but also the wellbeing of their employees, the state of the environment, and the ecology of suppliers who support their work. All this in the interest of creating “a more inclusive prosperity.” (The statement is a pointed refutation of the philosophy articulated by economist Milton Friedman in 1970 that “the social responsibility of business is to increase its profits.”)

Employee Wellbeing as a Metric of Success

One important plank in the Business Roundtable statement is a commitment to the wellbeing of employees

through fair compensation, training, education, and fostering diversity, inclusion, dignity, and respect. That shift in philosophy may prove to be too little, too late to stave off what is being called the “[Great Resignation](#)”—the current swell of people leaving for better jobs, or, in some cases, quitting the workforce entirely. Some of this exodus is the result of people shopping for better wages in a tight labor market, or of stress and burnout during the pandemic, but the Great Resignation is also a rational response to systems that fail to provide workers with childcare, health care, elder care, and affordable housing within a decent commute range of their workplace. This response may accelerate a trend that existed before the pandemic as well—a reset away from “productivity” of work output being the be-all and end-all measure of a good life or a good worker. Even in [Japan](#), where work culture is so hardcore that “karoshi” (“death from overwork”) is an actual thing, reforms are beginning to germinate, with initiatives ranging from caps on excessive working hours to increased flexibility, as well as a requirement for employers to mandate at least five days off work for staff compiling at least ten days of unused leave.

Questioning “More is Better”

The movements described above tackle specific systems, but proponents of “[degrowth](#)” argue that we need a larger paradigm shift, from systems that rely on growth for continued success to more sustainable values, notably environmental sustainability and social justice. Proponents

Climate Central’s [Picturing Our Future](#) collection provides science-based videos and visualizations comparing potential outcomes of sea level rise for nearly two hundred landmarks and iconic neighborhoods around the world.





The [Active Collections](#) movement generates discussion and action across the museum field to develop a new approach to collections, one that is more effective and sustainable. Image credit: Ray Rieck.

envision a future in which people in wealthy countries will learn to “live well with less”: less travel, less consumption, and less impact overall on the environment. Degrowth has allied itself with several movements in which museums are already involved, including decoloniality, slow culture, and the “We Are Still In” initiative supporting the goals of the 2015 Paris Climate Accords.

In Museums

Museums, stressed by disruptions to conventional sources of income, are beginning to challenge their own traditional metrics of success, including attendance, size of collections, and new buildings or expansions fueled by capital campaigns, and to search for meaningful alternatives.

Attendance

Some museums have designed their buildings and experiences around limited attendance in order to provide smaller, more intimate experiences for the visitor. Others have experimented with the practice on an ad hoc basis. During pandemic-induced attendance caps, some museums found that visitor satisfaction rose as crowding declined. [Researchers in the attractions industry have suggested that](#), post-pandemic, visitors may retain a preference for lower density, social distancing measures, and even less interaction with museum staff. If this holds true, museums might follow the lead of cities adopting sustainable tourism: fostering fewer, deeper, longer interactions, providing exclusive experiences, and supplementing admissions revenue with a wider variety of secondary income streams, including digital programs and online merchandise.

A Framework for Action

Inward Action

To create systems that foster healthy, sustainable practice, museums can:

- Engage the governing authority and staff in a thoughtful exploration of what values the museum wants to embody in its work and what constitutes “success.”
- As part of this discussion, explicitly consider the “right size” for the museum in terms of optimizing benefits for the community, including both visitors and staff.
- Choose metrics that support these values and goals, and educate funders and donors about these measures.
- Create the capacity to collect the data needed to support these metrics, through staffing (in-house or contract), training, and integrating evaluation into program design.
- Examine the museum’s labor and compensation policies to ensure the museum is supporting the true costs of working for the organization.

Outward

To help their communities achieve the right size for success, museums can:

- As tourist destinations, help cities that are tackling “over-tourism” to craft strategies that benefit residents economically, preserve quality of life, and distribute tourism to underappreciated destinations.
- If located in communities that are shrinking due to economic and demographic forces, help create plans to manage that downsizing in a way that results in livable, right-sized communities, while preserving public heritage such as historic structures, districts, and public art.

Collections

The accretion of unpruned collections can become the museological equivalent of barnacles—a drag on the organizational ship. The museum sector is finally beginning to chip away at the barriers to deaccessioning, not as a source of financial relief, but to rationalize the allocation of resources to produce the greatest good for the public. Besides the logistical barriers (the time and money it takes to deaccession responsibly), this shift requires a cultural change in museums' measure of success. Acquisitions are a source of pride, while deaccessioning offers few rewards, either financial (due to ethical guidelines for use of the resulting funds) or professional. Some museums are tackling these hurdles and downsizing their holdings; others are slowing growth through joint acquisitions and collections-sharing. Technological advances in the last decade have added an interesting twist to this issue, as museum staff consider how the rapidly expanding universe of accessible digitized collections might influence choices about what to add to the physical collection or archive.

Use of Capital

The cultural sector as a whole is having a moment of reckoning regarding physical growth. In 2012, the University of Chicago's report [*Set In Stone: building America's new generation of arts facilities, 1994-2008*](#) confirmed what many had long suspected to be true: many of the major cultural facilities projects that marked the turn of the century were, in fact, overbuilt and unsustainable. The researchers found that many of the biggest projects (and notably, some of the least successful), were driven by the ambitions of leaders and donors, not by the needs of the community. But overbuilding is a natural result of museum economics. Traditionally it's been easier to attract gifts associated with naming rights on a beautiful building than for intangible social goods. Despite that handicap, some museums are beginning to ask how capital campaigns can fund improvements to the well-being of staff and the community. In the absence of such capital, programs are often dependent on grant funding, and even successful programs that produce measurable good are too often terminated when the grant ends.

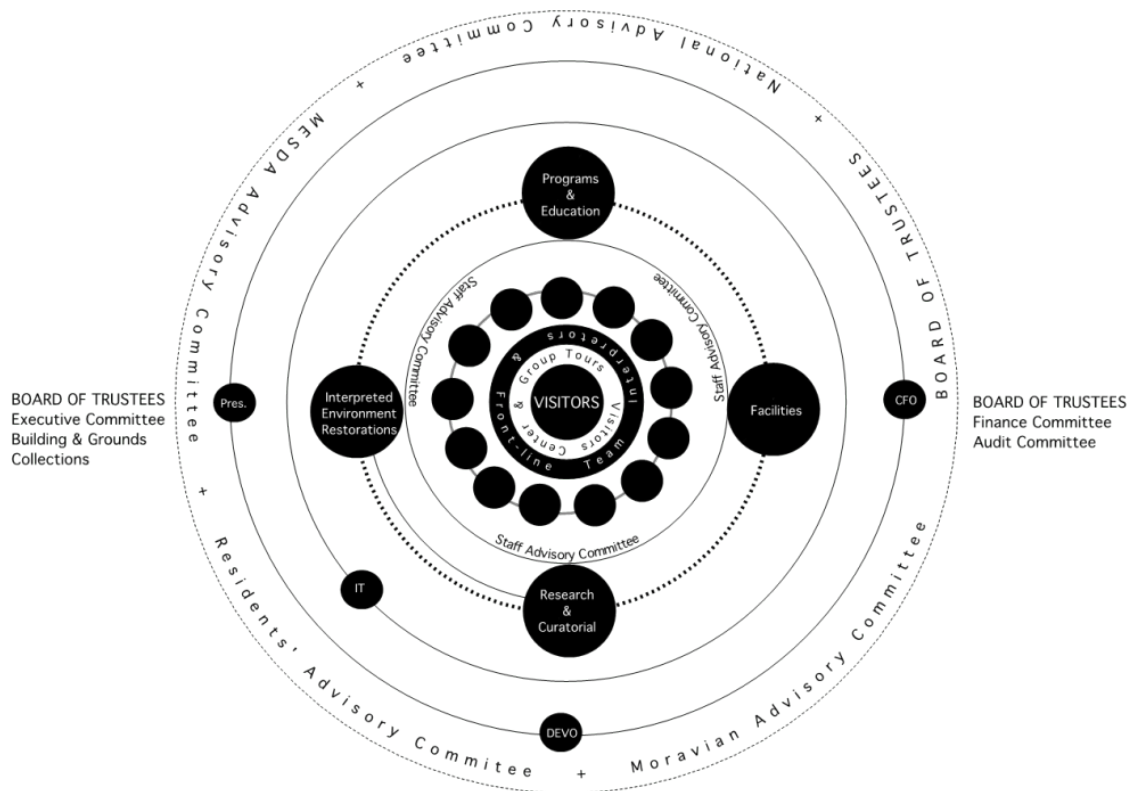
Labor

Even before the pandemic, labor conditions and low wages had contributed to the pressures leading to a rise in the number of museum staff seeking to join unions. COVID-19 dramatized the vulnerability of museum staff in the lowest paid, least stable positions. By [fall 2020](#), pandemic impact had led over half of US museums to lay off or furlough staff, with front-of-house positions being most at risk. At some museums, directors and leadership staff took pay cuts to mitigate the impact; at others staff banded together to create [mutual aid funds](#) to support out-of-work colleagues. Now we see museums that are factoring job security, wages, benefits, and equity into their plans to rebound and rebuild.

Systems-Level Change

Just as with society, real change for museums will require systemic reform, both of how museums define success for themselves and how they are judged by funders and donors. It seems likely that one reason museums uncritically adopt for-profit measures of success is that their boards of trustees are often dominated by people from the business world. Now there is a national effort, led by organizations that include the American Alliance of Museums and the Black Trustee Alliance for Art Museums, to help museums recruit trustees who bring diverse experiences, perspectives, and values to the boardroom. Boards that reflect the community the museum serves may be more likely to value metrics that track the good a museum does for that community.

The charitable funding sector is addressing the need for systemic change as well. In 2013, GuideStar, BBB Wise Giving Alliance, and Charity Navigator (all major players in the realm of scoring and reporting on nonprofit performance) launched the [Overhead Myth](#) campaign to combat the false conception that financial ratios in general, and overhead "efficiency" in particular, are an appropriate measure of overall nonprofit performance. Museums can accelerate this reform by preemptively adopting better metrics of success, adding to the yardstick of "service to mission" measures that challenge them to maximize community wellbeing.



Old Salem Museum and Gardens and The Museum of Early Southern Decorative Arts in Winston-Salem, North Carolina, have inverted the traditional hierarchical organization chart, re-envisioning operational functions to place front-line staff and visitors at the center of everything they do.

Museum Examples

Attendance

Even after a major expansion in 2018, the **Glenstone** museum in Potomac, Maryland, uses timed ticketing to [limit attendance to about four hundred people](#) a day in order to provide a contemplative experience conducive to deep engagement with the art in its building and on its grounds. Starting in 2021, Old Salem Museums & Gardens and The Museum of Early Southern Decorative Arts began limiting school groups visits to three days a week, with a cap of three hundred students per day. The strategy is to spread out the school visitation over many days (with fewer students), which in turn will require less staff all while providing a better visitor experience. Extensive analysis of operational data convinced the museum's leadership team that directing the visitor engagement to a manageable scale was a far better operations model than the previously held "bigger is better" and "be everything to everyone at all times" model.

Even before the COVID-19 pandemic forced attendance limits on museums, the **Vatican** and the **Louvre** took steps to limit visitation because over-tourism was degrading the experience, stressing staff, and in some cases damaging historic structures. In 2021, [the Uffizi Galleries](#) in Florence, Italy, launched the "Uffizi Diffusi" ("Scattered Uffizi") initiative to reduce overcrowding in their historic palaces and distribute tourism more broadly in their region by pushing treasures from their collections outside their galleries and into other parts of Tuscany.

Collections

The University of California, Irvine's newly forming **Institute and Museum of California Art (IMCA)** is making collections-sharing a core aspect of its operation and mission. In support of this strategy, the museum plans to build a "technological, logistic, and collaborative platform" that will facilitate sharing across academic, municipal, and private art museums. IMCA is currently selecting peer institutions to participate in the design of the platform with the goal that, over time, more users and more collections will join the structure.

INCREASED HEALTH AND WELL BEING



INCREASED INTERCULTURAL COMPETENCE



CONTINUED EDUCATION AND ENGAGEMENT



STRENGTHENED RELATIONSHIPS



People who visited museums participating in the [Utah Pilot Social Impact Study](#) reported statistically significant increases in the four major outcomes that the study measured. Image credit: Todd Anderson/Utah Department of Cultural and Community Engagement.

In 2015, the [Indianapolis Museum of Art at Newfields](#) embarked on the Collections Ranking Project initiative to assign letter grades to each of the fifty-four thousand items in its collections. Items receiving a rank of "D" (approximately 20 percent of the collection) were flagged for potential sale or donation to another institution. (The alternative would have been to spend about \$14 million to double the museum's storage space.) As of 2019, the museum had deaccessioned 4,615 objects, the vast majority through sale, and transferred 124 objects to other institutions. In 2018, [History Colorado](#) embarked on a similar project to survey, assess, and refine (i.e., downsize) target areas in the museum's 225-thousand-artifact collection.

Using Capital for Sustainable Good

In February 2021, the [Baltimore Museum of Art](#) announced it had secured \$1.46 million in private gifts

to fund DEAI initiatives. \$110 thousand were dedicated to raising the base salary of fifty workers from 13.50 to fifteen dollars an hour, with a goal of raising base pay for guards and visitor service personnel to twenty dollars per hour by the end of 2023. In November, the [Toledo Museum of Art](#) announced it had received two bequests totaling \$2.5 million, dedicated to employee professional development and engagement.

In March 2020, the [Yale Peabody Museum](#) in New Haven, Connecticut, closed to the public for an extensive renovation of its building. The capital campaign for the project was seeded by a \$160 million lead gift from Yale alumnus Edward P. Bass. In November 2021, [the university announced](#) that some of the funds amassed through the campaign would be used to fund free admission for the public in perpetuity.



The 2020 capital campaign for the Yale Peabody Museum will fund free admission for the public in addition to building renovations. Photo credit: Jack Devlin.

Building Equity into Employment Practices

In 2017, [Old Salem Museums & Gardens](#) and [The Museum of Early Southern Decorative Arts](#) in Winston-Salem, North Carolina, began to fundamentally reshape their operations to reverse a decades-long slide towards insolvency. They began by expanding their leadership team to represent every division in the organization, making it more diverse in terms of race, gender, and economic status, and flattening the organizational chart to reduce the distance between senior and front-line staff. They produced a new balanced application and review process that reduces basic requirements for positions and values lived experiences as well as traditional educational attainments. All pay and job discussions now go through a collaborative senior leadership team, and Old Salem has

launched an equity initiative that includes commitments to paying above a living wage for the area, implementing a cost-of-living raise for hourly staff, providing mental health benefits, and reducing the pay ratio of the CEO to lowest-paid exempt employees from seven-to-one to four-to-one.

New Metrics of Success

The national [Measurement of Museum Social Impact](#) (MOMSI) project is working with thirty-eight museums to measure museum impact on health and wellbeing, valuing diverse communities, continued education and engagement, and strengthened relationships. This work builds on a pilot project in 2017-2018 headed by the Utah Division of Arts & Museums in partnership with

the nonprofit museum complex **Thanksgiving Point** for a statewide social impact study, collecting data from almost four hundred visitors through eight participating museums. The [pilot evaluation](#) showed that 96 percent of the 104 indicators tracked by the project showed a statistically significant positive change. The results from the national MOMSI project will be released in 2022, followed in 2023 by the release of a free toolkit with resources to help museums measure their social impact.

Explore the Future

Signal of Change:

A “signal of change” is a recent news story, report, or event describing a local innovation or disruption that has the potential to grow in scope and scale. Use this signal to catalyze your thinking about how museums might help society create healthy and sustainable metrics of success.

A King County nonprofit raised all staff salaries to \$70,000 minimum. Will more organizations follow?

The Seattle Times, November 15, 2021

In November 2021, Choose 180, a youth diversion nonprofit, raised all its staff salaries to a minimum of seventy thousand dollars a year. For some of the organization’s twenty-four staff, the pay hikes amounted to a twenty-thousand-dollar annual raise in an instant, using existing funds. (According to MIT’s [Living Wage Calculator](#), a parent would need to make just shy of seventy-six thousand dollars to live in King County.) The increases added about four hundred thousand dollars to Choose 180’s 2022 budget, an amount the board supported unanimously. Executive Director Sean Goode said that when staff first suggested changing the pay structure, he initially balked. But one director reminded him that the philosophy of Choose 180 was that the living conditions of the young people they worked with needed to change in order for them to have a fighting chance to live beyond what he called “the disease of violence and the stress of poverty.” Could it be that they were paying their own team members to live in the same conditions? Goode said the conversation was a “gut punch” that sparked a transformation, and that he is confident he can fundraise to support the change going forward.

Explore the implications of this signal:

Ask yourself, what if paying a living wage became the norm for American nonprofits (perhaps even a metric of excellence valued by donors and funders)? Discuss three potential implications of this signal:

1. For yourself, your family, or friends
2. For your museum
3. For the United States

Additional Resources

- [Active Collections](#), edited by Elizabeth Wood, Rainey Tisdale, and Trevor Jones (2017). This collection of essays critically examines traditional approaches to museum collections, and explores new paradigms of stewardship, including “quality over quantity.” The corresponding Active Collections website ([activecollections.org](#)) shares “A Manifesto for Active History Museum Collections” (which states “we believe collections must either advance the mission or they must go”), case studies on right-sizing collections, and a section on crazy ideas, including the creation of a “deaccession special ops” team, and creating a “usefulness meter” for collections.
- [Putting the Right In Right Sizing: A historic preservation case study](#) (Michigan Historic Preservation Network, National Trust for Historic Preservation, 2021). This case study offers a number of observations for preservation and planning professionals about the role of preservation in cities undergoing right-sizing.



About this Report

Where to Find the Future

Most of the Center for the Future of Museums' content is available free over the web.

- ❖ [The CFM home page](http://bit.ly/futureofmuseums) on the Alliance website (<http://bit.ly/futureofmuseums>) includes links to all of our projects and reports, including past editions of *TrendsWatch*.
- ❖ [The CFM Blog](http://aam-us.org/category/future-of-museums) (aam-us.org/category/future-of-museums) features a mix of essays by CFM's Director, guest posts from people in and around the field, recommended reading and viewing, and commentary on current news. The trends featured in this report will be explored in more depth on the blog throughout 2022.
- ❖ CFM's weekly e-newsletter, "[Dispatches from the Future of Museums](http://bit.ly/dispatchesfromthefuture)," (<http://bit.ly/dispatchesfromthefuture>) contains summaries of and links to news items about trends, projections, museum innovations, and tools for the future.
- ❖ [The CFM Twitter](https://twitter.com/futureofmuseums) ([@futureofmuseums](https://twitter.com/futureofmuseums)) features links to news, research, opportunities, and current events.
- ❖ [CFM's Pinterest boards](https://pinterest.com/futureofmuseums/) (pinterest.com/futureofmuseums/) are devoted to images illustrating the trends we follow, recommended reading and viewing, and glimpses of potential futures.
- ❖ [CFM's Facebook page](https://facebook.com/futureofmuseums) (facebook.com/futureofmuseums) shares links and brief commentary on stories related to museums.
- ❖ [CFM's YouTube channel](https://youtube.com/futureofmuseums) (youtube.com/futureofmuseums) hosts interviews with museum professionals around the world as well as recordings and screencasts of talks by CFM staff, while our "Favorites" list is a compilation of futures-related videos from a wide variety of sources.
- ❖ [The Alliance Advisors and Speakers Bureau](http://aam-us.org/programs/alliance-advisors/) (aam-us.org/programs/alliance-advisors/) allows you to book lectures, workshops, and other engagements from CFM and other AAM staff.

About the Author

Elizabeth is the Vice President for Strategic Foresight and Founding Director of the Center for the Future of Museums at the American Alliance of Museums. She studied ecology and evolution as an undergraduate at Yale and received her master's degree in cell and molecular biology from Duke University. Her museum career has included working in a children's museum as well as natural history and history museums. She is a graduate of the Getty Leadership Institute's Museum Management Program and the Foresight Certificate program at the University of Houston.

Prior to starting CFM, Elizabeth literally wrote the book on museum standards and best practices, as Director of the Alliance's accreditation and excellence programs. She notes this was perfect preparation for her current role as agent provocateur—challenging museums to question assumptions about traditional practice and experiment with new ways of doing business. Elizabeth is the author of the Alliance's annual *TrendsWatch* report and works with museums around the world to help them build a better tomorrow.

About Us

The American Alliance of Museums' Center for the Future of Museums (CFM) helps museums explore the cultural, political, and economic challenges facing society and devise strategies to shape a better tomorrow. CFM is a think tank and R&D lab for fostering creativity and helping museums transcend traditional boundaries to serve society in new ways.

The American Alliance of Museums (AAM) is the only organization representing the entire museum field, from art and history museums to science centers and zoos. Since 1906, we have been championing museums through advocacy and providing museum professionals with the resources, knowledge, inspiration, and connections they need to move the field forward.

Our Alliance of thirty-five thousand museums and museum professionals seeks to better our communities, and our world, through collaborative human-centered experiences, education, and connection to histories, cultures, the natural world, and one another. Our members spark curiosity and wonder, widen horizons and understanding, and create community connection through a shared commitment to equity and learning.

Learn more at aam-us.org.

Design Credit

Selena Robleto, Red Velvet Creative

Cover

The building housing the Supreme Court of Poland in Warsaw features caryatids by sculptor Jerzy Juczkowicz symbolizing faith, hope, and love. Photo credit: Tan4ikk/Adobe Stock

Acknowledgements

TrendsWatch is made possible by the collective wisdom of many people inside and outside the museum field who contribute their time and creativity to CFM's work. For their help with this edition, I would particularly like to thank:

Katherine Kelbaugh, Ph.D., Executive Director, The National Association of Museum Schools

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Barry Szczesny, Director, Government Relations and Public Policy, American Alliance of Museums

Frank Vagnone, CEO, Old Salem Museums & Gardens and the Museum of Early Southern Decorative Arts

About Our Corporate Partners



“2021 proved to be another year of change and adaptation for all of us in the museum community. Elizabeth Merritt and our friends at AAM have delivered a thoughtful *TrendsWatch* report to anchor us around how to continue forging a path in the current landscape. We are honored to support this report every year, and our hope is that you are all buffered by the ideas and content within.”

—Dale Strange, President & GM, Blackbaud Arts & Cultural

With a focus on contactless experiences and digital enablement, **Blackbaud** is the technology backbone to support your organization and its mission. Blackbaud provides comprehensive, cloud-based software solutions to arts and cultural organizations seeking to optimize their operations, build and grow lifelong, loyal patron relationships, and maximize revenue.



“I always look forward to reading CFM’s annual *TrendsWatch* report as it provides a window into the world of what concerns museums most. The highlighted trends often provide a spotlight on current perils and exposures and thus potential helpful clues about how we need to modify risk management techniques to better serve the museum community.”

—Joe Dunn, President & CEO, Huntington T. Block Insurance Agency, Inc.

Huntington T. Block Insurance manages AAM-recognized insurance programs offering Museum Collections, Exhibitions & Temporary Loans/Fine Art; Property & Casualty; and Trustees/Directors & Officers Liability insurance. Each unique program strives to provide broad coverage at very competitive premiums with service from a knowledgeable and responsive team of risk professionals.



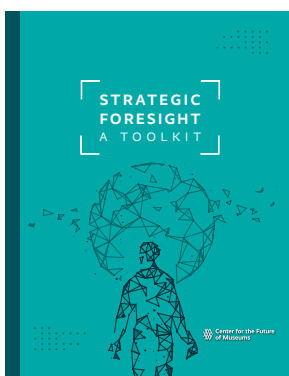
NEW from AAM's Center for the Future of Museums

This new resource is packed with worksheets, games, and exercises, providing a comprehensive introduction to strategic foresight—a vital skill set that enables individuals and organizations to anticipate change, craft effective plans, and shape the future they want to see.

Use this toolkit for:

- Professional development
- Staff enrichment
- Board education
- Strategic planning
- Creative brainstorming sessions
- Building connection within teams
- Livening up meetings

Strategic foresight provides a powerful assist to strategic planning, identifies critical risks and opportunities, and helps leaders avoid being blindsided by disruption. Develop “futures literacy” in yourself and your team to feed informed and thoughtful planning and decision-making.



Download your toolkit today

Nonmembers: \$60

AAM Members: \$50

<https://www.aam-us.org/programs/toolkits/strategic-foresight-toolkit>





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Alliance of
Museums**

Help Us Keep an Eye on the Future

TrendsWatch and other Center for the Future of Museums (CFM) activities are supported by American Alliance of Museums member dues and donations. If this report sparked your thinking and you would like to see *TrendsWatch* prosper, please consider supporting the Alliance by joining or making a tax-deductible contribution. For over a decade, CFM has been helping museums explore today's challenges and shape a better tomorrow. We welcome your investment in our shared future.

Support CFM today and help create a better future for museums.
Visit aam-us.org/membership or aam-us.org/donate.

Corporate or foundation support are also welcome. To learn more, contact Shelagh Grimshaw at sgrimshaw@aam-us.org.

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MUSEUM

TRENDSWATCH NAVIGATING A VOLATILE FUTURE





Strategic Foresight Toolkit

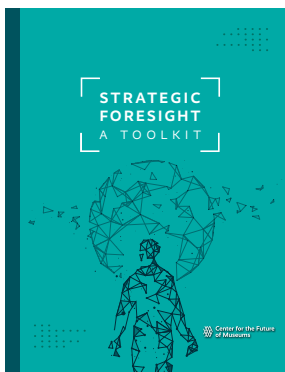
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Get your toolkit today! Scan the code or visit:
aam-us.org/strategic-foresight-toolkit





A 2019 Harley-Davidson FXDRS-114, with an 1868 cc, 8-valve V-twin engine. Also *TrendsWatch* author Elizabeth Merritt.

About the Center for the Future of Museums

The American Alliance of Museums' Center for the Future of Museums (CFM) helps museums explore the cultural, political, and economic challenges facing society and devise strategies to shape a better tomorrow. CFM is a think tank and R&D lab for fostering creativity and helping museums transcend traditional boundaries to serve society in new ways. Find research, reports, blog content, and foresight tools at aam-us.org/programs/center-for-the-future-of-museums/.

About the Author

Elizabeth Merritt is the Vice President for Strategic Foresight and Founding Director of the Center for the Future of Museums at the American Alliance of Museums. She studied ecology and evolution as an undergraduate at Yale and received her master's degree in cell and molecular biology from Duke University. Her museum career has included working in a children's museum as well as natural history and history museums. She is a graduate of the Getty Leadership Institute's Museum Management Program and the Foresight Certificate program at the University of Houston. Prior to starting CFM, Elizabeth literally wrote the book on museum standards and best practices as Director of the Alliance's accreditation and excellence programs. She considers this perfect preparation for her current role as agent provocateur—challenging museums to question assumptions about traditional practice and experiment with new ways of doing business.

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Nick Merriman, Chief Executive, Horniman Museum and Gardens, UK

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In 2018, the exhibition "Carbon Ruins" at Lund University addressed the question "What would a museum of the fossil fuel age look like if we set it in a near future where we successfully transitioned away from fossil fuels?"

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TRENDSWATCH: NAVIGATING A VOLATILE FUTURE

Cover: Our cover image was generated by the artificial intelligence platform Midjourney in response to the prompt "A landscape of modern wind generators and solar panels in the style of Hilma af Klint."



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The Alliance wishes to thank our corporate partner, who has generously supported this year's *TrendsWatch*:



Affinity Nonprofits

"I always look forward to reading CFM's annual TrendsWatch report as it provides a window into the world of what concerns museums most. The highlighted trends often provide a spotlight on current perils and exposures and thus potential helpful clues about how we need to modify risk management techniques to better serve the museum community." —Joe Dunn, President & CEO, Huntington T. Block Insurance Agency, Inc.

Huntington T. Block Insurance manages AAM-recognized insurance programs, offering Museum Collections, Exhibitions & Temporary Loans/Fine Art; Property & Casualty; and Trustees/Directors & Officers Liability insurance. Each unique program strives to provide broad coverage at very competitive premiums with service from a knowledgeable and responsive team of risk professionals.

Aon Affinity Nonprofits is a brand name for the brokerage and program administration operations of Aon Affinity focused on the nonprofit sector. We specialize in developing, marketing, and underwriting customized insurance for nonprofit organizations.

**MUSEUM
SOCIAL
IMPACT**

MUSEUM TOOLKIT

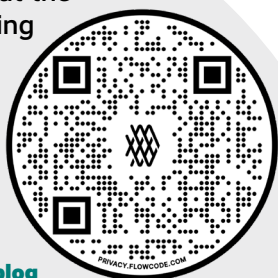
Download your **free** digital copy of this resource developed by the Measurement of Museum Social Impact (MOMSI) initiative!

The toolkit—complete with resources, practical tips, templates, and insights from participating museums—offers a reliable framework for measuring a museum's social impact, as demonstrated through outcomes in these **key areas**:

- Continuing learning and engagement
- Enhancing health and well-being
- Valuing diverse communities
- Strengthening relationships

Scan the QR code to learn more about the toolkit and exploring social impact measurement for museums!

Also available by visiting:
bit.ly/social-impact-blog



Stay tuned for more resources from AAM to help you measure your museum's social impact!





American
Alliance of
Museums

Connect with museum professionals around the world for the second Future of Museums Summit! With this Summit, we take the theoretical framework from our annual forecasting report, *TrendsWatch*, even further. Join this virtual convening to gain tactical strategies and takeaways to plan for a brighter future for you, your museum, and your community. Stay tuned for additional details and registration!

Sign up for updates at summit.aam-us.org to ensure you don't miss a thing.

FUTURE^{OF} MUSEUMS SUMMIT

OCTOBER 29-30, 2024

JUST RELEASED:

Museum Board Leadership: A National Report **2024**

We are proud to present the findings of a new national report on museum board leadership. This second edition of the report first fielded in 2017 finds noteworthy progress in recent years, as well as challenges to continued improvement in museum governance including board diversity. Each of the three sections—The People, The Work, and The Finances—presents key finding and resources to guide your progress on tasks ranging from diversifying your board to creating the core governing documents that undergird your museum's stability.

Download your free copy today. Visit: bit.ly/2024-board-leadership



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Alliance of
Museums

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Ahead of Our Time

Welcome to the future, *Museum* readers! This special issue of the magazine is dedicated to the latest edition of our Center for the Future of Museums' annual *TrendsWatch* report, which shares trends emerging on the margins of our field that may become dominant in museum practice over time.

Using the methodology of strategic foresight, the report's author, Elizabeth Merritt, identifies phenomena cropping up in her research, then works with museum experts to anticipate how those trends might impact the field as they develop. Through invaluable context-setting, cutting-edge examples, and incisive recommendations, *TrendsWatch* has for a decade running helped museums stay ahead of changes in society, such as QR codes and the "internet of things" (in the 2013 edition), big data and analytics (2014), and happiness and well-being as metrics of success (2016).

How we imagine the future depends a lot on what's happening in the present, and as this year's featured themes demonstrate, the present feels unstable. A new era of culture wars is unfolding, with cultural and educational institutions like museums caught in the middle, taking heat both for embracing and demurring on progressive stances. Dramatic advances in artificial intelligence technology have made their way to market, trailing with them a morass of questions about misinformation, job security, and intellectual property. Meanwhile, record-breaking wildfires and temperatures have

revealed the extent of the continuing climate crisis, urging us all to contemplate how we can reduce our carbon consumption.

This year's *TrendsWatch* asks how we might emerge from the volatile future these trends present not just intact, but better for it. After all, a future-minded museum is one in touch with its community—and poised to be a true community resource. As the people around us navigate the destabilizing changes of the future, they will need solid information, ethical solutions, and models of resilience. The better we try to stay not just with but ahead of our time, the better we will be able to guide and partner with our communities, actualizing our purpose in society more than ever before.

Consider this issue your invitation to start thinking big about our future, what challenges and opportunities will come with it, and how we can shape it for the better. At the Alliance, we look forward to building it along with you.

10/23/2023



A handwritten signature in black ink, appearing to read "Brooke Leonard".

Brooke Leonard is the Interim CEO & Chief of Staff at the American Alliance of Museums.

Our Volatile World

160

Educators fired
for political
reasons from
2020–2022.

30%

Percentage of hours
worked today that
could be automated by
2030 with the adoption
of generative AI.

300 million

Current jobs that could be eliminated or
diminished, globally, by generative AI.

90%

The increase in global
CO₂ emissions since
1970.

3.6 billion

People already
living in areas highly
susceptible to climate
change.

Sources: Clockwise from top: McKinsey Global Institute, *Generative AI and the Future of Work in America*; Goldman Sachs; World Health Organization; Environmental Protection Agency; *Washington Post* analysis of news reports



17%

Segment of US adults who reported that they felt lonely “a lot of the day yesterday.” (That translates to 44 million American adults.)

50%

Percent by which adults with physical health issues are more likely to be lonely than those with strong physical health.

2,571

Unique book titles that were challenged or banned from US public and/or school libraries in 2022.

53%

Portion of hiring managers reporting that in the past year their company eliminated the requirement for a bachelor's degree in some or all roles where it is not essential.

Sources: Clockwise from top: Gallup National Health and Well-being Index, 2023; 2021 survey commissioned by Cigna Corporation and conducted by Morning Consult; Intelligent survey, 2023; American Library Association's Office of Intellectual Freedom

Andrey Suslov/Alamy Stock Vector

WE CANNOT
AFFORD
THE LUXURY
OF EITHER
HOPE
OR
DESPAIR



Welcome to *TrendsWatch*

“Standing still is the fastest way
of moving backwards in a rapidly
changing world.”

—Lauren Bacall



HOW TO USE THIS REPORT

Use this edition of *TrendsWatch* as a catalyst for adapting to your museum's rapidly changing environment:

- What choices does your museum face regarding the utility and ethics of artificial intelligence?
- How can your museum reduce its carbon emissions and inspire the public to take action?
- When might your organization be caught up in the current culture wars, and how can you prepare strategies to respond?
- Who is currently excluded by your museum's hiring processes, and could you diversify your applicant pool by dropping unnecessary degree requirements?

Each article includes a list of things museums might do to tackle these issues. Share this report with your students, clients, colleagues, staff, volunteers, and board of trustees to foster discussion about how your organization will cope with a volatile future.

The theme of this year's *TrendsWatch* report is volatility—strategic foresight parlance for the speed of change. That speed has been increasing exponentially in recent decades. Google's **director of engineering** recently predicted that by 2041, we will be experiencing a year of change (by today's standards) in three months, and by 2071, a year of change in 11 days. That's the equivalent of 33 years of change in one year! The past 33 years gave us the World Wide Web, email, personal computers, and smartphones; we mapped the human genome and discovered how to edit individual genes. What will it be like to live through that amount of change in just one year? How can we make plans that can survive such rapid transformations?

On one hand, speed can be exhilarating. Open AI's ChatGPT launched in November 2022; by January 2023 it had 100 million active monthly global users. The user base is projected to grow to **117 million** in the US alone by 2025. The technology is amazing: it empowers anyone to be an artist or a writer. It helps students apply to college, journalists draft stories, and architects model the mechanics of their creations. People hope it will make legal services more affordable, education more effective, and brain surgery more accurate. On the surface, generative AI (GenAI) seems like another example of triumphant progress, promising to improve our lives as profoundly as penicillin.

But volatility has another connotation as well, not just rapid but also unpredictable change, often for the worse. It may be thrilling to go fast, but the prospect of rocketing into the future at warp speed, veering

erratically, bouncing off obstacles, is terrifying. GenAI is already disrupting whole industries, competing with illustrators, writers, and journalists and **displacing** 4,000 jobs a month. Goldman Sachs estimates that globally, 300 million current jobs are at risk of being automated by AI. In October 2023, the head of the Securities and Exchange Commission, testifying before the House Financial Services Committee, warned that, absent regulation, it is "nearly unavoidable" that AI will cause a massive financial crisis in the next decade. But that regulation will be hard to implement since the SEC is designed to oversee individual organizations and brokers, not the underlying systems, including AI algorithms, on which these entities rely. Creating effective guardrails for emerging technologies may require us to fundamentally reshape our regulatory infrastructure.

That's a second, underlying theme of this report: the need to reexamine and reinvent a lot of systems that shape our lives, systems that may have worked more or less well for a couple hundred years but now teeter on the edge of failure. Technology, combined with cultural, environmental, and financial stressors, has widened the partisan divide to the point where approximately **40 percent of all voters**, Republican and Democrat, believe that the other side is so extreme that it would be OK to use violence to prevent them from achieving their goals. The same study found a significant share of respondents expressing doubts about the future of democracy and even the United States as it is currently composed. Will we need to reform our civic infrastructure if democracy is to survive?

Emissions from over 200 years of reliance on fossil fuels have resulted in **temperatures** increasing more in the past 50 years than any 50-year period in the past two millennia. This astounding rate of change challenges our ability to respond: we have been unable to invent, test, and implement solutions fast enough to keep global CO₂ below critical levels. At the same time, we have to deal with the literal volatility of the climate crisis. Last year was the hottest on record, with four months in a row of record-breaking temperatures and the skies blanketed by the smoke of nearly 46 million acres burning across **Canada**—nine times the historical average. While some believe that technology can save us, it's clear that even with the best technologies, we will need to eat less meat, travel less often, and take up less space (in our homes and on the planet) to stick to a strict carbon diet.

Does all this seem intimidating? It does to me. One comforting thought: humans are supremely adaptable to change. Our great grandparents may have been terrified to hurtle down the highway at 75 mph—now we are so blasé about that speed we have to be reminded to keep both hands on the wheel (and thumbs off our phones). So maybe by the time humans reach 33 years of change in one year, this volatility will seem normal.

Another important thing to keep in mind: while some of this acceleration is beyond the control of any one individual, organization, or country, there are

things we can do to apply the brakes. We can take the time to savor the process of putting words on paper rather than using AI to generate our correspondence. We can choose to challenge the supremacy of efficiency and value the benefits of measured, thoughtful collaboration. Museums, as cultural influencers, can offer their communities a place to slow down and decompress. They can ally with the movements promoting slow art, slow tourism, and slow food. And we can remind each other that we don't have to go fast just because we can.

In the face of a volatile future, it's critical to cultivate what Dr. Jane McGonigal, of the Institute for the Future, calls “urgent optimism”: the desire to act immediately to tackle an obstacle, combined with the belief that we have a reasonable hope of success. I hope this report will foster that hope and leave you feeling empowered to make a difference.

Yours from the future,



Elizabeth Merritt

Vice President, Strategic Foresight, and Founding Director, Center for the Future of Museums, American Alliance of Museums

WHAT IS **TRENDSWATCH**?

TrendsWatch is the annual forecasting report produced by the Center for the Future of Museums, the American Alliance of Museums' think tank and idea laboratory for the museum field. Each edition is built on a year's worth of scanning and analysis of news, research, and conversations. The report goes out to members and subscribers as the January/February issue of *Museum* magazine, and a PDF version is released on the AAM website at the end of March. You can find dozens of embedded links to original sources for the information referenced in this text in the digital issue of *Museum* and in the PDF.

The text for this report was written by CFM's director, Elizabeth Merritt, with input and advice from many people inside and outside the museum sector. (See page 1 for the list of people who reviewed and commented on the articles.) We encourage you to join this conversation. Please share your thoughts and questions by:

- Joining the Future of Museums Community on AAM's Museum Junction discussion forum.
- **Submitting guest posts** to the **CFM blog**.
- Emailing CFM at emerritt@aam-us.org.


Elizabeth and her colleagues are available to support your work via speaking engagements, workshops, moderating discussions, and consulting. For more information on those services and to request our help, visit the **Alliance Advisory Services and Speakers Bureau** on the AAM website.

"Party With Us: Pride Edition" at the Museum of Us in San Diego, California, featured local drag queens from the Haus of St. James.



Culture Wars 2.0

What choices do museums face in avoiding or engaging with the current conflict?



“The net effect of loud, sensational clamor is to mute more quiet and temperate voices.”

—James Davison Hunter, *Culture Wars: The Struggle to Define America*

Last year *TrendsWatch* examined the growing partisan divide in the US and how museums might help repair our fractured democracy. However, an adjacent trend threatens the sector’s ability to fill this reparative role: museums as battlegrounds in a new wave of culture wars. Some are criticizing museums for embracing progressive values, while others regard museums as conservative vestiges of a colonial past. With alarming frequency, climate activists use museums as stages for protest or vandalism to draw attention to their cause.

Pressure is building along fault lines that segment communities, funders, policymakers, and museums’ own staff, boards, and volunteers. How can museums defuse this tension before it causes more damage? What choices do they face in avoiding or engaging in the current conflict, and how will these choices shape the future of museums and society?

The Challenge

Disagreements about the values that should guide public and private life in America are as old as the republic itself, and these debates periodically erupt into physical violence ranging from insurrection to all-out war. The verbal conflict took center stage at the 1992 Republican National Convention when Patrick Buchanan told the audience that “a cultural war” was taking place, characterizing it as a “struggle for the soul of America.” The issues Buchanan named (abortion, homosexuality, school choice, and “radical”

feminism) continue to be points of contention, but the battlefield has ballooned to include, well, almost everything, from **holiday greetings to beer.**

Thirty years later, the culture wars are heating up again, fueled by the power and reach of social media and the ascent of transparency as a core value. When every public meeting can be livestreamed on Facebook by anyone in the audience, there is scarce opportunity for nuanced discussions that can explore compromise and de-escalate conflict. Social media is now a major source of information for



In January 2023, demonstrators gathered to protest a Drag Story Hour at the Canton branch of the Enoch Pratt Free Library in Baltimore, Maryland.

Americans, and given the decline of professional journalism, it is often the primary platform for people to engage with current events.

The current state of P-12 education dramatizes the damage these conflicts can do to civic infrastructure. Teachers, already stressed by pandemic challenges, are barraged with complaints from parents and students about every detail of their work, including curricula, assignments, classroom decorations, and off-hand remarks. Even minor conflicts can go viral, spiraling into public campaigns calling for educators to be disciplined or fired. This relentless scrutiny has contributed to **record-high levels** of teacher burnout and turnover, to the migration of students from public to **private schools and to homeschooling**, and to the **downsizing and closure** of school libraries.

These skirmishes are egged on, in part, by those that profit from amplifying conflict: politicians courting votes, journalists seeking readers, technology corporations building reach and engagement. But they also reflect real disagreements in society about what theologian John Davison Hunter calls “matters of ultimate moral truth,” things on which one cannot compromise. Many combatants see the issues as threats to their very existence: white nationalists fear they are being replaced by people of color; trans individuals fear erasure of their identities and their lives. Stable democracy requires compromise, but negotiation around existential issues, about what is moral and ethical, seems impossible.

While cultural nonprofits have long been drawn into this fray, they are now being targeted with particular vitriol. America’s public libraries (a

system built with the largesse of Republican Andrew Carnegie) have become flashpoints for protests and penalties around progressive actions and values. We are seeing a record number of attempts to **ban books, criminal complaints** against and **laws targeting librarians**, and attempts to **defund and close libraries**. The American Library Association itself is now **being attacked**, nominally over the politics and identity of its CEO but more broadly over its support for and defense of its members. (This despite the fact that, as **the ALA points out**, there is strong nonpartisan consensus about the value of libraries and librarians.)

One drawback of using the term “culture wars” is the implication that there are two clear sides arrayed against each other, but that framing is inaccurate and unhelpful. Both liberals and conservatives drastically overestimate the difference between their views and those of the other side while underestimating the difference in views within their own side—a phenomenon dubbed “false polarization.” In fact, **subgroups within political parties** are

complex and varied. (For example, the vast majority of Black voters are Democrats; 61 percent of Democrats believe a person’s gender can differ from the sex identified at birth; only 31 percent of **Black Democrats** agree.) And while there are intransigent differences of opinion, there are also areas of broad agreement: **9 in 10 Americans believe** that protecting free speech is an important part of American democracy, and people should be allowed to express unpopular opinions.

Another problem with framing these conflicts as a war is the implication that there can be a winner. Short of a “**national divorce**,” splitting Democrat- and Republican-leaning states into different countries (an option that is, in fact, supported by 20 percent of US adults), we have to find a way, as a society, to explore these differences openly, honestly, and with respect if we are to maintain a functional democracy. Making people aware of these areas of commonality might be the best hope for reducing false polarization. Perhaps, as the growing bipartisan **civic repair** movement recommends, instead of

POTENTIAL FUTURE BATTLES

Following are some challenges posed to museums by the ongoing culture wars in the coming decade:

Consumers have more choices than ever in how to engage with history, culture, and educational content. Will museums lose out if, as just one choice in this array, they are identified as affiliated with one set of political positions or another?

There are growing disconnects between the expectations of some major foundations and those of local, state, or federal government officials (for example, regarding training and policies supporting DEAI). How will museums navigate these tensions and other partisan issues that may affect funding, whether that support comes from public dollars or individual donors?

There are significant generational divides around many contentious issues today, and around expectations of how organizations should behave. How can museums respond to the concerns of both current and future audiences?

We have recently seen **high-profile boycotts of brands** (Bud Light, Chick-fil-A) and institutions (Walt Disney World) from the left and the right. In the future, might we see partisan boycotts regarding museum attendance and membership?

Will more activists begin to use museums as useful platforms for protest, deploying vandalism against objects, or violence and threats of violence to draw attention to their causes? How would that change operations—design, staffing, procedures—and how might tighter security make some people feel more, or less, safe and welcome?



RESOURCES

Crisis Communications Guide, American Library Association

This brief guide outlines how to put a communication plan in place before a crisis occurs.

ala.org/advocacy/crisis-communications-guide

Marketing Intelligence Hub, Listen First Project

This online resource shares data-driven guidance on how to communicate in a way that fosters interest, hope, and trust from Americans of all backgrounds and beliefs.

listenfirstproject.org/marketing-intelligence-hub

Respecting Visitor Values: Audience Perceptions, 2022 Annual Survey of Museum Goers, Wilkening Consulting

This data story picks apart three main criticisms offered by the small percentage of museum-goers who do not believe that museums respect their personal values. (These categories correlated tightly with political values.)

bit.ly/RespectingVisitorValues

focusing on changing people's views about issues, "we need to change their views about each other."

What This Means for Museums

This isn't the first time museums have been caught up in partisan struggles. Buchanan's speech in 1992 helped define a decade of controversies that included criminal indictments against the **Cincinnati Contemporary Arts Center** on obscenity charges stemming from an exhibition of photographs by Robert Mapplethorpe; outcry over the Smithsonian's interpretive plans regarding the B-29 Superfortress bomber **Enola Gay** (a resolution passed by the US Senate characterized the exhibit script as "revisionist and offensive to many World War II veterans"); and Mayor Rudy Giuliani threatening to defund and displace **the Brooklyn Museum of Art** because of the "sick stuff" on view in "Sensation: Young British Artists from the Saatchi Collection."

These attacks come from the right and the left. Where Culture War 1.0 was fueled by the rise of the Moral Majority and other religious conservative movements, today's culture war engages the

progressive left as well as the conservative right. It includes movements like Black Lives Matter, #MeToo, and LGBTQ+ activists—groups that want greater inclusivity and a greater sensitivity to harm, historical trauma, and legacies of exclusion and appropriation.

They also originate from inside *and* outside the organization. One source of tension is the fact that museum staff are **overwhelmingly liberal**, while boards and donors often **skew conservative**. This can complicate decisions around what topics the museum should address and what communities it should serve. In some instances, museum staff have called for their employers to cancel space rentals by conservative groups, distance themselves from objectionable donors, and remove exhibit material they found offensive. With increasing frequency, climate activists are using museums as platforms for protest, throwing paint on or gluing themselves to frames, vitrines, or the plex protecting iconic objects to draw attention to their cause.

Some of the public's strongest reactions are prompted by museums revising their interpretation

MUSEUMS MIGHT ...

- Lead thoughtful, intentional conversations among board, leadership, and staff about their own values and how the museum should choose to engage or not engage on culture war issues.
- Establish frameworks and procedures for evaluating exhibits, programs, and event rentals for potential controversies, and create plans for how these controversies will be managed.
- Evaluate the language used in exhibits, programming, and communications. Identify partisan trigger words, and, when possible, find alternative terminology. (For example, some museums have found it is less controversial to say "our changing climate" rather than "climate change.")
- Train staff on how to have difficult conversations with people who don't share their beliefs and how to facilitate these conversations with others.
- Create policies, procedures, and training that equip staff to deal with angry or confrontational members of the public, and offer support to help them cope with the resulting stress.
- Strive to be "third places," the increasingly rare venues that sociologist Ray Oldenburg has argued are vital to society, democracy, and civil society. By welcoming people of differing backgrounds and beliefs, museums can provide opportunities for them to socialize and get to know each other as individuals.
- Monitor legislation and legal decisions that can affect their operations, even when not directly aimed at museums, and address these issues in their advocacy. (Sign up for **Advocacy Alerts** and attend AAM's annual Advocacy Day to inform this work.)

of history. **Monticello and other historic sites** have been castigated by some visitors and conservative commentators for introducing slave narratives into their interpretations. Texas is embroiled in a messy fight over how to tell the story of the **Alamo**, which has been called the “creation myth of Texas.” Myths, especially when they amplify an inaccurate version of the past, can be toxic: perpetuating those inaccuracies, justifying past actions that caused harm, and over-amplifying the anti-inclusive values of a small (but politically powerful) segment of Americans. But any identity, individual or collective, is grounded in the stories we tell about ourselves. Can America have a unified national identity without shared stories we all buy into? Without that identity, will the country tear itself apart?

Ironically, the very respect accorded to museums, as stewards of culture and trusted sources of information, may amplify these pressures in the future. In the wake of protests over the murder of George Floyd in 2020, at least 200 **Confederate memorials** were removed, renamed, or relocated, and in many cases these monuments were transferred to museums. While the intent may have been a bipartisan solution (caring for the heritage in perpetuity while providing historical context), this approach is sometimes equally offensive to people who feel these objects should be destroyed and to those who object to “revisionist history.” With many schools abandoning controversial topics, museums may pick up the slack, just as they did over a decade ago when public schools largely **abandoned arts education**. But while arts education is generally seen as benign, topics such as race and racism, gender and sexuality, and controversial social and political issues **are not**. Some schools have reached out to museums to teach subjects they feel they can no longer handle. Will the outrage follow?

How can museums stay true to their role and their values without being sidelined by one faction or another? How can they retain bipartisan or nonpartisan credibility and influence while tackling difficult issues? Museums have the potential to foster healing or inflict harm, build bridges or deepen divides depending on how they respond to these challenges, but they face difficult choices. Museums might take

stands on issues that align with their mission and the values of staff and stakeholders. They might declare themselves to be noncombatants, serving as a cultural circuit breaker for the cycle of escalating outrage. They might play the role of peacemaker, helping people find common ground.

Each of these choices comes with potential benefits, and risks. Museums have earned broad, nonpartisan trust from the American public, and they can use that trust to educate and influence the public about important issues. On the other hand, taking a stand on contentious issues may result in a particular museum, or museums as a whole, being tagged as partisan, relegated to the echo chambers of people who already agree with them. The individuals and institutions that benefit from the culture wars thrive on public attention: perhaps sometimes museums might better serve vulnerable individuals, communities, and society as a whole by refusing to engage. But people who feel targeted by these conflicts may expect museums to weigh in with a statement or action that signals solidarity and support. Museums have long aspired to be public “**agora**” where people can come together to discuss important issues without feeling the need to self-censor. To ensure that people of all political identities feel welcome in these conversations, the museum itself might need to be seen as nonpartisan—neither liberal nor conservative—in its words and its actions.

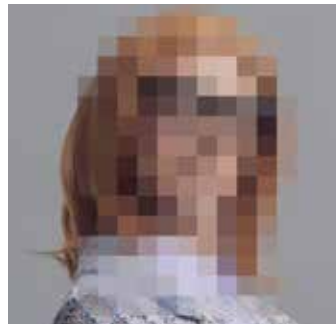
Everyone loses when cultural and educational institutions are damaged by partisan skirmishing. Treating libraries, museums, and schools as active combatants in the culture wars destabilizes our already fragile social infrastructure by threatening some of the few remaining institutions trusted to provide accurate information and common reference points.

In his exploration of the culture wars, Hunter also observed that “the whole point of civil society ... is to provide mediating institutions to stand between the individual and the state, or the individual and the economy. They’re at their best when they are doing just that: They are mediating, they are educating.” By engaging in hard conversations, inside their organizations and with their communities, museums can continue to fill that critical role.



Taking a Stand

In June 2023, the Museum of Us hosted “Party With Us: Pride Edition,” a day of programming featuring San Diego drag queens from the Haus of St. James, in solidarity with LGBTQIA+ communities being inundated with hate and legislative efforts to undo hard-won civil rights protections. Despite the polarizing public debate on drag, the decision to host the event was consonant with the museum’s purpose to be a place for community voice, especially those voices that have been historically marginalized. This was consistent with the museum’s previous visible support of LGBTQIA+ communities. In 2015, immediately following the Supreme Court’s decision on same-sex marriage, the museum displayed an enormous Pride flag from its iconic California Tower to mark the occasion. Since 2022, the museum has also been the site for the city’s annual Pride kick-off, with a week-long display of an even bigger Progress Pride flag from the tower.



Being Noncombatants

By its very nature, successful noncombativity is a nonstory. While this makes it rare to find published examples of museums that have chosen not to “feed the beast,” museum professionals might use the confidentiality afforded at conferences and small gatherings to connect with colleagues who have personal experience to share.



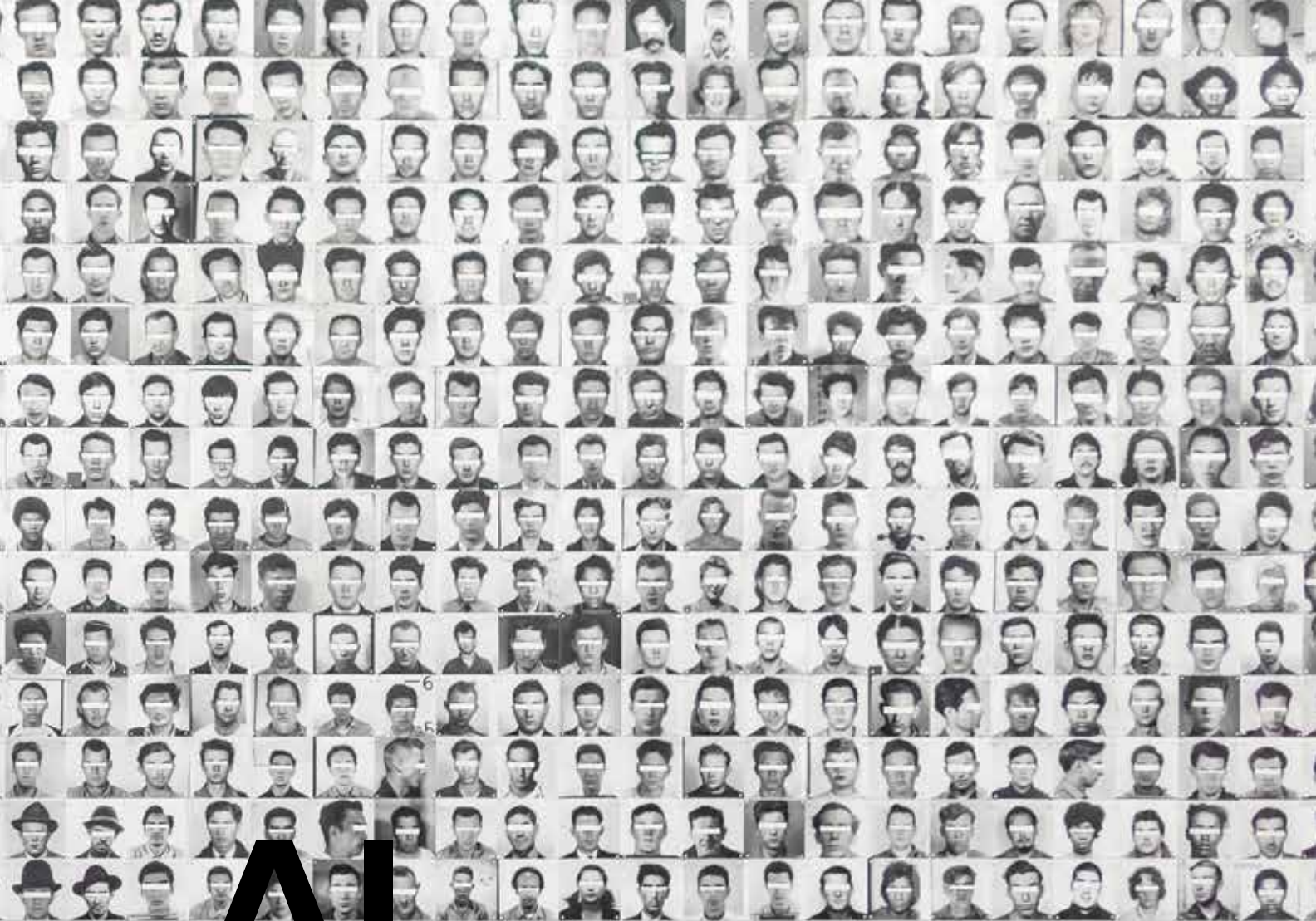
Playing Peacemaker

In 2019, the Frazier History Museum in Louisville, Kentucky, launched “**Let’s Talk: Bridging the Divide**,” creating a flourishing community space for dialogue and questions on challenging topics that often divide us. The program’s name ties to the Frazier’s location on the so-called “9th Street Divide” that historically has separated the city by race. Through dozens of moderated panel discussions, the museum has given the public an opportunity to hear from guests with varying perspectives on wide-ranging and sometimes contentious issues, including mental health, political discourse, voting, racial equity, policing, education, and Native American history. One of the most recent programs was the first community conversation about a newly released report from the US Department of Justice critical of policing in Louisville. This groundbreaking gathering brought together the mayor, the acting police chief, and representatives from the NAACP, Louisville’s Urban League, and the Fraternal Order of Police. The museum staff who facilitate the programs observe, “The dialogue isn’t always easy, and navigating the discussion and audience questions can be tricky, but if you want to bridge divides, there has to be conversation.”



Trevor Paglen's *They Took the Faces from the Accused and the Dead...* (SD18), 2019, from the "Uncanny Valley: Being Human in the Age of AI" exhibition at the de Young Museum in San Francisco, California.





AI Adolescence

What is generative AI, and what are the practical applications and implications for museums?

Photo by Gary Sexton, courtesy of the artist, Altman Siegel Gallery, San Francisco and the Fine Arts Museums of San Francisco

“Success in creating AI would be the biggest event in human history. Unfortunately, it might also be the last, unless we learn how to avoid the risks.”

—Stephen Hawking

In the past decade, artificial intelligence (AI) has leapt from the realm of science fiction and tech culture into our everyday lives. Most recently, generative AI is disrupting the work of creators, upending education, and performing key tasks in white-collar work. Some feel AI poses an existential threat to humanity—others forecast that it will quickly retreat into specific, narrow applications.

What is AI, is the hype justified, and how can museums make informed judgments about this or any other emerging technology? What are the practical applications and implications for museums in the short and long term?

The Challenge

Artificial intelligence encompasses a range of technologies that seem to mimic human ability to reason, make decisions, generate predictions, and perform complex tasks. Birthed in the 1950s, when Dartmouth professor John McCarthy coined the term and Alan Turing proposed his commonsense test for machine intelligence, AI literally began toddling in 1966, when the Stanford Research Institute introduced “Shakey,” the first mobile robot capable of interpreting instructions.

When *TrendsWatch* first covered AI in 2017, the major focus was “big data”: mining and analyzing huge datasets to generate business insights (or beat human grandmasters at chess) and using AI conversational skills to interact with users and respond to questions. Now AI is experiencing an adolescent growth spurt, fueled by the ability of generative AI (GenAI) to create original content as text, images, and sound. If chatbots powered by conversational AI might be mistaken for customer service reps, programs like ChatGPT and DALL-E, powered by GenAI, are trying

Students, faculty, and staff at Duke University’s Nasher Museum of Art used OpenAI’s ChatGPT platform to select works and write label copy for “Act as If You Are a Curator: An AI-Generated Exhibition.”



Photo by Cornell Watson

HOW GENERATIVE AI MIGHT HARM THE CREATIVE ECONOMY

By ChatGPT

This essay was written by OpenAI's ChatGPT 3.5 in response to the prompt "Write 500 words on the damage generative artificial intelligence may do to the creative economy." The program returned the following text in less than 10 seconds.

Generative artificial intelligence (AI) has emerged as a powerful tool, capable of producing creative content such as art, music, and literature. While it offers numerous benefits, there is growing concern about the potential damage it may inflict on the creative economy, particularly on artists and writers. This essay explores the multifaceted ways in which generative AI can harm the creative economy.

- 1. Devaluation of creative work.** Generative AI can flood the market with easily produced content, devaluing the work of human artists and writers. As AI-generated art becomes more prevalent, traditional art may lose its uniqueness and value. Consumers may be less willing to pay for original creations when cheaper AI alternatives are available, thereby reducing the income of artists and writers who rely on their work for a livelihood.
- 2. Copyright and plagiarism issues.** AI-generated content can blur the lines of copyright and intellectual property rights. Identifying the origin of a piece of content becomes challenging when AI creates works that closely mimic human creations. This can lead to a surge in plagiarism, where AI-generated work is passed off as original, causing financial and reputational harm to genuine creators.
- 3. Homogenization of creativity.** Generative AI algorithms are often trained on a massive corpus of existing creative works. While this can lead to impressive imitation, it can also result in a homogenization of creativity. The AI may perpetuate existing styles and trends rather than encouraging innovation and the exploration of new artistic frontiers. This stifling of creativity can be detrimental to the vibrant and diverse nature of the creative economy.
- 4. Erosion of skill development.** If AI becomes the primary tool for generating creative content, it could discourage aspiring artists and writers from developing their skills. The sense of accomplishment and personal growth that comes from honing one's craft may diminish, as people may opt for AI shortcuts. This could ultimately lead to a decline in the quality of human-created art and literature.
- 5. Job displacement.** The adoption of generative AI in the creative industry could lead to job displacement. Artists and writers may find themselves competing with AI systems that can produce content more quickly and cost-effectively. This could result in job loss and economic instability for many individuals in the creative sector.
- 6. Loss of emotional connection.** Art and literature often have a profound emotional impact on consumers because they are imbued with the personal experiences and perspectives of the creator. AI-generated content may lack this emotional depth, making it harder for audiences to connect with the work on a meaningful level. This could result in a decline in the overall appreciation of art and literature.
- 7. Ethical concerns.** Generative AI can inadvertently create content that is offensive, harmful, or biased, which can have a negative impact on society and culture. Artists and writers often contribute to important conversations and social change through their work. If AI-generated content lacks ethical considerations, it may contribute to harmful narratives and reinforce existing biases.

In conclusion, while generative AI holds immense promise in the realm of creativity, it also poses significant threats to the creative economy, including artists and writers. To mitigate these risks, there is a need for thoughtful regulation, ethical guidelines, and a recognition of the value of human creativity. Generative AI should be seen as a tool to enhance human creativity rather than a replacement for it. By carefully navigating the integration of AI into the creative process, we can harness its potential while preserving the vitality and diversity of the creative economy.

MUSEUMS MIGHT ...

- Help the public make informed choices, as users and voters, by providing education on AI and attendant issues.
- Explore how AI-generated content could be used to enhance collections, exhibits, education, and visitor interactions.
- Educate staff and the board about the choices the museum faces regarding AI use.
- Create ethical frameworks for decision-making.
- Take an active role in developing policies, guidelines, and regulations around issues such as sourcing of training data, tracking of content provenance, and protecting the rights of creators.
- Identify where AI can be used to help staff do their work while assessing the impact on museum labor overall.

out for the roles of author, artist, and composer.

ChatGPT is just one of a slew of GenAI programs taking the world by storm. A **2023 McKinsey survey** found that over 79 percent of respondents had some exposure to GenAI and nearly a quarter were using it regularly in their work. It is being used by students for **writing assignments**, researchers for **academic papers**, lawyers to produce **legal briefs**, and high school students to generate **college application essays**. In the process, developers of GenAI seem to be obeying Meta founder Mark Zuckerberg's exhortation to "move fast and break things." The growing list of things that, if not broken, at least cracked by generative AI ranges from copyright and intellectual property to both primary and higher education.

Some of the disruptions created by GenAI arise from flaws deeply embedded in the current algorithms. GenAI has a well-documented tendency to "hallucinate" (i.e., make shit up). In 2023, a **Federal District Court judge** threatened to sanction lawyers who used ChatGPT to generate a filing that turned out

to be filled with fake judicial opinions and legal citations, and staff of the research platform **Preprints.org** removed a ChatGPT-written submission that included fictitious references. GenAI also has an unfortunate tendency to amplify bias inherited from its training data. As **Bloomberg** recently reported, to judge by the outputs of the Stable Diffusion image generator, "CEOs are white men; women are rarely doctors, lawyers or judges; men with dark skin commit crimes; and women with dark skin flip burgers."

Any new technology can have a disruptive effect on labor, with the heaviest impact historically falling on blue-collar jobs. AI, and particularly generative AI, may be the first technology to destabilize white-collar work as well. We are already seeing grave threats to whole professions, especially in the **creative class**. Text and image generators are producing **cover art**, writing **news stories**, and producing blog posts and marketing copy. One of the major demands of the Hollywood strike of 2023 was restricting studios' use of AI, both to create **digital likenesses of actors** and to **generate scripts**. While this new technology will create some high-skill, adequately compensated jobs (AI research scientist, AI creative director), they will be outnumbered by **more precarious and stressful gig work**, such as labeling training data and flagging content that contains sexual abuse, hate speech, and violence.

AI's potential to do harm goes beyond its effect on labor. Its power, reach, and plausibility supercharges the dissemination of false information and fake content, including videos, news articles, social media posts, and even **books**. The **chairman of the Senate Intelligence Committee** has warned that misinformation generated and promulgated using AI could disrupt the 2024 presidential election. Even when used for good, like improving education, the widespread adoption of GenAI could widen the digital divide. While most of the current wave of AI applications have launched on a **freemium** model, eventually, to be profitable, the companies that create and deploy this technology will have to charge. The more these applications become embedded and necessary tools, the more we risk exacerbating existing inequalities due to disparate levels of access and ability to pay.

This technology is evolving so fast that the sectors impacted by its application, as well as regulators, are



Visitors to The Dalí Museum in St. Petersburg, Florida, interact with the museum's *Dream Tapestry* digital experience where personal dreams transform into one-of-a-kind art pieces.

struggling to keep up. How should **existing laws** and policies, written before the age of AI, be applied with regard to intellectual property, liability for harm or damage, privacy, bias, and discrimination in employment? What new regulation is needed, and how should we allow, ban, control, or regulate use? What role should GenAI play in P-12 and higher education, hiring, research, or law enforcement?

What's Next?

Will AI continue to accelerate at the current hyper-sonic rate? As with many technologies financed by large companies, the long-term business model is not yet clear. While **OpenAI**, the creator of ChatGPT, projected \$200 million in revenue by the end of 2023, it was spending \$700,000 a day to run the system, leaving it in the red. It remains to be seen whether it can convert enough free users into paid customers to make the product sustainable.

When regulators do catch up with the system, the constraints placed on how data is mined, and used,

may severely crimp the growth of a system that was fueled by exploiting free content (a practice that has already spawned **numerous lawsuits**). Ironically, by displacing human creators, GenAI may have sowed the seeds of its own destruction. GenAI trains on datasets collected from the internet, but when it learns from data produced by other AI, its performance degenerates, resulting in what researchers have dubbed “**model collapse**.” That breaking point may not be far off: the European security center **Europol** predicts that as much as 90 percent of online content might be “synthetically generated” by 2026.

What This Means for Museums

Museums have been experimenting with various flavors of AI for at least two decades, from practical applications (**Indianapolis Museum of Art at Newfields** using AI to crop digitized images) to playful (the wonderful Send Me SFMOMA, which responded to text prompts with images from the collection). Museums have deployed **AI-powered**

RESOURCES

Generative Artificial Intelligence and Data Privacy: A Primer, Congressional Research Service, 2023

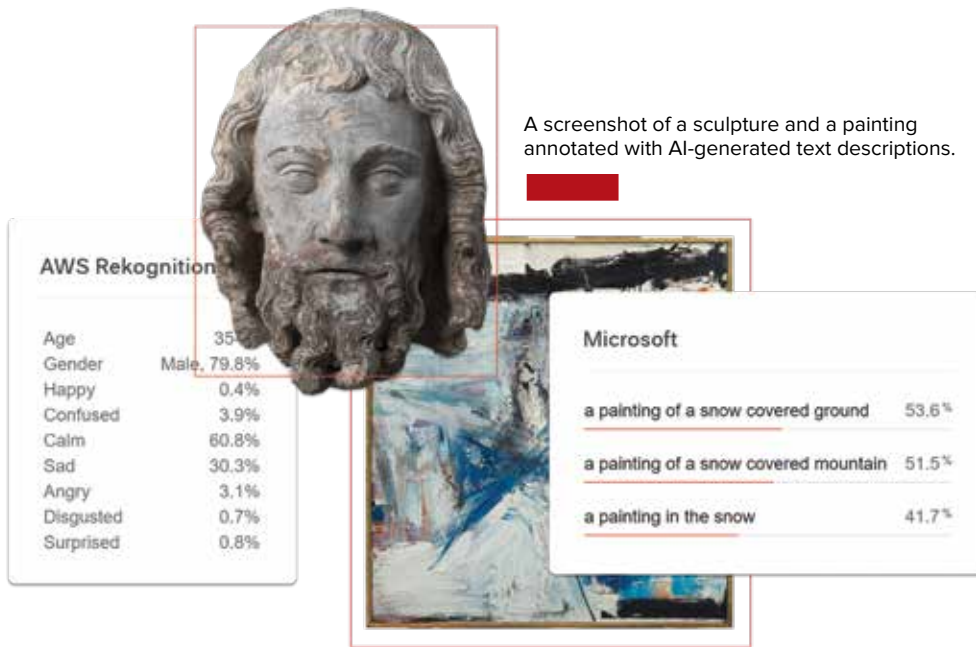
This publication provides an overview of generative AI, an explanation of the underlying data models and data sources, and what happens to data shared with AI models. It also outlines policy considerations with regard to privacy and related laws, and data scraping.

crsreports.congress.gov/product/pdf/R/R47569

Blueprint for an AI Bill of Rights: Making Automated Systems Work for the American People, White House Office of Science and Technology Policy, 2022

This document identifies five principles to guide the design, use, and deployment of automated systems to “protect the American public in the age of artificial intelligence,” including the rights to algorithmic discrimination protection and data privacy. The framework is accompanied by a technical handbook for anyone seeking to incorporate these protections into policies and practice.

whitehouse.gov/ostp/ai-bill-of-rights



A screenshot of a sculpture and a painting annotated with AI-generated text descriptions.

metadata associated with their own records follow these digital assets into the AI universe?

GenAI is trained on vast datasets compiled by scraping text and images from the web—without permission from or compensation to the creators of that material. Many artists, educators, and researchers are furious that GenAI harvests their work without consent, acknowledgement, or compensation. Do museums want to encourage the development and use of technology that is based on what many

robots as docents, predictive analytics to **forecast visitation** and **set ticket prices**, cognitive search to enhance **collections metadata**, and **sentiment analysis** to mine visitors' social media posts. At the Museum of Tomorrow in Rio de Janeiro, Brazil, the AI-powered chatbot **Iris+** queries visitors about their experience and suggests steps they can take to address their biggest concerns about the future.

It is no surprise that museums have leapt to experiment with GenAI as well. In 2023, Duke University students and faculty used ChatGPT to organize the exhibition “**Act as If You Are a Curator**” at the Nasher Museum of Art, prompting the platform to select works from the collection and write labels. Behind the scenes, some museums are experimenting with text generators to create communications for members and donors, draft reports, and even **write grant applications**. But for all the exciting new possibilities presented by GenAI, it poses profound challenges to museums as well.

A general erosion in trust accelerated by AI-generated misinformation (accidental or deliberate) might impact the long-standing and robust trust the public has in museums, or it may be an opportunity for museums to lean into their reputation as sources of reliable information. What role might museums play in creating systems to verify “**content provenance**”—the source and legitimacy of images, videos, text, and articles? How can museums ensure that data and

feel is ethically, if not yet legally, theft of intellectual property? How might museums help protect creative, educational, and academic communities of practice from harm and advocate for their interests?

AI and GenAI provide opportunities to increase income and reduce costs. Museums need to decide whether, when, and how to adopt this technology—decisions that are both values-based and practical. Some may seem like clear wins: using chatbots to provide personalized experiences for visitors, image recognition to help the public engage with collections, and business applications to forecast attendance. Others may require more thought. How should AI be deployed to help staff with their work? If the use of AI could reduce the number of staff, do museums want to be complicit in this loss? AI depends on **vast computational resources and massive energy use**. How might museums factor AI's environmental impact into their strategies to reduce their carbon impact?

Working through these issues will require museum board members and staff to acquire basic AI literacy to understand its benefits and drawbacks and identify where AI adoption might require expenditures (in technology, training, new staff) or result in savings (through increased productivity or staff reductions). Hardest of all, it will require making some projections about the timeline of development and adoption of AI, a critical issue on which even the experts disagree.



In October 2022, the **Museum of Science, Boston**, opened the permanent exhibition **“Exploring AI: Making the Invisible Visible”** to illuminate how the approaches and data used to train computer systems have often resulted in AI that mirrors human biases, raising questions about unchecked use of these technologies across all aspects of our lives. Complementing the exhibition, a series of in-person and online **programs** dove into topics such as computer vision, large language models, generative AI, and deepfakes to encourage community deliberation about the future of AI technologies. The museum also created a **resource library**—including animated explainers, infographics, videos, and games—that challenges learners to consider how we can ensure that our society creates and uses AI technologies in ways that are ethical, inclusive, and can benefit all people.



In 2022, the **Carnegie Science Center** in Pittsburgh hosted researchers from Carnegie Mellon University’s Human-Computer Interaction Institute to pilot a Novel Research-based Intelligent Lifelong Learning Apparatus (**NoRILLA**) with support from the National Science Foundation. This AI-enhanced interactive science exhibit adds a camera, touchscreen, display, and an AI assistant to a traditional earthquake table or other physical apparatus, such as ramps. NoRILLA—brought to life as a virtual gorilla—helps participants make scientific discoveries through interactive feedback and guidance. Evaluations revealed that children learned significantly more from the AI-enhanced intelligent science exhibit compared to the traditional exhibit, and the dwell time increased by a factor of four. NoRILLA has since deployed at the Children’s Museum of Atlanta, the Please Touch Museum in Philadelphia, the Children’s Discovery Museum of San Jose, and the CaixaForum Valencia in Spain. Read more about NoRILLA in the *Journal of the Learning Sciences* at bit.ly/NoRILLAJLS.



Beginning in 2015, the **Illinois Holocaust Museum** has worked with the USC Shoah Foundation to capture Holocaust survivor stories and bring them to life via high-definition, AI-powered holograms paired with voice-recognition technology. The resulting **Survivor Stories Experience** enables the interviewees to tell their deeply moving stories and respond to questions from the audience, inviting visitors to have a personalized, one-on-one “conversation.” The museum’s own research and national studies show that Holocaust survivors’ stories humanize difficult history, helping visitors develop empathy, learn the dangers of indifference, and recognize their responsibility to stand up to hatred and antisemitism. Recent research by the University of Illinois finds that visiting the museum and seeing the holograms empowered and motivated attendees to address injustice in their lives and communities.

Decarbonizing the Future

How can museums reduce their own emissions and inspire the public to take action?





In October 2023, the Climate Museum opened “THE END OF FOSSIL FUEL,” an exhibition that “explores the fossil fuel industry’s history of racism and deception, spotlights the success of the environmental and climate justice movement in resisting and reversing the industry’s harms, and invites visitors to take action in community.”

Sari Goodfriend

“Adults keep saying we owe it to the young people to give them hope, but ... I don’t want you to be hopeful. I want you to panic. I want you to feel the fear I feel every day. ... I want you to act as you would in a crisis. I want you to act as if the house was on fire, because it is.”

—Greta Thunberg, who became a climate activist at the age of 15

The climate crisis poses an overwhelming threat to museums and the communities they serve. Museums’ collections constitute a vast seedbank of human civilization, creativity, and accomplishments. Protecting those seeds will entail a commitment to decarbonizing the future—replacing our dependence on fossil fuels with sustainable systems.

How can museums decarbonize their own operations? How can they inspire people to take meaningful action in response to the climate crisis, even as they prepare to live in a profoundly disrupted future?

The Challenge

How we talk about the world shapes how we think about the world: nowhere is this more evident than the evolution in language describing climate change. In 2019, *The Guardian*, Britain's equivalent to *The New York Times*, announced that to more accurately describe the environmental challenges facing the world, it would henceforth refer to the "climate emergency" or "climate crisis" rather than to "climate change." Now we are creating a whole new terminology to describe the impact of this crisis on mental health, grouped under the heading of climate trauma. This taxonomy includes climate anxiety (a sense of impending dread); solastalgia (distress at the changes in one's home environment); and eco-grief (anguish and despair at the deterioration of the places we love).

Scientists around the world are struggling to bracket the best and worst possible outcomes of the current climate trends, but it's clear that even the rosiest credible projections are grim. The **Inevitable Policy Response** consortium concludes that by 2050 the world will likely achieve the **Paris Agreement** goals to limit global warming to an increase of 1.5° C to 2° C above preindustrial levels. This may be unduly optimistic, however, in light of the fact that, as the UN Environment Programme reports, every one of the 196 countries that signed on to the agreement is **falling short of these goals**. At the pessimistic end of the spectrum, Columbia University scientist James Hansen, who briefed the Senate about global heating way back in 1988, predicts we are approaching a "**new climate frontier**" with temperatures higher than at any point in the past million years.

This crisis poses an immediate and deadly threat. Record temperatures are directly responsible for a soaring number of **heat-related deaths** and record-breaking **wildfires, drought, and flooding**. In the near term, these changes threaten economies, ecosystems, and agriculture. We are fast approaching irreversible **tipping points**, including the collapse of ice sheets and ocean circulation, loss of glaciers, and the dieback of coral reefs and rainforests. Warming, combined with habitat destruction and introduction of invasive species, has triggered the sixth **mass extinction** in Earth's history, which may wipe out up to a million species. For humans, a warming world increases

disease, injury, and death rates. It also contributes to a **global crisis in mental health**, with rates of **suicide** rising in step with global temperature, climate disasters triggering acute stress and PTSD, and climate disruptions leading to **long-term depression and anxiety**.

Industrialization has flooded the atmosphere with CO₂, getting us into this mess. Theoretically, we could dig ourselves out by capturing and storing carbon (biologically, geologically, or technologically), but so far, the majority of such projects have either **failed or fallen significantly short** of their goals. Many of the "**carbon credits**" pitched to individuals and corporations as a way to offset emissions are illusory, unverified, or temporary. Gaining control over the climate crisis, the **UN Environment Programme** has declared, will require urgent, system-wide transformation. That includes putting ourselves on a strict carbon diet when it comes to both public infrastructure and individual behavior. This includes, critically, curbing the consumption (for travel, meat, material possessions) that has become synonymous with success. It may require **degrowth**—focusing on sustainable metrics of success such as health, education, and happiness rather than economic profit.

While efforts to tackle this crisis have been slowed by climate skeptics and misinformation, relentless communication by scientists and activists is having an impact. The **Yale Program on Climate Change Communication** reports that public understanding of climate risk has **improved since 2008**, when the group first began tracking public opinion. As of 2013, the Americans who think global warming is happening outnumber those who think it is not by a ratio of nearly 5 to 1, and 60 percent understand it is caused by humans. On the other hand, climate change ranks **17th out of 21 national issues** concerning Americans, trailing far behind the economy, health care costs, terrorism, and the budget deficit. How can we bump up climate action on this list of priorities and increase people's willingness to act?

What This Means for Museums

Of paramount concern is the fact that the climate crisis is harming the communities that museums exist to serve, posing particular risk to the very young and the very old, people with disabilities or chronic medical



Architectural rendering of the southeast view of the Charles and Stacie Mathewson Education and Research Center at the Nevada Museum of Art.

CARBON MANAGEMENT AT THE NEVADA MUSEUM OF ART

By Colin M. Robertson, Charles N. Mathewson Senior Vice President of Education and Research

“We are learning from Indigenous artists and partners to better understand and refine our role as a cultural institution in addressing climate justice, land and water use.”—David B. Walker, CEO, Nevada Museum of Art

As a cultural institution located in Reno, the Nevada Museum of Art has a vested interest in climate action. In 2022, the nonprofit research organization Climate Center named Reno the city with the fastest-warming climate in the United States—since 1970, summer temperatures in our city have risen 10.9 degrees. We are committed to positively impacting our own micro-climate by reducing our carbon emissions and inspiring our community to learn and take further action.

- Nevada’s geography, climate, and hydrogeology are embedded in our museum’s architecture and visual identity.
- Our building, designed by architect Will Bruder, is inspired by a basalt rock formation endemic to the high desert of the Great Basin.
- Our visual identity and branding, designed by Brad Bartlett, are based on geothermal heat maps of Reno, and the thermal data visualized on our website reflects hourly, daily, and seasonal temperature changes.
- Our Center for Art + Environment, launched in 2008, stewards a substantial and growing collection of archives, special collections, and unique publications related to creative interactions between artists and the environment.

To extend the museum’s commitment to art and the environment institutionally, and to align with the Paris Climate Agreement’s imperatives to reduce waste and the world’s carbon emissions, in 2022 we worked with the Ki Futures program—an Amsterdam-based program designed for the cultural sector by the non-profit organization Ki Culture—to produce a Sustainability Action Plan (bit.ly/NVMAActionPlan) addressing climate justice and carbon accounting.

To optimize our museum’s carbon footprint, we use a comprehensive carbon accounting platform developed by nZero Inc. to analyze and ameliorate our direct and indirect emissions. nZero’s dashboard visualizes our energy consumption and emissions data in real time—a sometimes sobering exercise, given the cooling and humidification requirements in a high desert environment.

As new infrastructure comes online during the construction of our 50,000-square-foot Charles and Stacie Mathewson Education and Research Center, we anticipate our carbon footprint will improve despite increasing the overall size of our museum. One goal of our groundbreaking exhibition “Into the Time Horizon” (opening in 2026) is to reduce an exhibition’s carbon footprint by better utilizing permanent collections in combination with signature international loans and commissions.

We would like to thank nZero, the Teiger Foundation, and the Helen Frankenthaler Foundation for their support of the Nevada Museum of Art’s sustainability initiatives.

conditions, people of color, people with low incomes, and Indigenous peoples. More than 90 US coastal communities currently experience **chronic flooding**, and that number is expected to rise to over 170 in the next two decades. By 2100, as many as **13 million people** in the US could be forced by rising sea levels to relocate, stressing the economies, housing, and infrastructure of the cities that receive these displaced populations.

The risks facing museums themselves are clear and comprehensive. To name just a few:

- Over a third of US museums lie within 100 kilometers of the coast—a quarter in zones highly vulnerable to sea level rise and severe storms.
- Sixteen percent of Americans live in areas at **high risk of wildfire**—this will rise to 21 percent in the next three decades as the risk zones for fire expand. US museums, which tend to co-locate with population, face similar exposure.
- Museum buildings and HVAC systems were built for climate conditions that are rapidly becoming out of date. The stress on these systems, and costs of remediation, will only increase with time.
- As **plant hardiness zones shift north**, historic properties and botanic gardens face a future in which their original landscaping and collections cannot survive.
- The increase in the number of **extreme heat days** annually is encroaching on attendance and outdoor space rentals.
- The climate crisis is **making insurance more expensive**. Major insurers have already **stopped writing new policies** in California, Florida, and Louisiana, and this list of “uninsurable” areas is expected to grow.

- Climate risk will put additional pressure on museums racing to document and preserve archaeological sites, habitats, and endangered species.

Museums can respond to these challenges both internally, through how they operate, and externally, through how they work with their communities and influence the public.

The Carbon Inventory Project estimates that the US museum sector annually emits an estimated 4 million metric tons of CO₂e, or carbon dioxide equivalent, which expresses the total greenhouse gases emitted in terms of the equivalent measurement of carbon dioxide. This is equivalent to the emissions of about **83,000 US households**. As the Culture Over Carbon initiative points out, reducing those emissions by 30 percent would be the equivalent of taking three natural-gas-fired power plants offline or 271,000 cars off the road. If the entire sector reduced its annual energy consumption by 50 percent, the related emissions reductions would be equivalent to eliminating five such power plants or 452,000 passenger vehicles (more than all the registered vehicles in Maine).

There is **consensus** among the general public, even stronger among frequent museum-goers, that museums should be working to reduce their carbon footprints and operate in more sustainable ways. These improvements could encompass design, construction, energy use, land management, digital activities, and all other aspects of museum operations. Choices range from moving the museum to a more sustainable site to reducing reliance on travelling exhibits and collection loans. Given the tremendous carbon output tied to **computation and data storage** on “the cloud,” museums may also need to assess the impact

RESOURCES

Culture Over Carbon: Understanding the Impact of Museums’ Energy Use, New Buildings Institute, 2023

This report shares energy data from more than 130 participating institutions, including zoos and aquariums, gardens, historic sites, and five types of museums. The report also includes recommendations for energy saving strategies geared to cultural institutions.

ecprs.org/engagement/culture-over-carbon

Toolkit on Sustainability in the Museum Practice, International Committee for Museums and Collections of Modern Art. Launched in 2021 and updated in 2023, this toolkit offers museums resources, tools, guidelines, and examples to promote sustainable change related to equity, inclusion, diversity, justice, environmental respect, and sustainable economic growth.

bit.ly/46Or2kk

of their digital practices. (Even **removing images from email signatures** has a measurable impact on carbon emissions.)

Some of these changes will require museums to revisit and revise old standards, which can be deeply embedded in intransigent systems. The museum sector is slowly chipping away at **inflexible and unsustainable standards** for climate control, but even as some museums around the globe **adjust their HVAC** systems to allow a greater range of temperature and humidity, many contend with loan agreements that adhere to old conventions.

There is overwhelming, broad-based support for museums of all types to educate the public about climate change. Not just science centers, natural history museums, zoos, and aquariums (as one might expect), but also art museums, history museums, historic sites, and children's museums. No other type of institution in American life is more **trusted** than museums, and when it comes to information on **climate change specifically**, only scientists and researchers rank as more credible. (It's always good news when science wins.)

What message should museums send when teaching about the climate crisis? It may not be as simple as making more people understand, and believe, what is likely to happen. **Research** suggests that if people are confronted with projections that are too depressing and scary, they disengage and are even *less* likely to take action. (Case in point: How did reading the opening of this article make you feel?) Some advocate "**climate optimism**": fostering change by helping people believe they can make a difference, creating a positive feedback loop of action and hope.

Crafting the appropriate message is also complicated by wide uncertainties around what we face. Museums can't assure people "if you do this and support that, all will be well." Even if we take every recommended action, many generations will live in a significantly warmer world. However, museums can help people understand that their actions can help avert the worst-case scenario while simultaneously preparing them to live in a profoundly altered world. Museums can help people think about uncomfortable truths *and* feel empowered to do things that can make things better.

MUSEUMS MIGHT ...

Internally, as organizations and as a sector

- Measure and report on their own carbon emissions as a first step toward reduction; integrate carbon goals into their strategic and operational plans.
- Implement climate-friendly policies and procedures that minimize emissions, such as supporting remote work. (Hybrid employees who work from home two to four days per week **reduce their emissions by 11 to 29 percent** compared to full-time on-site workers.)
- Question the dominant paradigm that success requires growth. What would "degrowth" look like in museums? Might it entail less travel for research, fewer loans, and capping the museum's footprint and attendant energy costs?
- Make thoughtful decisions about funding. Some wealth is tied directly to practices that fuel the climate crisis. When are grants, sponsorships, or donations an appropriate form of reparative practice, and when do they insulate individuals and corporations from the need to make fundamental changes to their business models?
- Work together as a sector to revisit expectations on climate control so that museums are not required or pressured to conform to environmentally unsustainable standards.
- Join initiatives such as **We Are Still In, the Museums & Climate Change Initiative**, the **Climate Heritage Network**, and the **Coalition of Museums for Climate Justice** to foster organizational and collective action.

Externally

- Use their knowledge, perspective, and trusted status to advocate for climate actions by individuals, businesses, and government.
- Motivate members of the public to take action by changing their own lifestyles and advocating for change at the local, state, and federal levels.
- Organize and host constructive community conversations, workshops, speaker series, and programs that resonate across the political spectrum and help people think critically about these issues.
- Help individuals and communities cope with the stress and grief inflicted by climate impact.

MUSEUM EXAMPLES



In 2021, the board of the **Discovery Museum** in Acton, Massachusetts, approved a **five-year Sustainability Plan** that outlines more than two dozen action steps across all areas of its operations to reduce greenhouse gas emissions and decrease its carbon footprint, reduce water usage, minimize waste generation, invest sustainably, and advocate for climate action. All these steps support the larger goal of inspiring others to climate action. A cornerstone of the plan is the installation of a 326 kWh solar array over a portion of the parking lot that generates more than 100 percent of the museum's electricity on-site, with the excess sold to five other nonprofit organizations at a discount. The solar array, which became operational in summer 2022, represents a CO₂ reduction equal to preserving 317 acres of forest. In June 2022, the museum kicked off a first-of-its-kind carbon offset program for members, staff, and volunteers and in September 2023 provided carbon offsets for all other visitors.



Each spring, the **National Nordic Museum** in Seattle hosts corporate leaders, policymakers, and scholars for its annual Nordic Innovation Summit. Launched in 2018, the summit strengthens ties between the technology and innovation sectors in the Nordic countries and the Pacific Northwest—two regions advancing cleantech solutions. It is now a week-long event that serves over 400 on-site attendees and thousands through a live webcast. The theme of 2023's summit was "Sustaining Sustainability"—the idea that by doing good (through environmental, social, and governance commitments), a company can do well financially. Highlights included Governor Jay Inslee pitching business opportunities in Washington State to Nordic cleantech companies; Henrik Henriksson, CEO of H2 Green Steel, sharing how his company is reducing 95 percent of carbon emissions in the industry; and executives at Volta Truck discussing the US launch of their 16-ton, all-electric commercial vehicle. This program exemplifies how the National Nordic Museum lives its values as a neutral convener for climate-crisis cooperation.



In 2021, the **Peabody Essex Museum** (PEM) in Salem, Massachusetts, launched a Climate + Environment Initiative with the goal of sparking conversation, motivating action, and inspiring creative solutions. Designed to be simultaneously outward-facing and inward-looking, the initiative produces a series of ongoing exhibitions and public programs while implementing institutional protocols to mitigate climate impact, such as creating reusable exhibition design systems, offering sustainable products in the shop, and transitioning to renewable energy sources. A museum-wide staff cohort meets regularly to propose ideas to make PEM a more sustainable and climate-forward institution. PEM also hosts Salem's annual Preservation in a Changing Climate conference with the city and has recently partnered with Mass Audubon to help establish a regional Youth Climate Leaders Club. Through its efforts, PEM seeks to be a community partner and a hub for engagement, empowering other organizations to take similar actions to confront the biggest challenge of our time.

Dropping the Degree

Sixty percent of Americans may find their job search stalling when they hit a “paper ceiling” that ensures that applicants without a four-year college degree advance only so far. This requirement

excludes 70 percent of Black job seekers, 80 percent of Latinos, and three-quarters of American Indians and Alaskan Natives.

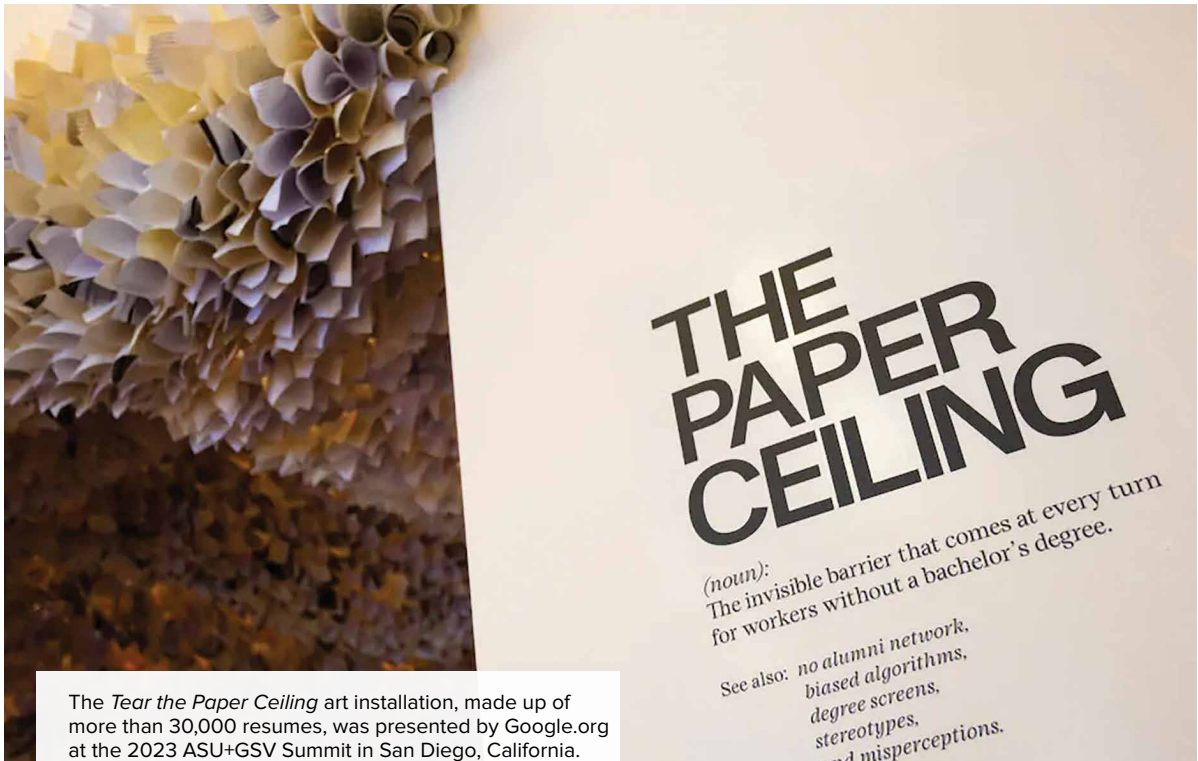
Many of the positions above this ceiling don’t actually require college experience, and many

potential workers have acquired relevant skills through alternative routes, including community college, military service, and on-the-job experience. But requiring a degree has become a common practice in part because it is an

Eastern State Penitentiary Historic Site (ESPHS) overhauled its recruitment strategy to hire “returning citizens”—people with lived experience behind prison walls. ESPHS encourages other museums to follow suit and include returning citizens in interpreting and reimagining museums.



Photo by Luis Cruz Duarte, courtesy of Eastern State Penitentiary Historic Site, Philadelphia, PA



The *Tear the Paper Ceiling* art installation, made up of more than 30,000 resumes, was presented by Google.org at the 2023 ASU+GSV Summit in San Diego, California.

efficient way to filter a deluge of digital applications.

The paper ceiling doesn't just keep people from getting jobs; it **damages lives** in a host of ways. In the US, people without a four-year degree are less likely to own their own home, are more likely to suffer from depression, and have a life-expectancy eight years shorter than their college-educated peers. While it's difficult to untangle cause and effect, it's clear that barriers to hiring help fuel the social and economic stratification of society.

Museums and the Paper Ceiling

Data suggests museums have succumbed to "over-credentialing" as well. Ninety percent of

museum workers represented in the last **national salary survey, in 2017**, held at least a bachelor's degree, versus 33 percent of the general population. More than 77 percent of technician/preparators (a position described as "typically requiring manual skills related to duties") have a four-year degree or higher. This overshoot may stem in part from the attitudes and behavior of job seekers: for example, highly educated creatives may see museum employment as a desirable way to fund their independent work. However, having a large pool of highly credentialed applicants can normalize museums' expectation that they can, and therefore should, fill these positions with college graduates.

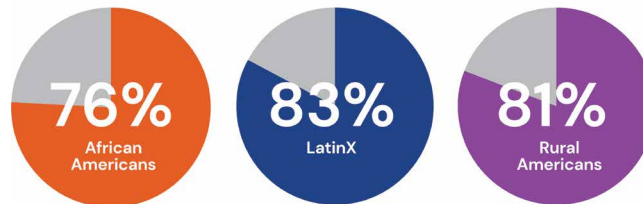
Two challenges are pushing museums to revisit traditional hiring practices, the most recent being the nonprofit labor shortage. As museums recover and restaff following the pandemic, **60 percent of directors** report they are having trouble filling open positions. Another impetus is that many museums are stalling or even losing ground in their efforts to attract and retain a more racially diverse workforce. Facing these challenges, museums might want to rip down the paper ceiling to widen the pool of potential applicants, increase the diversity of their workforce, and contribute to an equitable society.

Other job sectors are already "dropping the degree." In the past year, major companies including Kellogg's, General Motors, and

Bank of America announced they will stop requiring four-year degrees for a wide variety of positions. **Governments** are trying it, too: in 2023 Virginia became the 30th state to review roles and remove unnecessary degree requirements from thousands of public-sector jobs. As a tool to advance diversity, equity, accessibility, and inclusion (DEAI), degree reform is systemic and potentially sustainable, in contrast to one-and-done approaches that rely on diversity training seminars or job fairs.

In museums, the degree in question might be a B.A. or B.S., but for some positions it might be a master's or a Ph.D. Expectations regarding advanced degrees are even more exclusionary than undergraduate degrees, with respect to race and socioeconomic background, and often result in people embarking on museum careers burdened by significant student debt. It's worth remembering that museums' focus on advanced academic credentials is a relatively recent development. The ranks of successful, prominent directors without advanced credentials include Julianna Force, who began as a personal secretary and rose to become founding director of the Whitney Museum of Art in New York City in 1930; J. Carter Brown, who held an M.B.A. when he became director of the National Gallery of Art in Washington, DC; and Ron Chew, who did not have a bachelor's degree when he became executive director of Seattle's Wing Luke Asian Museum in 1991.

Four-Year Degree Requirements Automatically Screen Out:



If Not Degrees, Then What?

Degrees are often used as proxies for criteria that wouldn't withstand scrutiny. It's well documented that, left to their own devices, people tend to hire applicants they feel comfortable with, people who share their background, interests, experience, and cultural references. That very human tendency is directly at odds with museums' desire to recruit and retain staff who reflect the racial and cultural diversity of their communities. Weaning an organization from over-reliance on credentialing starts with managers taking a hard look at the skills a job really needs. If a position requires time management and social and communications skills, for example, what other ways might applicants demonstrate these abilities?

Some employers are replacing degree-based hiring with "skills-based hiring," assessing applicants' practical knowledge, experience, and demonstrated skills and competencies. These approaches come with their own drawbacks. Some employers have implemented "challenge-based hiring"—requiring applicants to brainstorm ideas, solve a problem, or write an essay. This

imposes a time burden on applicants, and in some cases asks them to donate material of real value (whether or not they get the job). Degrees are binary—an applicant does or doesn't have one. (Granted, degrees from some institutions may be more prestigious than others, but that's a whole other bundle of bias.) Knowledge and experience are more nuanced and harder to assess. How can museums create systems for reviewing applications that are fair and equitable but also don't eat unreasonable amounts of staff time?

Once a museum has recruited a more diverse workforce, managers face another set of challenges: ensuring these new staff members want to stay. Employers may need to provide training in hard or soft skills and examine the organizational culture to ensure it is welcoming for new hires who don't share the background, norms, and experiences represented in the dominant institutional culture.

It may not be a simple solution, or a magic fix, but examining when they might want to drop the degree for particular roles could be a healthy first step for museums to take on the road to effective, fair, and equitable hiring.



Digital Twins and Doom Loops

A brief guide to terms that may be popping up in your news feeds.



Digital twin
of an oil rig.



Digital twins: digital models of objects, systems, or processes (e.g., buildings, machines, distribution systems) that exist or could exist in the real world. These interactive models use real or fictional data input to visualize, simulate, or predict how their real-world

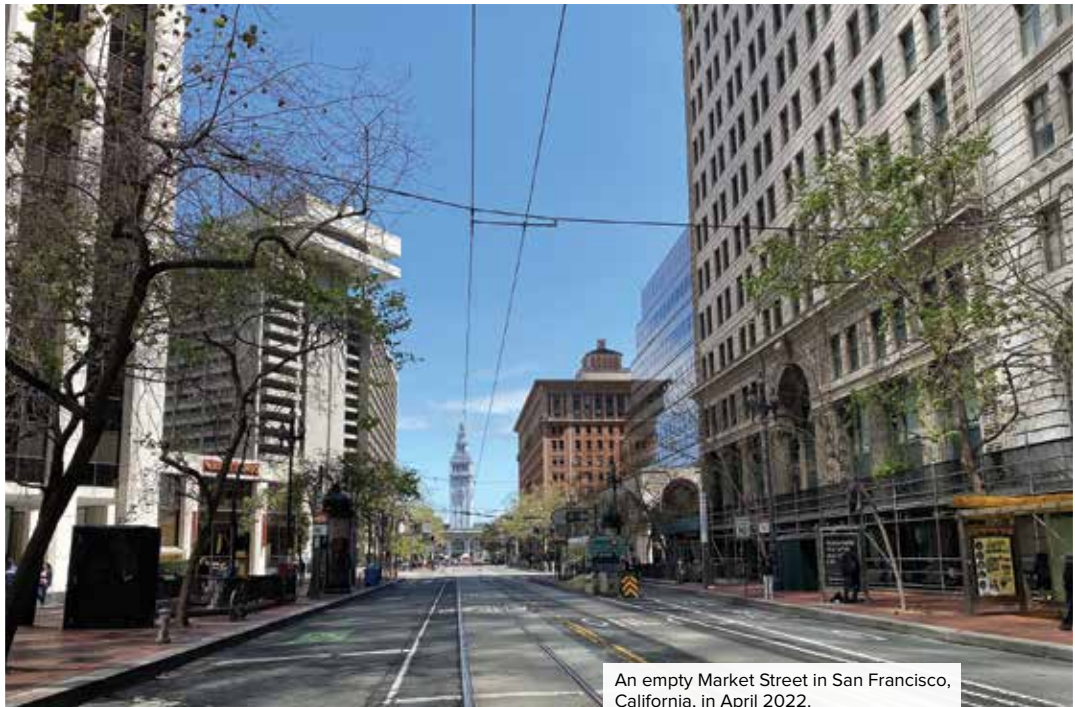
counterparts will respond to various situations and conditions. For example, **Shanghai** has commissioned a digital twin of the whole city that will use data from satellites, drones, and sensors to model 100,000 elements, including waste disposal, traffic, and the potential

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effects of natural disasters. The **Neurotwin** project is creating personalized digital twins of individual human brains to predict the effects of using electromagnets to treat Alzheimer's disease. **The Natural History Museum** in London feeds data, from



An empty Market Street in San Francisco, California, in April 2022.

thousands of sensors that measure everything from temperature and humidity to vibration and light, into a digital model that helps staff reduce energy use, identify threats to collections, and prioritize repairs and improvements.

Doom loops: a negative feedback cycle in which the damaging effects of a disruption spark a downward spiral that is difficult to reverse. Currently, much attention is being given to **urban doom loops** sparked by the pandemic, when remote work emptied office buildings and prompted many people to relocate to

areas with lower costs of living. The resulting lower foot traffic, job loss due to small business closures, and disinvestment in city services resulting from lower tax revenues led to an increase in homelessness and crime, making it less likely that people and businesses will return to former urban cores. Researchers warn that a **climate doom loop** may result from the fact that climate disasters (extreme heat, storms, floods, fires) are diverting money and attention from the efforts needed to curb emissions and reform the systems fueling the climate crisis.

Combating the Loneliness Crisis

In 2019, the temporary
Torro Loneliness Museum
opened in Beijing to help
people "accept and cast
aside their loneliness."



In May 2023, Dr. Vivek Murthy released *Our Epidemic of Loneliness and Isolation: The U.S. Surgeon General's Advisory on the Healing Effects of Social Connection and Community*. Such advisories are issued to address “significant health challenges that require the nation’s immediate awareness and action.” The first, in 1964, tackled smoking and tobacco use. Subsequent advisories covered preventing and decreasing overweight and obesity (2001) and using naloxone to prevent opioid overdoses (2022). In this latest report, Murthy calls on the US to make the same investments in addressing social connection that we have made in combating tobacco use, obesity, and the addiction crisis.

What is the extent of this crisis?

About a third of US adults 45 and older suffer from loneliness; that figure rises to nearly 80 percent in young adults 18 to 24. The incidence of loneliness is particularly high among vulnerable older adults, including immigrants; lesbian, gay, bisexual, and transgender populations; minorities; and victims of elder abuse. Economists estimate that loneliness costs the **US economy** \$406 billion a year due to lost work days and adds an estimated \$6.7 billion a year to **Medicare costs** for socially isolated older adults.

Why is loneliness a significant health challenge?

Research shows that **loneliness**

and **isolation** are linked to sleep problems, inflammation, and immune changes in younger adults. In older people, they’re tied to symptoms such as pain, insomnia, depression, anxiety, and shorter life span. In people of all ages, they are associated with higher risks of heart disease, stroke, diabetes, addiction, suicide, self-harm, and dementia.

What are some root causes of this epidemic?

More Americans are living alone. According to **US Census** data, the number of one-person households soared from 8 percent in 1940 to an estimated 29 percent in 2022. Now roughly 13 percent of American adults live alone, from 4 percent of adults 18–24 to 26 percent of those 65 and older.

The decline of organized religion. Churches have traditionally been a critical “third place” where people socialize and connect with their community, but participation in organized religion is at an all-time low, with roughly 3 in 10 adults now **religiously unaffiliated**. Sixty-eight percent of adults report attending religious services a few times a year or less.

The rise of social media. **Teens** spend an average of 4.8 hours a day on social media. While these platforms were initially hailed as a great connector, they have **demonstrably contributed** to the mental health crisis among young people by fostering unrealistic expectations regarding appearance and facilitating cyberbullying.

What can museums do?

The surgeon general’s report makes the following recommendations for how cultural organizations can help combat this epidemic:

- Create opportunities and spaces for inclusive social connection and establish programs that foster positive and safe relationships.
- Embed social connection in internal policies, practices, programs, and evaluations.
- Actively seek and build partnerships with other community institutions...to create a culture of connection in the broader community.
- Advance public education and awareness efforts to introduce and elevate the topic in programs and exhibits.
- Create and provide education, resources, and support programs for community members and key populations: community-wide social events, volunteering, network-building, and professional development.
- Foster a culture of connection in the broader community by highlighting examples of healthy social connection and leading by example.



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TrendsWatch and other Center for the Future of Museums (CFM) activities are supported by **American Alliance of Museums** member dues and donations. Corporate and foundation support are also welcome. If this report sparked your thinking and you would like to see *TrendsWatch* prosper, please consider supporting the Alliance by joining or making a tax-deductible contribution. For over a decade, CFM has been helping museums explore today's challenges and shape a better tomorrow. We welcome your investment in our shared future.

Support CFM today and help create a better future for museums.
Visit aam-us.org/membership or aam-us.org/donate.

To learn more about foundation support, contact Eileen Goldspiel, Director, Advancement, at egoldspiel@aam-us.org. For information on corporate support, contact Ryan Bourke at rbourke@aam-us.org.



Strategic Foresight Toolkit

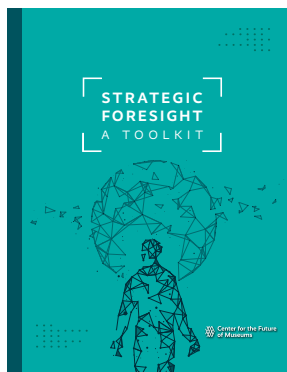
from AAM's Center for the Future of Museums

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A 2019 Harley-Davidson FXDRS-114, with an 1868 cc, 8-valve V-twin engine. Also *TrendsWatch* author Elizabeth Merritt.

About the Center for the Future of Museums

The American Alliance of Museums' Center for the Future of Museums (CFM) helps museums explore the cultural, political, and economic challenges facing society and devise strategies to shape a better tomorrow. CFM is a think tank and R&D lab for fostering creativity and helping museums transcend traditional boundaries to serve society in new ways. Find research, reports, blog content, and foresight tools at aam-us.org/programs/center-for-the-future-of-museums/.

About the Author

Elizabeth Merritt is the Vice President for Strategic Foresight and Founding Director of the Center for the Future of Museums at the American Alliance of Museums. She studied ecology and evolution as an undergraduate at Yale and received her master's degree in cell and molecular biology from Duke University. Her museum career has included working in a children's museum as well as natural history and history museums. She is a graduate of the Getty Leadership Institute's Museum Management Program and the Foresight Certificate program at the University of Houston. Prior to starting CFM, Elizabeth literally wrote the book on museum standards and best practices as Director of the Alliance's accreditation and excellence programs. She considers this perfect preparation for her current role as agent provocateur—challenging museums to question assumptions about traditional practice and experiment with new ways of doing business.

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In 2018, the exhibition "Carbon Ruins" at Lund University addressed the question "What would a museum of the fossil fuel age look like if we set it in a near future where we successfully transitioned away from fossil fuels?"

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TRENDSWATCH: NAVIGATING A VOLATILE FUTURE

Cover: Our cover image was generated by the artificial intelligence platform Midjourney in response to the prompt "A landscape of modern wind generators and solar panels in the style of Hilma af Klint."



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The Alliance wishes to thank our corporate partner, who has generously supported this year's *TrendsWatch*:



Affinity Nonprofits

"I always look forward to reading CFM's annual TrendsWatch report as it provides a window into the world of what concerns museums most. The highlighted trends often provide a spotlight on current perils and exposures and thus potential helpful clues about how we need to modify risk management techniques to better serve the museum community." —Joe Dunn, President & CEO, Huntington T. Block Insurance Agency, Inc.

Huntington T. Block Insurance manages AAM-recognized insurance programs, offering Museum Collections, Exhibitions & Temporary Loans/Fine Art; Property & Casualty; and Trustees/Directors & Officers Liability insurance. Each unique program strives to provide broad coverage at very competitive premiums with service from a knowledgeable and responsive team of risk professionals.

Aon Affinity Nonprofits is a brand name for the brokerage and program administration operations of Aon Affinity focused on the nonprofit sector. We specialize in developing, marketing, and underwriting customized insurance for nonprofit organizations.

MUSEUM TOOLKIT

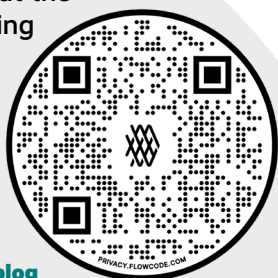
Download your **free** digital copy of this resource developed by the Measurement of Museum Social Impact (MOMSI) initiative!

The toolkit—complete with resources, practical tips, templates, and insights from participating museums—offers a reliable framework for measuring a museum's social impact, as demonstrated through outcomes in these **key areas**:

- Continuing learning and engagement
- Enhancing health and well-being
- Valuing diverse communities
- Strengthening relationships

Scan the QR code to learn more about the toolkit and exploring social impact measurement for museums!

Also available by visiting:
bit.ly/social-impact-blog



Stay tuned for more resources from AAM to help you measure your museum's social impact!





American
Alliance of
Museums

Connect with museum professionals around the world for the second Future of Museums Summit! With this Summit, we take the theoretical framework from our annual forecasting report, *TrendsWatch*, even further. Join this virtual convening to gain tactical strategies and takeaways to plan for a brighter future for you, your museum, and your community. Stay tuned for additional details and registration!

Sign up for updates at summit.aam-us.org to ensure you don't miss a thing.

FUTURE^{OF} MUSEUMS SUMMIT

OCTOBER 29-30, 2024

JUST RELEASED:

Museum Board Leadership: A National Report **2024**

We are proud to present the findings of a new national report on museum board leadership. This second edition of the report first fielded in 2017 finds noteworthy progress in recent years, as well as challenges to continued improvement in museum governance including board diversity. Each of the three sections—The People, The Work, and The Finances—presents key finding and resources to guide your progress on tasks ranging from diversifying your board to creating the core governing documents that undergird your museum's stability.

Download your free copy today. Visit: bit.ly/2024-board-leadership



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Ahead of Our Time

Welcome to the future, *Museum* readers! This special issue of the magazine is dedicated to the latest edition of our Center for the Future of Museums' annual *TrendsWatch* report, which shares trends emerging on the margins of our field that may become dominant in museum practice over time.

Using the methodology of strategic foresight, the report's author, Elizabeth Merritt, identifies phenomena cropping up in her research, then works with museum experts to anticipate how those trends might impact the field as they develop. Through invaluable context-setting, cutting-edge examples, and incisive recommendations, *TrendsWatch* has for a decade running helped museums stay ahead of changes in society, such as QR codes and the "internet of things" (in the 2013 edition), big data and analytics (2014), and happiness and well-being as metrics of success (2016).

How we imagine the future depends a lot on what's happening in the present, and as this year's featured themes demonstrate, the present feels unstable. A new era of culture wars is unfolding, with cultural and educational institutions like museums caught in the middle, taking heat both for embracing and demurring on progressive stances. Dramatic advances in artificial intelligence technology have made their way to market, trailing with them a morass of questions about misinformation, job security, and intellectual property. Meanwhile, record-breaking wildfires and temperatures have

revealed the extent of the continuing climate crisis, urging us all to contemplate how we can reduce our carbon consumption.

This year's *TrendsWatch* asks how we might emerge from the volatile future these trends present not just intact, but better for it. After all, a future-minded museum is one in touch with its community—and poised to be a true community resource. As the people around us navigate the destabilizing changes of the future, they will need solid information, ethical solutions, and models of resilience. The better we try to stay not just with but ahead of our time, the better we will be able to guide and partner with our communities, actualizing our purpose in society more than ever before.

Consider this issue your invitation to start thinking big about our future, what challenges and opportunities will come with it, and how we can shape it for the better. At the Alliance, we look forward to building it along with you.

10/23/2023



A handwritten signature in black ink, appearing to read "Brooke Leonard".

Brooke Leonard is the Interim CEO & Chief of Staff at the American Alliance of Museums.

Our Volatile World

160

Educators fired
for political
reasons from
2020–2022.

30%

Percentage of hours
worked today that
could be automated by
2030 with the adoption
of generative AI.

300 million

Current jobs that could be eliminated or
diminished, globally, by generative AI.

90%

The increase in global
CO₂ emissions since
1970.

3.6 billion

People already
living in areas highly
susceptible to climate
change.

Sources: Clockwise from top: McKinsey Global Institute, *Generative AI and the Future of Work in America*; Goldman Sachs; World Health Organization; Environmental Protection Agency; *Washington Post* analysis of news reports



17%

Segment of US adults who reported that they felt lonely “a lot of the day yesterday.” (That translates to 44 million American adults.)

50%

Percent by which adults with physical health issues are more likely to be lonely than those with strong physical health.

2,571

Unique book titles that were challenged or banned from US public and/or school libraries in 2022.

53%

Portion of hiring managers reporting that in the past year their company eliminated the requirement for a bachelor's degree in some or all roles where it is not essential.

Sources: Clockwise from top: Gallup National Health and Well-being Index, 2023; 2021 survey commissioned by Cigna Corporation and conducted by Morning Consult; Intelligent survey, 2023; American Library Association's Office of Intellectual Freedom

Andrey Suslov/Alamy Stock Vector

WE CANNOT
AFFORD
THE LUXURY
OF EITHER
HOPE
OR
DESPAIR



Welcome to *TrendsWatch*

“Standing still is the fastest way
of moving backwards in a rapidly
changing world.”

—Lauren Bacall



HOW TO USE THIS REPORT

Use this edition of *TrendsWatch* as a catalyst for adapting to your museum's rapidly changing environment:

- What choices does your museum face regarding the utility and ethics of artificial intelligence?
- How can your museum reduce its carbon emissions and inspire the public to take action?
- When might your organization be caught up in the current culture wars, and how can you prepare strategies to respond?
- Who is currently excluded by your museum's hiring processes, and could you diversify your applicant pool by dropping unnecessary degree requirements?

Each article includes a list of things museums might do to tackle these issues. Share this report with your students, clients, colleagues, staff, volunteers, and board of trustees to foster discussion about how your organization will cope with a volatile future.

The theme of this year's *TrendsWatch* report is volatility—strategic foresight parlance for the speed of change. That speed has been increasing exponentially in recent decades. Google's **director of engineering** recently predicted that by 2041, we will be experiencing a year of change (by today's standards) in three months, and by 2071, a year of change in 11 days. That's the equivalent of 33 years of change in one year! The past 33 years gave us the World Wide Web, email, personal computers, and smartphones; we mapped the human genome and discovered how to edit individual genes. What will it be like to live through that amount of change in just one year? How can we make plans that can survive such rapid transformations?

On one hand, speed can be exhilarating. Open AI's ChatGPT launched in November 2022; by January 2023 it had 100 million active monthly global users. The user base is projected to grow to **117 million** in the US alone by 2025. The technology is amazing: it empowers anyone to be an artist or a writer. It helps students apply to college, journalists draft stories, and architects model the mechanics of their creations. People hope it will make legal services more affordable, education more effective, and brain surgery more accurate. On the surface, generative AI (GenAI) seems like another example of triumphant progress, promising to improve our lives as profoundly as penicillin.

But volatility has another connotation as well, not just rapid but also unpredictable change, often for the worse. It may be thrilling to go fast, but the prospect of rocketing into the future at warp speed, veering

erratically, bouncing off obstacles, is terrifying. GenAI is already disrupting whole industries, competing with illustrators, writers, and journalists and **displacing** 4,000 jobs a month. Goldman Sachs estimates that globally, 300 million current jobs are at risk of being automated by AI. In October 2023, the head of the Securities and Exchange Commission, testifying before the House Financial Services Committee, warned that, absent regulation, it is “nearly unavoidable” that AI will cause a massive financial crisis in the next decade. But that regulation will be hard to implement since the SEC is designed to oversee individual organizations and brokers, not the underlying systems, including AI algorithms, on which these entities rely. Creating effective guardrails for emerging technologies may require us to fundamentally reshape our regulatory infrastructure.

That's a second, underlying theme of this report: the need to reexamine and reinvent a lot of systems that shape our lives, systems that may have worked more or less well for a couple hundred years but now teeter on the edge of failure. Technology, combined with cultural, environmental, and financial stressors, has widened the partisan divide to the point where approximately **40 percent of all voters**, Republican and Democrat, believe that the other side is so extreme that it would be OK to use violence to prevent them from achieving their goals. The same study found a significant share of respondents expressing doubts about the future of democracy and even the United States as it is currently composed. Will we need to reform our civic infrastructure if democracy is to survive?

Emissions from over 200 years of reliance on fossil fuels have resulted in **temperatures** increasing more in the past 50 years than any 50-year period in the past two millennia. This astounding rate of change challenges our ability to respond: we have been unable to invent, test, and implement solutions fast enough to keep global CO₂ below critical levels. At the same time, we have to deal with the literal volatility of the climate crisis. Last year was the hottest on record, with four months in a row of record-breaking temperatures and the skies blanketed by the smoke of nearly 46 million acres burning across **Canada**—nine times the historical average. While some believe that technology can save us, it's clear that even with the best technologies, we will need to eat less meat, travel less often, and take up less space (in our homes and on the planet) to stick to a strict carbon diet.

Does all this seem intimidating? It does to me. One comforting thought: humans are supremely adaptable to change. Our great grandparents may have been terrified to hurtle down the highway at 75 mph—now we are so blasé about that speed we have to be reminded to keep both hands on the wheel (and thumbs off our phones). So maybe by the time humans reach 33 years of change in one year, this volatility will seem normal.

Another important thing to keep in mind: while some of this acceleration is beyond the control of any one individual, organization, or country, there are

things we can do to apply the brakes. We can take the time to savor the process of putting words on paper rather than using AI to generate our correspondence. We can choose to challenge the supremacy of efficiency and value the benefits of measured, thoughtful collaboration. Museums, as cultural influencers, can offer their communities a place to slow down and decompress. They can ally with the movements promoting slow art, slow tourism, and slow food. And we can remind each other that we don't have to go fast just because we can.

In the face of a volatile future, it's critical to cultivate what Dr. Jane McGonigal, of the Institute for the Future, calls “urgent optimism”: the desire to act immediately to tackle an obstacle, combined with the belief that we have a reasonable hope of success. I hope this report will foster that hope and leave you feeling empowered to make a difference.

Yours from the future,



Elizabeth Merritt

Vice President, Strategic Foresight, and Founding Director, Center for the Future of Museums, American Alliance of Museums

WHAT IS **TRENDSWATCH**?

TrendsWatch is the annual forecasting report produced by the Center for the Future of Museums, the American Alliance of Museums' think tank and idea laboratory for the museum field. Each edition is built on a year's worth of scanning and analysis of news, research, and conversations. The report goes out to members and subscribers as the January/February issue of *Museum* magazine, and a PDF version is released on the AAM website at the end of March. You can find dozens of embedded links to original sources for the information referenced in this text in the digital issue of *Museum* and in the PDF.

The text for this report was written by CFM's director, Elizabeth Merritt, with input and advice from many people inside and outside the museum sector. (See page 1 for the list of people who reviewed and commented on the articles.) We encourage you to join this conversation. Please share your thoughts and questions by:

- Joining the Future of Museums Community on AAM's Museum Junction discussion forum.
- **Submitting guest posts** to the **CFM blog**.
- Emailing CFM at emerritt@aam-us.org.


Elizabeth and her colleagues are available to support your work via speaking engagements, workshops, moderating discussions, and consulting. For more information on those services and to request our help, visit the **Alliance Advisory Services and Speakers Bureau** on the AAM website.

"Party With Us: Pride Edition" at the Museum of Us in San Diego, California, featured local drag queens from the Haus of St. James.



Culture Wars 2.0

What choices do museums face in avoiding or engaging with the current conflict?



“The net effect of loud, sensational clamor is to mute more quiet and temperate voices”

—James Davison Hunter, *Culture Wars: The Struggle to Define America*

Last year *TrendsWatch* examined the growing partisan divide in the US and how museums might help repair our fractured democracy. However, an adjacent trend threatens the sector’s ability to fill this reparative role: museums as battlegrounds in a new wave of culture wars. Some are criticizing museums for embracing progressive values, while others regard museums as conservative vestiges of a colonial past. With alarming frequency, climate activists use museums as stages for protest or vandalism to draw attention to their cause.

Pressure is building along fault lines that segment communities, funders, policymakers, and museums’ own staff, boards, and volunteers. How can museums defuse this tension before it causes more damage? What choices do they face in avoiding or engaging in the current conflict, and how will these choices shape the future of museums and society?

The Challenge

Disagreements about the values that should guide public and private life in America are as old as the republic itself, and these debates periodically erupt into physical violence ranging from insurrection to all-out war. The verbal conflict took center stage at the 1992 Republican National Convention when Patrick Buchanan told the audience that “a cultural war” was taking place, characterizing it as a “struggle for the soul of America.” The issues Buchanan named (abortion, homosexuality, school choice, and “radical”

feminism) continue to be points of contention, but the battlefield has ballooned to include, well, almost everything, from **holiday greetings to beer.**

Twenty years later, the culture wars are heating up again, fueled by the power and reach of social media and the ascent of transparency as a core value. When every public meeting can be livestreamed on Facebook by anyone in the audience, there is scarce opportunity for nuanced discussions that can explore compromise and de-escalate conflict. Social media is now a major source of information for



In January 2023, demonstrators gathered to protest a Drag Story Hour at the Canton branch of the Enoch Pratt Free Library in Baltimore, Maryland.

Americans, and given the decline of professional journalism, it is often the primary platform for people to engage with current events.

The current state of P-12 education dramatizes the damage these conflicts can do to civic infrastructure. Teachers, already stressed by pandemic challenges, are barraged with complaints from parents and students about every detail of their work, including curricula, assignments, classroom decorations, and off- and remarks. Even minor conflicts can go viral, spiraling into public campaigns calling for educators to be disciplined or fired. This relentless scrutiny has contributed to **record-high levels** of teacher burnout and turnover, to the migration of students from public to **private schools and to homeschooling**, and to the **downsizing and closure** of school libraries.

These skirmishes are egged on, in part, by those that profit from amplifying conflict: politicians courting votes, journalists seeking readers, technology corporations building reach and engagement. But they also reflect real disagreements in society about what theologian John Davison Hunter calls “matters of ultimate moral truth,” things on which one cannot compromise. Many combatants see the issues as threats to their very existence: white nationalists fear they are being replaced by people of color; trans individuals fear erasure of their identities and their lives. Stable democracy requires compromise, but negotiation around existential issues, about what is moral and ethical, seems impossible.

While cultural nonprofits have long been drawn into this fray, they are now being targeted with particular vitriol. America’s public libraries (a

Via Flickr, photo by Stephen Melkisetheian

system built with the largesse of Republican Andrew Carnegie) have become flashpoints for protests and penalties around progressive actions and values. We are seeing a record number of attempts to **ban books, criminal complaints** against and **laws targeting librarians**, and attempts to **defund and close libraries**. The American Library Association itself is now **being attacked**, nominally over the politics and identity of its CEO but more broadly over its support for and defense of its members. (Th s despite the fact that, as **the ALA points out**, there is strong nonpartisan consensus about the value of libraries and librarians.)

One drawback of using the term “culture wars” is the implication that there are two clear sides arrayed against each other, but that framing is inaccurate and unhelpful. Both liberals and conservatives drastically overestimate the difference between their views and those of the other side while underestimating the difference in views within their own side—a phenomenon dubbed “false polarization.” In fact, **subgroups within political parties** are

complex and varied. (For example, the vast majority of Black voters are Democrats; 61 percent of Democrats believe a person’s gender can differ from the sex identified at birth; only 31 percent of **Black Democrats** agree.) And while there are intransigent differences of opinion, there are also areas of broad agreement: **9 in 10 Americans believe** that protecting free speech is an important part of American democracy, and people should be allowed to express unpopular opinions.

Another problem with framing these conflicts as a war is the implication that there can be a winner. Short of a “**national divorce**,” splitting Democrat- and Republican-leaning states into different countries (an option that is, in fact, supported by 20 percent of US adults), we have to find a way, as a society, to explore these differences openly, honestly, and with respect if we are to maintain a functional democracy. Making people aware of these areas of commonality might be the best hope for reducing false polarization. Perhaps, as the growing bipartisan **civic repair** movement recommends, instead of

POTENTIAL FUTURE BATTLES

Following are some challenges posed to museums by the ongoing culture wars in the coming decade:

Consumers have more choices than ever in how to engage with history, culture, and educational content. Will museums lose out if, as just one choice in this array, they are identified as affiliated with one set of political positions or another?

There are growing disconnects between the expectations of some major foundations and those of local, state, or federal government officials (for example, regarding training and policies supporting DEAI). How will museums navigate these tensions and other partisan issues that may affect funding, whether that support comes from public dollars or individual donors?

There are significant generational divides around many contentious issues today, and around expectations of how organizations should behave. How can museums respond to the concerns of both current and future audiences?

We have recently seen **high-profile boycotts of brand** (Bud Light, Chick-fil-A) and institutions (Walt Disney World) from the left and the right. In the future, might we see partisan boycotts regarding museum attendance and membership?

Will more activists begin to use museums as useful platforms for protest, deploying vandalism against objects, or violence and threats of violence to draw attention to their causes? How would that change operations—design, staffing, procedures—and how might tighter security make some people feel more, or less, safe and welcome?



RESOURCES

Crisis Communications Guide, American Library Association

This brief guide outlines how to put a communication plan in place before a crisis occurs.

ala.org/advocacy/crisis-communications-guide

Marketing Intelligence Hub, Listen First Project

This online resource shares data-driven guidance on how to communicate in a way that fosters interest, hope, and trust from Americans of all backgrounds and beliefs.

listenfirstproject.org/marketing-intelligence-hub

Respecting Visitor Values: Audience Perceptions, 2022 Annual Survey of Museum Goers, Wilkening Consulting

This data story picks apart three main criticisms offered by the small percentage of museum-goers who do not believe that museums respect their personal values. (These categories correlated tightly with political values.)

bit.ly/RespectingVisitorValues

focusing on changing people's views about issues, "we need to change their views about each other."

What This Means for Museums

This isn't the first time museums have been caught up in partisan struggles. Buchanan's speech in 1992 helped define a decade of controversies that included criminal indictments against the **Cincinnati Contemporary Arts Center** on obscenity charges stemming from an exhibition of photographs by Robert Mapplethorpe; outcry over the Smithsonian's interpretive plans regarding the B-29 Superfortress bomber **Enola Gay** (a resolution passed by the US Senate characterized the exhibit script as "revisionist and offensive to many World War II veterans"); and Mayor Rudy Giuliani threatening to defund and displace the **Brooklyn Museum of Art** because of the "sick stuff" on view in "Sensation: Young British Artists from the Saatchi Collection."

These attacks come from the right and the left. Where Culture War 1.0 was fueled by the rise of the Moral Majority and other religious conservative movements, today's culture war engages the

progressive left as well as the conservative right. It includes movements like Black Lives Matter, #MeToo, and LGBTQ+ activists—groups that want greater inclusivity and a greater sensitivity to harm, historical trauma, and legacies of exclusion and appropriation.

They also originate from inside *and* outside the organization. One source of tension is the fact that museum staff are **overwhelmingly liberal**, while boards and donors often **skew conservative**. This can complicate decisions around what topics the museum should address and what communities it should serve. In some instances, museum staff have called for their employers to cancel space rentals by conservative groups, distance themselves from objectionable donors, and remove exhibit material they found offensive. With increasing frequency, climate activists are using museums as platforms for protest, throwing paint on or gluing themselves to frames, vitrines, or the plex protecting iconic objects to draw attention to their cause.

Some of the public's strongest reactions are prompted by museums revising their interpretation

MUSEUMS MIGHT ...

- Lead thoughtful, intentional conversations among board, leadership, and staff about their own values and how the museum should choose to engage or not engage on culture war issues.
- Establish frameworks and procedures for evaluating exhibits, programs, and event rentals for potential controversies, and create plans for how these controversies will be managed.
- Evaluate the language used in exhibits, programming, and communications. Identify partisan trigger words, and, when possible, find alternative terminology. (For example, some museums have found it is less controversial to say "our changing climate" rather than "climate change.")
- Train staff on how to have difficult conversations with people who don't share their beliefs and how to facilitate these conversations with others.
- Create policies, procedures, and training that equip staff to deal with angry or confrontational members of the public, and offer support to help them cope with the resulting stress.
- Strive to be "third places," the increasingly rare venues that sociologist Ray Oldenburg has argued are vital to society, democracy, and civil society. By welcoming people of differing backgrounds and beliefs, museums can provide opportunities for them to socialize and get to know each other as individuals.
- Monitor legislation and legal decisions that can affect their operations, even when not directly aimed at museums, and address these issues in their advocacy. (Sign up for **Advocacy Alerts** and attend AAM's annual Advocacy Day to inform this work.)

of history. **Monticello and other historic sites** have been castigated by some visitors and conservative commentators for introducing slave narratives into their interpretations. Texas is embroiled in a messy fight over how to tell the story of the **Alamo**, which has been called the “creation myth of Texas.” Myths, especially when they amplify an inaccurate version of the past, can be toxic: perpetuating those inaccuracies, justifying past actions that caused harm, and over-amplifying the anti-inclusive values of a small (but politically powerful) segment of Americans. But any identity, individual or collective, is grounded in the stories we tell about ourselves. Can America have a unified national identity without shared stories we all buy into? Without that identity, will the country tear itself apart?

Ironically, the very respect accorded to museums, as stewards of culture and trusted sources of information, may amplify these pressures in the future. In the wake of protests over the murder of George Floyd in 2020, at least 200 **Confederate memorials** were removed, renamed, or relocated, and in many cases these monuments were transferred to museums. While the intent may have been a bipartisan solution (caring for the heritage in perpetuity while providing historical context), this approach is sometimes equally offensive to people who feel these objects should be destroyed and to those who object to “revisionist history.” With many schools abandoning controversial topics, museums may pick up the slack, just as they did over a decade ago when public schools largely **abandoned arts education**. But while arts education is generally seen as benign, topics such as race and racism, gender and sexuality, and controversial social and political issues **are not**. Some schools have reached out to museums to teach subjects they feel they can no longer handle. Will the outrage follow?

How can museums stay true to their role and their values without being sidelined by one faction or another? How can they retain bipartisan or nonpartisan credibility and influence while tackling difficult issues? Museums have the potential to foster healing or inflict harm, build bridges or deepen divides depending on how they respond to these challenges, but they face difficult choices. Museums might take

stands on issues that align with their mission and the values of staff and stakeholders. They might declare themselves to be noncombatants, serving as a cultural circuit breaker for the cycle of escalating outrage. They might play the role of peacemaker, helping people find common ground.

Each of these choices comes with potential benefits, and risks. Museums have earned broad, nonpartisan trust from the American public, and they can use that trust to educate and influence the public about important issues. On the other hand, taking a stand on contentious issues may result in a particular museum, or museums as a whole, being tagged as partisan, relegated to the echo chambers of people who already agree with them. The individuals and institutions that benefit from the culture wars thrive on public attention: perhaps sometimes museums might better serve vulnerable individuals, communities, and society as a whole by refusing to engage. But people who feel targeted by these conflicts may expect museums to weigh in with a statement or action that signals solidarity and support. Museums have long aspired to be public “**agora**” where people can come together to discuss important issues without feeling the need to self-censor. To ensure that people of all political identities feel welcome in these conversations, the museum itself might need to be seen as nonpartisan—neither liberal nor conservative—in its words and its actions.

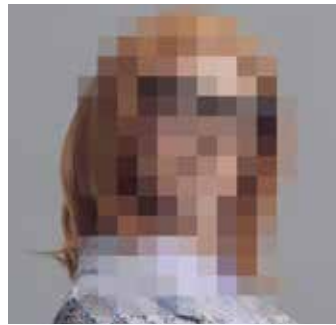
Everyone loses when cultural and educational institutions are damaged by partisan skirmishing. Treating libraries, museums, and schools as active combatants in the culture wars destabilizes our already fragile social infrastructure by threatening some of the few remaining institutions trusted to provide accurate information and common reference points.

In his exploration of the culture wars, Hunter also observed that “the whole point of civil society ... is to provide mediating institutions to stand between the individual and the state, or the individual and the economy. They’re at their best when they are doing just that: They are mediating, they are educating.” By engaging in hard conversations, inside their organizations and with their communities, museums can continue to fill that critical role.



Taking a Stand

In June 2023, the Museum of Us hosted “Party With Us: Pride Edition,” a day of programming featuring San Diego drag queens from the Haus of St. James, in solidarity with LGBTQIA+ communities being inundated with hate and legislative efforts to undo hard-won civil rights protections. Despite the polarizing public debate on drag, the decision to host the event was consonant with the museum’s purpose to be a place for community voice, especially those voices that have been historically marginalized. This was consistent with the museum’s previous visible support of LGBTQIA+ communities. In 2015, immediately following the Supreme Court’s decision on same-sex marriage, the museum displayed an enormous Pride flag from its iconic California Tower to mark the occasion. Since 2022, the museum has also been the site for the city’s annual Pride kick-off, with a week-long display of an even bigger Progress Pride flag from the tower.



Being Noncombatants

By its very nature, successful noncombativity is a nonstory. While this makes it rare to find published examples of museums that have chosen not to “feed the beast,” museum professionals might use the confidentiality afforded at conferences and small gatherings to connect with colleagues who have personal experience to share.



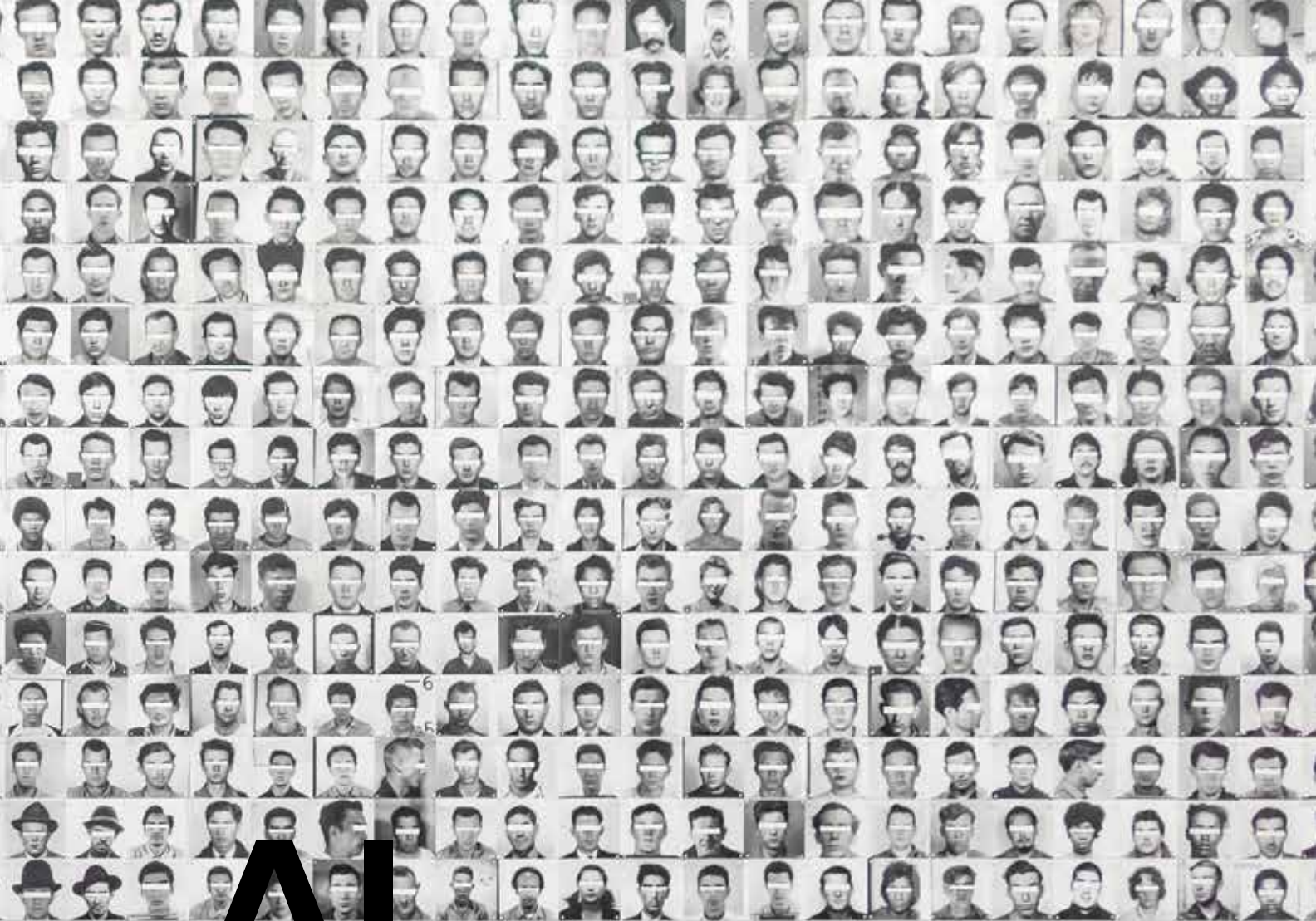
Playing Peacemaker

In 2019, the Frazier History Museum in Louisville, Kentucky, launched “Let’s Talk: Bridging the Divide,” creating a flourishing community space for dialogue and questions on challenging topics that often divide us. The program’s name ties to the Frazier’s location on the so-called “9th Street Divide” that historically has separated the city by race. Through dozens of moderated panel discussions, the museum has given the public an opportunity to hear from guests with varying perspectives on wide-ranging and sometimes contentious issues, including mental health, political discourse, voting, racial equity, policing, education, and Native American history. One of the most recent programs was the first community conversation about a newly released report from the US Department of Justice critical of policing in Louisville. This groundbreaking gathering brought together the mayor, the acting police chief, and representatives from the NAACP, Louisville’s Urban League, and the Fraternal Order of Police. The museum staff who facilitate the programs observe, “The dialogue isn’t always easy, and navigating the discussion and audience questions can be tricky, but if you want to bridge divides, there has to be conversation.”



Trevor Paglen's *They Took the Faces from the Accused and the Dead...* (SD18), 2019, from the "Uncanny Valley: Being Human in the Age of AI" exhibition at the de Young Museum in San Francisco, California.





AI Adolescence

What is generative AI, and what are the practical applications and implications for museums?

Photo by Gary Sexton, courtesy of the artist, Altman Siegel Gallery, San Francisco and the Fine Arts Museums of San Francisco

“Success in creating AI would be the biggest event in human history. Unfortunately, it might also be the last, unless we learn how to avoid the risk.”

—Stephen Hawking

In the past decade, artificial intelligence (AI) has leapt from the realm of science fiction and tech culture into our everyday lives. Most recently, generative AI is disrupting the work of creators, upending education, and performing key tasks in white-collar work. Some feel AI poses an existential threat to humanity—others forecast that it will quickly retreat into specific, narrow applications.

What is AI, is the hype justified, and how can museums make informed judgments about this or any other emerging technology? What are the practical applications and implications for museums in the short and long term?

The Challenge

Artificial intelligence encompasses a range of technologies that seem to mimic human ability to reason, make decisions, generate predictions, and perform complex tasks. Birthed in the 1950s, when Dartmouth professor John McCarthy coined the term and Alan Turing proposed his commonsense test for machine intelligence, AI literally began toddling in 1966, when the Stanford Research Institute introduced “Shakey,” the first mobile robot capable of interpreting instructions.

When *TrendsWatch* first covered AI in 2017, the major focus was “big data”: mining and analyzing huge datasets to generate business insights (or beat human grandmasters at chess) and using AI conversational skills to interact with users and respond to questions. Now AI is experiencing an adolescent growth spurt, fueled by the ability of generative AI (GenAI) to create original content as text, images, and sound. If chatbots powered by conversational AI might be mistaken for customer service reps, programs like ChatGPT and DALL-E, powered by GenAI, are trying

Students, faculty, and staff at Duke University’s Nasher Museum of Art used OpenAI’s ChatGPT platform to select works and write label copy for “Act as If You Are a Curator: An AI-Generated Exhibition.”



Photo by Cornell Watson

HOW GENERATIVE AI MIGHT HARM THE CREATIVE ECONOMY

By ChatGPT

This essay was written by OpenAI's ChatGPT 3.5 in response to the prompt "Write 500 words on the damage generative artificial intelligence may do to the creative economy." The program returned the following text in less than 10 seconds.

Generative artificial intelligence (AI) has emerged as a powerful tool, capable of producing creative content such as art, music, and literature. While it offers numerous benefits, there is growing concern about the potential damage it may inflict on the creative economy, particularly on artists and writers. This essay explores the multifaceted ways in which generative AI can harm the creative economy.

- 1. Devaluation of creative work.** Generative AI can flood the market with easily produced content, devaluing the work of human artists and writers. As AI-generated art becomes more prevalent, traditional art may lose its uniqueness and value. Consumers may be less willing to pay for original creations when cheaper AI alternatives are available, thereby reducing the income of artists and writers who rely on their work for a livelihood.
- 2. Copyright and plagiarism issues.** AI-generated content can blur the lines of copyright and intellectual property rights. Identifying the origin of a piece of content becomes challenging when AI creates works that closely mimic human creations. This can lead to a surge in plagiarism, where AI-generated work is passed off as original, causing financial and reputational harm to genuine creators.
- 3. Homogenization of creativity.** Generative AI algorithms are often trained on a massive corpus of existing creative works. While this can lead to impressive imitation, it can also result in a homogenization of creativity. The AI may perpetuate existing styles and trends rather than encouraging innovation and the exploration of new artistic frontiers. This stifling of creativity can be detrimental to the vibrant and diverse nature of the creative economy.
- 4. Erosion of skill development.** If AI becomes the primary tool for generating creative content, it could discourage aspiring artists and writers from developing their skills. The sense of accomplishment and personal growth that comes from honing one's craft may diminish, as people may opt for AI shortcuts. This could ultimately lead to a decline in the quality of human-created art and literature.
- 5. Job displacement.** The adoption of generative AI in the creative industry could lead to job displacement. Artists and writers may find themselves competing with AI systems that can produce content more quickly and cost-effectively. This could result in job loss and economic instability for many individuals in the creative sector.
- 6. Loss of emotional connection.** Art and literature often have a profound emotional impact on consumers because they are imbued with the personal experiences and perspectives of the creator. AI-generated content may lack this emotional depth, making it harder for audiences to connect with the work on a meaningful level. This could result in a decline in the overall appreciation of art and literature.
- 7. Ethical concerns.** Generative AI can inadvertently create content that is offensive, harmful, or biased, which can have a negative impact on society and culture. Artists and writers often contribute to important conversations and social change through their work. If AI-generated content lacks ethical considerations, it may contribute to harmful narratives and reinforce existing biases.

In conclusion, while generative AI holds immense promise in the realm of creativity, it also poses significant threats to the creative economy, including artists and writers. To mitigate these risks, there is a need for thoughtful regulation, ethical guidelines, and a recognition of the value of human creativity. Generative AI should be seen as a tool to enhance human creativity rather than a replacement for it. By carefully navigating the integration of AI into the creative process, we can harness its potential while preserving the vitality and diversity of the creative economy.

MUSEUMS MIGHT ...

- Help the public make informed choices, as users and voters, by providing education on AI and attendant issues.
- Explore how AI-generated content could be used to enhance collections, exhibits, education, and visitor interactions.
- Educate staff and the board about the choices the museum faces regarding AI use.
- Create ethical frameworks for decision-making.
- Take an active role in developing policies, guidelines, and regulations around issues such as sourcing of training data, tracking of content provenance, and protecting the rights of creators.
- Identify where AI can be used to help staff do their work while assessing the impact on museum labor overall.

out for the roles of author, artist, and composer.

ChatGPT is just one of a slew of GenAI programs taking the world by storm. A **2023 McKinsey survey** found that over 79 percent of respondents had some exposure to GenAI and nearly a quarter were using it regularly in their work. It is being used by students for **writing assignments**, researchers for **academic papers**, lawyers to produce **legal briefs**, and high school students to generate **college application essays**. In the process, developers of GenAI seem to be obeying Meta founder Mark Zuckerberg's exhortation to "move fast and break things." The growing list of things that, if not broken, at least cracked by generative AI ranges from copyright and intellectual property to both primary and higher education.

Some of the disruptions created by GenAI arise from flaws deeply embedded in the current algorithms. GenAI has a well-documented tendency to "hallucinate" (i.e., make shit up). In 2023, a **Federal District Court judge** threatened to sanction lawyers who used ChatGPT to generate a filing that turned out

to be filled with fake judicial opinions and legal citations, and staff of the research platform **Preprints.org** removed a ChatGPT-written submission that included fictitious references. GenAI also has an unfortunate tendency to amplify bias inherited from its training data. As **Bloomberg** recently reported, to judge by the outputs of the Stable Diffusion image generator, "CEOs are white men; women are rarely doctors, lawyers or judges; men with dark skin commit crimes; and women with dark skin flip burgers."

Any new technology can have a disruptive effect on labor, with the heaviest impact historically falling on blue-collar jobs. AI, and particularly generative AI, may be the first technology to destabilize white-collar work as well. We are already seeing grave threats to whole professions, especially in the **creative class**. Text and image generators are producing **cover art**, writing **news stories**, and producing blog posts and marketing copy. One of the major demands of the Hollywood strike of 2023 was restricting studios' use of AI, both to create **digital likenesses of actors** and to **generate scripts**. While this new technology will create some high-skill, adequately compensated jobs (AI research scientist, AI creative director), they will be outnumbered by **more precarious and stressful gig work**, such as labeling training data and flagging content that contains sexual abuse, hate speech, and violence.

AI's potential to do harm goes beyond its effect on labor. Its power, reach, and plausibility supercharges the dissemination of false information and fake content, including videos, news articles, social media posts, and even **books**. The **chairman of the Senate Intelligence Committee** has warned that misinformation generated and promulgated using AI could disrupt the 2024 presidential election. Even when used for good, like improving education, the widespread adoption of GenAI could widen the digital divide. While most of the current wave of AI applications have launched on a **freemium** model, eventually, to be profitable, the companies that create and deploy this technology will have to charge. The more these applications become embedded and necessary tools, the more we risk exacerbating existing inequalities due to disparate levels of access and ability to pay.

This technology is evolving so fast that the sectors impacted by its application, as well as regulators, are



Visitors to The Dalí Museum in St. Petersburg, Florida, interact with the museum's *Dream Tapestry* digital experience where personal dreams transform into one-of-a-kind art pieces.

struggling to keep up. How should **existing laws** and policies, written before the age of AI, be applied with regard to intellectual property, liability for harm or damage, privacy, bias, and discrimination in employment? What new regulation is needed, and how should we allow, ban, control, or regulate use? What role should GenAI play in P-12 and higher education, hiring, research, or law enforcement?

What's Next?

Will AI continue to accelerate at the current hyper-sonic rate? As with many technologies financed by large companies, the long-term business model is not yet clear. While **OpenAI**, the creator of ChatGPT, projected \$200 million in revenue by the end of 2023, it was spending \$700,000 a day to run the system, leaving it in the red. It remains to be seen whether it can convert enough free users into paid customers to make the product sustainable.

When regulators do catch up with the system, the constraints placed on how data is mined, and used,

may severely crimp the growth of a system that was fueled by exploiting free content (a practice that has already spawned **numerous lawsuits**). Ironically, by displacing human creators, GenAI may have sowed the seeds of its own destruction. GenAI trains on datasets collected from the internet, but when it learns from data produced by other AI, its performance degenerates, resulting in what researchers have dubbed “**model collapse**.” That breaking point may not be far off: the European security center **Europol** predicts that as much as 90 percent of online content might be “synthetically generated” by 2026.

What This Means for Museums

Museums have been experimenting with various flavors of AI for at least two decades, from practical applications (**Indianapolis Museum of Art at Newfields** using AI to crop digitized images) to playful (the wonderful Send Me SFMOMA, which responded to text prompts with images from the collection). Museums have deployed **AI-powered**

RESOURCES

Generative Artificial Intelligence and Data Privacy: A Primer, Congressional Research Service, 2023

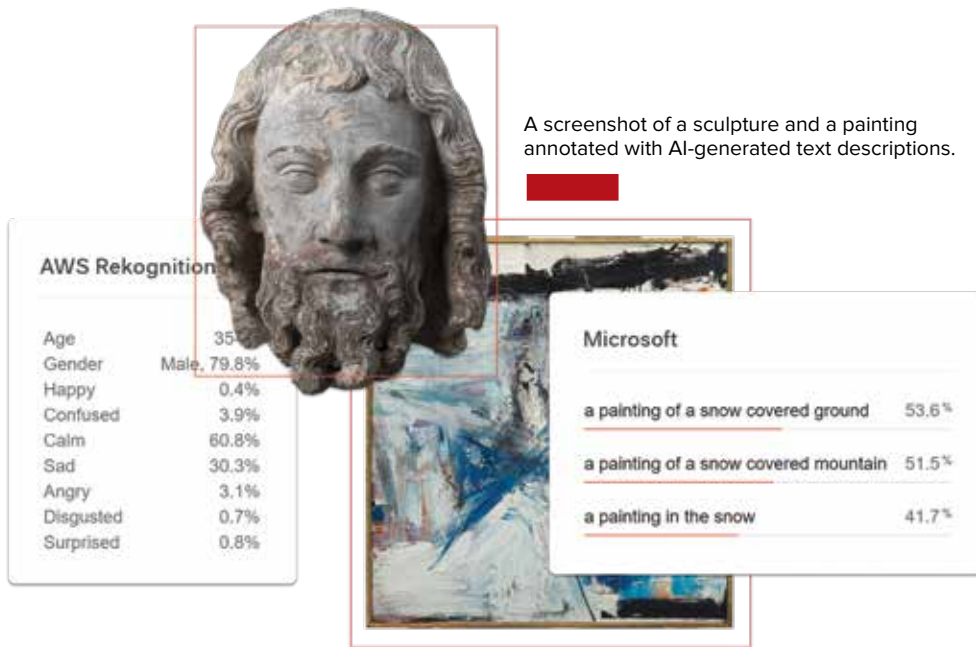
This publication provides an overview of generative AI, an explanation of the underlying data models and data sources, and what happens to data shared with AI models. It also outlines policy considerations with regard to privacy and related laws, and data scraping.

crsreports.congress.gov/product/pdf/R/R47569

Blueprint for an AI Bill of Rights: Making Automated Systems Work for the American People, White House Office of Science and Technology Policy, 2022

This document identifies five principles to guide the design, use, and deployment of automated systems to “protect the American public in the age of artificial intelligence,” including the rights to algorithmic discrimination protection and data privacy. The framework is accompanied by a technical handbook for anyone seeking to incorporate these protections into policies and practice.

whitehouse.gov/ostp/ai-bill-of-rights



A screenshot of a sculpture and a painting annotated with AI-generated text descriptions.

robots as docents, predictive analytics to **forecast visitation** and **set ticket prices**, cognitive search to enhance **collections metadata**, and **sentiment analysis** to mine visitors' social media posts. At the Museum of Tomorrow in Rio de Janeiro, Brazil, the AI-powered chatbot **Iris+** queries visitors about their experience and suggests steps they can take to address their biggest concerns about the future.

It is no surprise that museums have leapt to experiment with GenAI as well. In 2023, Duke University students and faculty used ChatGPT to organize the exhibition “**Act as If You Are a Curator**” at the Nasher Museum of Art, prompting the platform to select works from the collection and write labels. Behind the scenes, some museums are experimenting with text generators to create communications for members and donors, draft reports, and even **write grant applications**. But for all the exciting new possibilities presented by GenAI, it poses profound challenges to museums as well.

A general erosion in trust accelerated by AI-generated misinformation (accidental or deliberate) might impact the long-standing and robust trust the public has in museums, or it may be an opportunity for museums to lean into their reputation as sources of reliable information. What role might museums play in creating systems to verify “**content provenance**”—the source and legitimacy of images, videos, text, and articles? How can museums ensure that data and

metadata associated with their own records follow these digital assets into the AI universe?

GenAI is trained on vast datasets compiled by scraping text and images from the web—without permission from or compensation to the creators of that material. Many artists, educators, and researchers are furious that GenAI harvests their work without consent, acknowledgement, or compensation. Do museums want to encourage the development and use of technology that is based on what many

feel is ethically, if not yet legally, theft of intellectual property? How might museums help protect creative, educational, and academic communities of practice from harm and advocate for their interests?

AI and GenAI provide opportunities to increase income and reduce costs. Museums need to decide whether, when, and how to adopt this technology—decisions that are both values-based and practical. Some may seem like clear wins: using chatbots to provide personalized experiences for visitors, image recognition to help the public engage with collections, and business applications to forecast attendance. Others may require more thought. How should AI be deployed to help staff with their work? If the use of AI could reduce the number of staff, do museums want to be complicit in this loss? AI depends on **vast computational resources and massive energy use**. How might museums factor AI's environmental impact into their strategies to reduce their carbon impact?

Working through these issues will require museum board members and staff to acquire basic AI literacy to understand its benefits and drawbacks and identify where AI adoption might require expenditures (in technology, training, new staff) or result in savings (through increased productivity or staff reductions). Hardest of all, it will require making some projections about the timeline of development and adoption of AI, a critical issue on which even the experts disagree.



In October 2022, the **Museum of Science, Boston**, opened the permanent exhibition **“Exploring AI: Making the Invisible Visible”** to illuminate how the approaches and data used to train computer systems have often resulted in AI that mirrors human biases, raising questions about unchecked use of these technologies across all aspects of our lives. Complementing the exhibition, a series of in-person and online **programs** dove into topics such as computer vision, large language models, generative AI, and deepfakes to encourage community deliberation about the future of AI technologies. The museum also created a **resource library**—including animated explainers, infographics, videos, and games—that challenges learners to consider how we can ensure that our society creates and uses AI technologies in ways that are ethical, inclusive, and can benefit all people.



In 2022, the **Carnegie Science Center** in Pittsburgh hosted researchers from Carnegie Mellon University’s Human-Computer Interaction Institute to pilot a Novel Research-based Intelligent Lifelong Learning Apparatus (**NoRILLA**) with support from the National Science Foundation. This AI-enhanced interactive science exhibit adds a camera, touchscreen, display, and an AI assistant to a traditional earthquake table or other physical apparatus, such as ramps. NoRILLA—brought to life as a virtual gorilla—helps participants make scientific discoveries through interactive feedback and guidance. Evaluations revealed that children learned significantly more from the AI-enhanced intelligent science exhibit compared to the traditional exhibit, and the dwell time increased by a factor of four. NoRILLA has since deployed at the Children’s Museum of Atlanta, the Please Touch Museum in Philadelphia, the Children’s Discovery Museum of San Jose, and the CaixaForum Valencia in Spain. Read more about NoRILLA in the *Journal of the Learning Sciences* at bit.ly/NoRILLAJLS.



Beginning in 2015, the **Illinois Holocaust Museum** has worked with the USC Shoah Foundation to capture Holocaust survivor stories and bring them to life via high-definition, AI-powered holograms paired with voice-recognition technology. The resulting **Survivor Stories Experience** enables the interviewees to tell their deeply moving stories and respond to questions from the audience, inviting visitors to have a personalized, one-on-one “conversation.” The museum’s own research and national studies show that Holocaust survivors’ stories humanize difficult history, helping visitors develop empathy, learn the dangers of indifference, and recognize their responsibility to stand up to hatred and antisemitism. Recent research by the University of Illinois finds that visiting the museum and seeing the holograms empowered and motivated attendees to address injustice in their lives and communities.

Decarbonizing the Future

How can museums reduce their own emissions and inspire the public to take action?

**ID OF
FUEL**

in the United States,
reckoning.

oil fuel economy relies on racism and
colonial domination to push its worst impacts
onto Black people and people whose nations are
controlled and toward a sustainable
history of fossil fuels started
a dependence on fossil fuels.

moving the industry's emphasis
to preserve its vast power
of profiting off destruction
toward terminating its role
knowledge, we can end the
and build a better world.

work is already here
that. By the end
both to believe
in the and with
not fight with

oil fuel
crisis
off of

TWO WORLDS

Cause and Effect

The countries that have emitted the most greenhouse gases—those that have played a larger role in causing the climate crisis—tend to be least vulnerable to its impacts. Conversely, the countries with the highest emissions—those that have contributed least to global warming—are already most ravaged by the crisis and most vulnerable to it going forward.

Cumulative Emissions

100%
50%
0%





In October 2023, the Climate Museum opened “THE END OF FOSSIL FUEL,” an exhibition that “explores the fossil fuel industry’s history of racism and deception, spotlights the success of the environmental and climate justice movement in resisting and reversing the industry’s harms, and invites visitors to take action in community.”

Sari Goodfriend

“Adults keep saying we owe it to the young people to give them hope, but ... I don’t want you to be hopeful. I want you to panic. I want you to feel the fear I feel every day. ... I want you to act as you would in a crisis. I want you to act as if the house was on fire, because it is.”

—Greta Thunberg, who became a climate activist at the age of 15

The climate crisis poses an overwhelming threat to museums and the communities they serve. Museums’ collections constitute a vast seedbank of human civilization, creativity, and accomplishments. Protecting those seeds will entail a commitment to decarbonizing the future—replacing our dependence on fossil fuels with sustainable systems.

How can museums decarbonize their own operations? How can they inspire people to take meaningful action in response to the climate crisis, even as they prepare to live in a profoundly disrupted future?

The Challenge

How we talk about the world shapes how we think about the world: nowhere is this more evident than the evolution in language describing climate change. In 2019, *The Guardian*, Britain's equivalent to *The New York Times*, announced that to more accurately describe the environmental challenges facing the world, it would henceforth refer to the "climate emergency" or "climate crisis" rather than to "climate change." Now we are creating a whole new terminology to describe the impact of this crisis on mental health, grouped under the heading of climate trauma. This taxonomy includes climate anxiety (a sense of impending dread); solastalgia (distress at the changes in one's home environment); and eco-grief (anguish and despair at the deterioration of the places we love).

Scientists around the world are struggling to bracket the best and worst possible outcomes of the current climate trends, but it's clear that even the rosiest credible projections are grim. The **Inevitable Policy Response** consortium concludes that by 2050 the world will likely achieve the **Paris Agreement** goals to limit global warming to an increase of 1.5° C to 2° C above preindustrial levels. This may be unduly optimistic, however, in light of the fact that, as the UN Environment Programme reports, every one of the 196 countries that signed on to the agreement is **falling short of these goals**. At the pessimistic end of the spectrum, Columbia University scientist James Hansen, who briefed the Senate about global heating way back in 1988, predicts we are approaching a "**new climate frontier**" with temperatures higher than at any point in the past million years.

This crisis poses an immediate and deadly threat. Record temperatures are directly responsible for a soaring number of **heat-related deaths** and record-breaking **wildfires, drought, and flooding**. In the near term, these changes threaten economies, ecosystems, and agriculture. We are fast approaching irreversible **tipping points**, including the collapse of ice sheets and ocean circulation, loss of glaciers, and the dieback of coral reefs and rainforests. Warming, combined with habitat destruction and introduction of invasive species, has triggered the sixth **mass extinction** in Earth's history, which may wipe out up to a million species. For humans, a warming world increases

disease, injury, and death rates. It also contributes to a **global crisis in mental health**, with rates of **suicide** rising in step with global temperature, climate disasters triggering acute stress and PTSD, and climate disruptions leading to **long-term depression and anxiety**.

Industrialization has flooded the atmosphere with CO₂, getting us into this mess. Theoretically, we could dig ourselves out by capturing and storing carbon (biologically, geologically, or technologically), but so far, the majority of such projects have either **failed or fallen significantly short** of their goals. Many of the "**carbon credits**" pitched to individuals and corporations as a way to offset emissions are illusory, unverifiable, or temporary. Gaining control over the climate crisis, the **UN Environment Programme** has declared, will require urgent, system-wide transformation. That includes putting ourselves on a strict carbon diet when it comes to both public infrastructure and individual behavior. This includes, critically, curbing the consumption (for travel, meat, material possessions) that has become synonymous with success. It may require **degrowth**—focusing on sustainable metrics of success such as health, education, and happiness rather than economic profit.

While efforts to tackle this crisis have been slowed by climate skeptics and misinformation, relentless communication by scientists and activists is having an impact. The **Yale Program on Climate Change Communication** reports that public understanding of climate risk has **improved since 2008**, when the group first began tracking public opinion. As of 2013, the Americans who think global warming is happening outnumber those who think it is not by a ratio of nearly 5 to 1, and 60 percent understand it is caused by humans. On the other hand, climate change ranks **17th out of 21 national issues** concerning Americans, trailing far behind the economy, health care costs, terrorism, and the budget deficit. How can we bump up climate action on this list of priorities and increase people's willingness to act?

What This Means for Museums

Of paramount concern is the fact that the climate crisis is harming the communities that museums exist to serve, posing particular risk to the very young and the very old, people with disabilities or chronic medical



Architectural rendering of the southeast view of the Charles and Stacie Mathewson Education and Research Center at the Nevada Museum of Art.

CARBON MANAGEMENT AT THE NEVADA MUSEUM OF ART

By Colin M. Robertson, Charles N. Mathewson Senior Vice President of Education and Research

“We are learning from Indigenous artists and partners to better understand and refine our role as a cultural institution in addressing climate justice, land and water use.”—David B. Walker, CEO, Nevada Museum of Art

As a cultural institution located in Reno, the Nevada Museum of Art has a vested interest in climate action. In 2022, the nonprofit research organization Climate Center named Reno the city with the fastest-warming climate in the United States—since 1970, summer temperatures in our city have risen 10.9 degrees. We are committed to positively impacting our own micro-climate by reducing our carbon emissions and inspiring our community to learn and take further action.

- Nevada’s geography, climate, and hydrogeology are embedded in our museum’s architecture and visual identity.
- Our building, designed by architect Will Bruder, is inspired by a basalt rock formation endemic to the high desert of the Great Basin.
- Our visual identity and branding, designed by Brad Bartlett, are based on geothermal heat maps of Reno, and the thermal data visualized on our website reflects hourly, daily, and seasonal temperature changes.
- Our Center for Art + Environment, launched in 2008, stewards a substantial and growing collection of archives, special collections, and unique publications related to creative interactions between artists and the environment.

To extend the museum’s commitment to art and the environment institutionally, and to align with the Paris Climate Agreement’s imperatives to reduce waste and the world’s carbon emissions, in 2022 we worked with the Ki Futures program—an Amsterdam-based program designed for the cultural sector by the non-profit organization Ki Culture—to produce a Sustainability Action Plan (bit.ly/NVMAActionPlan) addressing climate justice and carbon accounting.

To optimize our museum’s carbon footprint, we use a comprehensive carbon accounting platform developed by nZero Inc. to analyze and ameliorate our direct and indirect emissions. nZero’s dashboard visualizes our energy consumption and emissions data in real time—a sometimes sobering exercise, given the cooling and humidification requirements in a high desert environment.

As new infrastructure comes online during the construction of our 50,000-square-foot Charles and Stacie Mathewson Education and Research Center, we anticipate our carbon footprint will improve despite increasing the overall size of our museum. One goal of our groundbreaking exhibition “Into the Time Horizon” (opening in 2026) is to reduce an exhibition’s carbon footprint by better utilizing permanent collections in combination with signature international loans and commissions.

We would like to thank nZero, the Teiger Foundation, and the Helen Frankenthaler Foundation for their support of the Nevada Museum of Art’s sustainability initiatives.

conditions, people of color, people with low incomes, and Indigenous peoples. More than 90 US coastal communities currently experience **chronic flooding**, and that number is expected to rise to over 170 in the next two decades. By 2100, as many as **13 million people** in the US could be forced by rising sea levels to relocate, stressing the economies, housing, and infrastructure of the cities that receive these displaced populations.

The risks facing museums themselves are clear and comprehensive. To name just a few:

- Over a third of US museums lie within 100 kilometers of the coast—a quarter in zones highly vulnerable to sea level rise and severe storms.
- Sixteen percent of Americans live in areas at **high risk of wildfire**—this will rise to 21 percent in the next three decades as the risk zones for fire expand. US museums, which tend to co-locate with population, face similar exposure.
- Museum buildings and HVAC systems were built for climate conditions that are rapidly becoming out of date. The stress on these systems, and costs of remediation, will only increase with time.
- As **plant hardiness zones shift north**, historic properties and botanic gardens face a future in which their original landscaping and collections cannot survive.
- The increase in the number of **extreme heat days** annually is encroaching on attendance and outdoor space rentals.
- The climate crisis is **making insurance more expensive**. Major insurers have already **stopped writing new policies** in California, Florida, and Louisiana, and this list of “uninsurable” areas is expected to grow.

- Climate risk will put additional pressure on museums racing to document and preserve archaeological sites, habitats, and endangered species.

Museums can respond to these challenges both internally, through how they operate, and externally, through how they work with their communities and influence the public.

The Carbon Inventory Project estimates that the US museum sector annually emits an estimated 4 million metric tons of CO₂e, or carbon dioxide equivalent, which expresses the total greenhouse gases emitted in terms of the equivalent measurement of carbon dioxide. This is equivalent to the emissions of about **83,000 US households**. As the Culture Over Carbon initiative points out, reducing those emissions by 30 percent would be the equivalent of taking three natural-gas-fired power plants offline or 271,000 cars off the road. If the entire sector reduced its annual energy consumption by 50 percent, the related emissions reductions would be equivalent to eliminating five such power plants or 452,000 passenger vehicles (more than all the registered vehicles in Maine).

There is **consensus** among the general public, even stronger among frequent museum-goers, that museums should be working to reduce their carbon footprints and operate in more sustainable ways. These improvements could encompass design, construction, energy use, land management, digital activities, and all other aspects of museum operations. Choices range from moving the museum to a more sustainable site to reducing reliance on travelling exhibits and collection loans. Given the tremendous carbon output tied to **computation and data storage** on “the cloud,” museums may also need to assess the impact

RESOURCES

Culture Over Carbon: Understanding the Impact of Museums’ Energy Use, New Buildings Institute, 2023

This report shares energy data from more than 130 participating institutions, including zoos and aquariums, gardens, historic sites, and five types of museums. The report also includes recommendations for energy saving strategies geared to cultural institutions.

ecprs.org/engagement/culture-over-carbon

Toolkit on Sustainability in the Museum Practice, International Committee for Museums and Collections of Modern Art. Launched in 2021 and updated in 2023, this toolkit offers museums resources, tools, guidelines, and examples to promote sustainable change related to equity, inclusion, diversity, justice, environmental respect, and sustainable economic growth.

bit.ly/46Or2kk

of their digital practices. (Even **removing images from email signatures** has a measurable impact on carbon emissions.)

Some of these changes will require museums to revisit and revise old standards, which can be deeply embedded in intransigent systems. The museum sector is slowly chipping away at **inflexible and unsustainable standards** for climate control, but even as some museums around the globe **adjust their HVAC** systems to allow a greater range of temperature and humidity, many contend with loan agreements that adhere to old conventions.

There is overwhelming, broad-based support for museums of all types to educate the public about climate change. Not just science centers, natural history museums, zoos, and aquariums (as one might expect), but also art museums, history museums, historic sites, and children's museums. No other type of institution in American life is more **trusted** than museums, and when it comes to information on **climate change specifically**, only scientists and researchers rank as more credible. (It's always good news when science wins.)

What message should museums send when teaching about the climate crisis? It may not be as simple as making more people understand, and believe, what is likely to happen. **Research** suggests that if people are confronted with projections that are too depressing and scary, they disengage and are even *less* likely to take action. (Case in point: How did reading the opening of this article make you feel?) Some advocate "**climate optimism**": fostering change by helping people believe they can make a difference, creating a positive feedback loop of action and hope.

Crafting the appropriate message is also complicated by wide uncertainties around what we face. Museums can't assure people "if you do this and support that, all will be well." Even if we take every recommended action, many generations will live in a significantly warmer world. However, museums can help people understand that their actions can help avert the worst-case scenario while simultaneously preparing them to live in a profoundly altered world. Museums can help people think about uncomfortable truths *and* feel empowered to do things that can make things better.

MUSEUMS MIGHT ...

Internally, as organizations and as a sector

- Measure and report on their own carbon emissions as a first step toward reduction; integrate carbon goals into their strategic and operational plans.
- Implement climate-friendly policies and procedures that minimize emissions, such as supporting remote work. (Hybrid employees who work from home two to four days per week **reduce their emissions by 11 to 29 percent** compared to full-time on-site workers.)
- Question the dominant paradigm that success requires growth. What would "degrowth" look like in museums? Might it entail less travel for research, fewer loans, and capping the museum's footprint and attendant energy costs?
- Make thoughtful decisions about funding. Some wealth is tied directly to practices that fuel the climate crisis. When are grants, sponsorships, or donations an appropriate form of reparative practice, and when do they insulate individuals and corporations from the need to make fundamental changes to their business models?
- Work together as a sector to revisit expectations on climate control so that museums are not required or pressured to conform to environmentally unsustainable standards.
- Join initiatives such as **We Are Still In, the Museums & Climate Change Initiative**, the **Climate Heritage Network**, and the **Coalition of Museums for Climate Justice** to foster organizational and collective action.

Externally

- Use their knowledge, perspective, and trusted status to advocate for climate actions by individuals, businesses, and government.
- Motivate members of the public to take action by changing their own lifestyles and advocating for change at the local, state, and federal levels.
- Organize and host constructive community conversations, workshops, speaker series, and programs that resonate across the political spectrum and help people think critically about these issues.
- Help individuals and communities cope with the stress and grief inflicted by climate impact.

MUSEUM EXAMPLES



In 2021, the board of the **Discovery Museum** in Acton, Massachusetts, approved a **five-year Sustainability Plan** that outlines more than two dozen action steps across all areas of its operations to reduce greenhouse gas emissions and decrease its carbon footprint, reduce water usage, minimize waste generation, invest sustainably, and advocate for climate action. All these steps support the larger goal of inspiring others to climate action. A cornerstone of the plan is the installation of a 326 kWh solar array over a portion of the parking lot that generates more than 100 percent of the museum's electricity on-site, with the excess sold to five other nonprofit organizations at a discount. The solar array, which became operational in summer 2022, represents a CO₂ reduction equal to preserving 317 acres of forest. In June 2022, the museum kicked off a first-of-its-kind carbon offset program for members, staff, and volunteers and in September 2023 provided carbon offsets for all other visitors.



Each spring, the **National Nordic Museum** in Seattle hosts corporate leaders, policymakers, and scholars for its annual Nordic Innovation Summit. Launched in 2018, the summit strengthens ties between the technology and innovation sectors in the Nordic countries and the Pacific Northwest—two regions advancing cleantech solutions. It is now a week-long event that serves over 400 on-site attendees and thousands through a live webcast. The theme of 2023's summit was "Sustaining Sustainability"—the idea that by doing good (through environmental, social, and governance commitments), a company can do well financially. Highlights included Governor Jay Inslee pitching business opportunities in Washington State to Nordic cleantech companies; Henrik Henriksson, CEO of H2 Green Steel, sharing how his company is reducing 95 percent of carbon emissions in the industry; and executives at Volta Truck discussing the US launch of their 16-ton, all-electric commercial vehicle. This program exemplifies how the National Nordic Museum lives its values as a neutral convener for climate-crisis cooperation.



In 2021, the **Peabody Essex Museum** (PEM) in Salem, Massachusetts, launched a Climate + Environment Initiative with the goal of sparking conversation, motivating action, and inspiring creative solutions. Designed to be simultaneously outward-facing and inward-looking, the initiative produces a series of ongoing exhibitions and public programs while implementing institutional protocols to mitigate climate impact, such as creating reusable exhibition design systems, offering sustainable products in the shop, and transitioning to renewable energy sources. A museum-wide staff cohort meets regularly to propose ideas to make PEM a more sustainable and climate-forward institution. PEM also hosts Salem's annual Preservation in a Changing Climate conference with the city and has recently partnered with Mass Audubon to help establish a regional Youth Climate Leaders Club. Through its efforts, PEM seeks to be a community partner and a hub for engagement, empowering other organizations to take similar actions to confront the biggest challenge of our time.

Dropping the Degree

Sixty percent of Americans may find their job search stalling when they hit a “paper ceiling” that ensures that applicants without a four-year college degree advance only so far. This requirement

excludes 70 percent of Black job seekers, 80 percent of Latinos, and three-quarters of American Indians and Alaskan Natives.

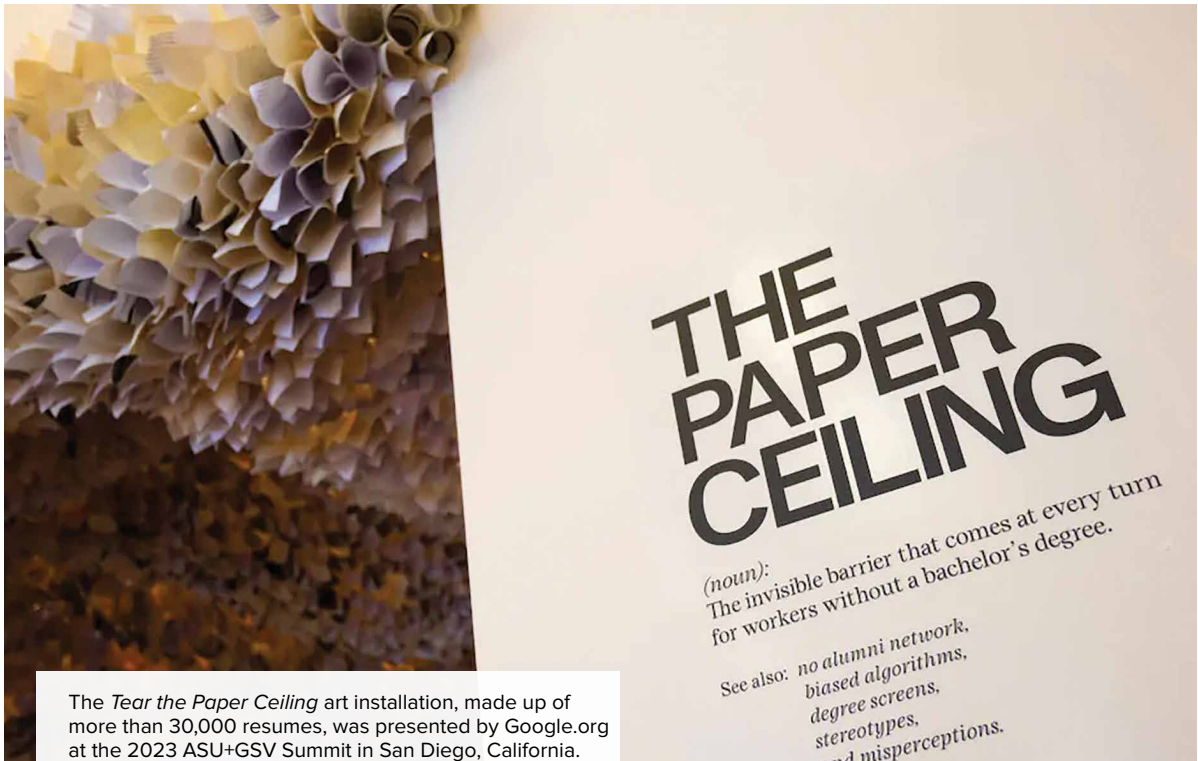
Many of the positions above this ceiling don’t actually require college experience, and many

potential workers have acquired relevant skills through alternative routes, including community college, military service, and on-the-job experience. But requiring a degree has become a common practice in part because it is an

Eastern State Penitentiary Historic Site (ESPHS) overhauled its recruitment strategy to hire “returning citizens”—people with lived experience behind prison walls. ESPHS encourages other museums to follow suit and include returning citizens in interpreting and reimagining museums.



Photo by Luis Cruz Duarte, courtesy of Eastern State Penitentiary Historic Site, Philadelphia, PA



The *Tear the Paper Ceiling* art installation, made up of more than 30,000 resumes, was presented by Google.org at the 2023 ASU+GSV Summit in San Diego, California.

efficient way to filter a deluge of digital applications.

The paper ceiling doesn't just keep people from getting jobs; it **damages lives** in a host of ways. In the US, people without a four-year degree are less likely to own their own home, are more likely to suffer from depression, and have a life-expectancy eight years shorter than their college-educated peers. While it's difficult to untangle cause and effect, it's clear that barriers to hiring help fuel the social and economic stratification of society.

Museums and the Paper Ceiling

Data suggests museums have succumbed to "over-credentialing" as well. Ninety percent of

museum workers represented in the last **national salary survey, in 2017**, held at least a bachelor's degree, versus 33 percent of the general population. More than 77 percent of technician/preparators (a position described as "typically requiring manual skills related to duties") have a four-year degree or higher. This overshoot may stem in part from the attitudes and behavior of job seekers: for example, highly educated creatives may see museum employment as a desirable way to fund their independent work. However, having a large pool of highly credentialed applicants can normalize museums' expectation that they can, and therefore should, fill these positions with college graduates.

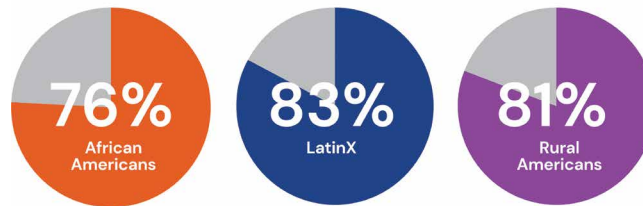
Two challenges are pushing museums to revisit traditional hiring practices, the most recent being the nonprofit labor shortage. As museums recover and restaff following the pandemic, **60 percent of directors** report they are having trouble filling open positions. Another impetus is that many museums are stalling or even losing ground in their efforts to attract and retain a more racially diverse workforce. Facing these challenges, museums might want to rip down the paper ceiling to widen the pool of potential applicants, increase the diversity of their workforce, and contribute to an equitable society.

Other job sectors are already "dropping the degree." In the past year, major companies including Kellogg's, General Motors, and

Bank of America announced they will stop requiring four-year degrees for a wide variety of positions. **Governments** are trying it, too: in 2023 Virginia became the 30th state to review roles and remove unnecessary degree requirements from thousands of public-sector jobs. As a tool to advance diversity, equity, accessibility, and inclusion (DEAI), degree reform is systemic and potentially sustainable, in contrast to one-and-done approaches that rely on diversity training seminars or job fairs.

In museums, the degree in question might be a B.A. or B.S., but for some positions it might be a master's or a Ph.D. Expectations regarding advanced degrees are even more exclusionary than undergraduate degrees, with respect to race and socioeconomic background, and often result in people embarking on museum careers burdened by significant student debt. It's worth remembering that museums' focus on advanced academic credentials is a relatively recent development. The ranks of successful, prominent directors without advanced credentials include Julianna Force, who began as a personal secretary and rose to become founding director of the Whitney Museum of Art in New York City in 1930; J. Carter Brown, who held an M.B.A. when he became director of the National Gallery of Art in Washington, DC; and Ron Chew, who did not have a bachelor's degree when he became executive director of Seattle's Wing Luke Asian Museum in 1991.

Four-Year Degree Requirements Automatically Screen Out:



If Not Degrees, Then What?

Degrees are often used as proxies for criteria that wouldn't withstand scrutiny. It's well documented that, left to their own devices, people tend to hire applicants they feel comfortable with, people who share their background, interests, experience, and cultural references. That very human tendency is directly at odds with museums' desire to recruit and retain staff who reflect the racial and cultural diversity of their communities. Weaning an organization from over-reliance on credentialing starts with managers taking a hard look at the skills a job really needs. If a position requires time management and social and communications skills, for example, what other ways might applicants demonstrate these abilities?

Some employers are replacing degree-based hiring with "skills-based hiring," assessing applicants' practical knowledge, experience, and demonstrated skills and competencies. These approaches come with their own drawbacks. Some employers have implemented "challenge-based hiring"—requiring applicants to brainstorm ideas, solve a problem, or write an essay. This

imposes a time burden on applicants, and in some cases asks them to donate material of real value (whether or not they get the job). Degrees are binary—an applicant does or doesn't have one. (Granted, degrees from some institutions may be more prestigious than others, but that's a whole other bundle of bias.) Knowledge and experience are more nuanced and harder to assess. How can museums create systems for reviewing applications that are fair and equitable but also don't eat unreasonable amounts of staff time?

Once a museum has recruited a more diverse workforce, managers face another set of challenges: ensuring these new staff members want to stay. Employers may need to provide training in hard or soft skills and examine the organizational culture to ensure it is welcoming for new hires who don't share the background, norms, and experiences represented in the dominant institutional culture.

It may not be a simple solution, or a magic fix, but examining when they might want to drop the degree for particular roles could be a healthy first step for museums to take on the road to effective, fair, and equitable hiring.



Digital Twins and Doom Loops

A brief guide to terms that may be popping up in your news feeds.



Digital twin
of an oil rig.



Digital twins: digital models of objects, systems, or processes (e.g., buildings, machines, distribution systems) that exist or could exist in the real world. These interactive models use real or fictional data input to visualize, simulate, or predict how their real-world

counterparts will respond to various situations and conditions. For example, **Shanghai** has commissioned a digital twin of the whole city that will use data from satellites, drones, and sensors to model 100,000 elements, including waste disposal, traffic, and the potential

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effects of natural disasters. The **Neurotwin** project is creating personalized digital twins of individual human brains to predict the effects of using electromagnets to treat Alzheimer's disease. **The Natural History Museum** in London feeds data, from



An empty Market Street in San Francisco, California, in April 2022.

thousands of sensors that measure everything from temperature and humidity to vibration and light, into a digital model that helps staff reduce energy use, identify threats to collections, and prioritize repairs and improvements.

Doom loops: a negative feedback cycle in which the damaging effects of a disruption spark a downward spiral that is difficult to reverse. Currently, much attention is being given to **urban doom loops** sparked by the pandemic, when remote work emptied office buildings and prompted many people to relocate to

areas with lower costs of living. The resulting lower foot traffic job loss due to small business closures, and disinvestment in city services resulting from lower tax revenues led to an increase in homelessness and crime, making it less likely that people and businesses will return to former urban cores. Researchers warn that a **climate doom loop** may result from the fact that climate disasters (extreme heat, storms, floods, fires) are diverting money and attention from the efforts needed to curb emissions and reform the systems fueling the climate crisis.

Combating the Loneliness Crisis

In 2019, the temporary
Torro Loneliness Museum
opened in Beijing to help
people "accept and cast
aside their loneliness."



In May 2023, Dr. Vivek Murthy released *Our Epidemic of Loneliness and Isolation: The U.S. Surgeon General's Advisory on the Healing Effects of Social Connection and Community*. Such advisories are issued to address “significant health challenges that require the nation’s immediate awareness and action.” The first, in 1964, tackled smoking and tobacco use. Subsequent advisories covered preventing and decreasing overweight and obesity (2001) and using naloxone to prevent opioid overdoses (2022). In this latest report, Murthy calls on the US to make the same investments in addressing social connection that we have made in combating tobacco use, obesity, and the addiction crisis.

What is the extent of this crisis?

About a third of US adults 45 and older suffer from loneliness; that figure rises to nearly 80 percent in young adults 18 to 24. The incidence of loneliness is particularly high among vulnerable older adults, including immigrants; lesbian, gay, bisexual, and transgender populations; minorities; and victims of elder abuse. Economists estimate that loneliness costs the **US economy** \$406 billion a year due to lost work days and adds an estimated \$6.7 billion a year to **Medicare costs** for socially isolated older adults.

Why is loneliness a significant health challenge?

Research shows that **loneliness**

and isolation are linked to sleep problems, inflammation, and immune changes in younger adults. In older people, they’re tied to symptoms such as pain, insomnia, depression, anxiety, and shorter life span. In people of all ages, they are associated with higher risks of heart disease, stroke, diabetes, addiction, suicide, self-harm, and dementia.

What are some root causes of this epidemic?

More Americans are living alone. According to **US Census** data, the number of one-person households soared from 8 percent in 1940 to an estimated 29 percent in 2022. Now roughly 13 percent of American adults live alone, from 4 percent of adults 18–24 to 26 percent of those 65 and older.

The decline of organized religion. Churches have traditionally been a critical “third place” where people socialize and connect with their community, but participation in organized religion is at an all-time low, with roughly 3 in 10 adults now **religiously unaffiliated**. Sixty-eight percent of adults report attending religious services a few times a year or less.

The rise of social media. **Teens** spend an average of 4.8 hours a day on social media. While these platforms were initially hailed as a great connector, they have **demonstrably contributed** to the mental health crisis among young people by fostering unrealistic expectations regarding appearance and facilitating cyberbullying.

What can museums do?

The surgeon general’s report makes the following recommendations for how cultural organizations can help combat this epidemic:

- Create opportunities and spaces for inclusive social connection and establish programs that foster positive and safe relationships.
- Embed social connection in internal policies, practices, programs, and evaluations.
- Actively seek and build partnerships with other community institutions...to create a culture of connection in the broader community.
- Advance public education and awareness efforts to introduce and elevate the topic in programs and exhibits.
- Create and provide education, resources, and support programs for community members and key populations: community-wide social events, volunteering, network-building, and professional development.
- Foster a culture of connection in the broader community by highlighting examples of healthy social connection and leading by example.



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A BENEFIT OF MEMBERSHIP IN THE
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