

# TrendsWatch 2012

Museums and the Pulse of the Future



## ACKNOWLEDGMENTS

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Individual Expertise, Collective Wisdom



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# Introducing TrendsWatch

This report is for anyone who is interested in the future of museums—but especially for the people at museums (staff, directors, trustees) who have to plan for that future now. How can you predict what that future might hold? AAM's Center for the Future of Museums (CFM) is here to help with TrendsWatch—a summary of the most important drivers of change we have observed over the past year.

Any museum with a five- or 10-year plan that assumes the world will remain the same is probably going to land in the wrong place. All aspects of our world—social, technological, environmental, economic, political—are changing so quickly that museums need to add some long-term forecasting to their portfolio of planning skills. Envisioning what the world might be like decades from now will help ensure that your planning is realistic and flexible enough to encompass various **plausible futures**.\*

You can find hints of the future all around you, embedded in articles, blogs, tweets, “top 10” lists, research reports, mainstream media, books, films, conferences and everyday conversation. In future-speak, searching for these clues is called **scanning**. Scanning is a way to identify and monitor change, anticipate disruptions and explore the

implications of what we observe. The goal of scanning is to find what is not already known, to go beyond established wisdom and seek the new. We look for early signs, teases and warnings of trends that are just beginning and for changes in the speed or direction of existing trends.

Here at the American Association of Museums, we know that you don't have time to become a professional futurist in addition to being a museum director, curator, educator, registrar, development officer, trustee, etc. One role of CFM is to scan the future on your behalf—acting as an early radar detection system for the field. CFM's e-newsletter **“Dispatches from the Future of Museums”** delivers news bites to your inbox each week, our **Twitter feed** shares informative links, the **Research Roundup** gathers additional links, the **CFM Blog** provides context and commentary and **CFM research reports** delve into selected issues in depth. To this collection of futures scanning tools, AAM now adds TrendsWatch. Some of these trends are blossoming outside of museums; some are already influencing museums directly; all will help shape the world to come. As you create, review and implement your museum's plans for 2012 and beyond, use TrendsWatch as one tool to help foresee where you are headed.

Yours from the future,



Elizabeth Merritt, Founding Director, Center for the Future of Museums  
American Association of Museums

\* The PDF version of this report includes copious embedded links to news stories, blog posts, research reports, videos and other resources indicated by bold blue or yellow type. If you are reading a print copy of the report, you can access the links at <http://futureofmuseums.org/reading/publications>. Another way to use TrendsWatch is to make it a guide for your own scanning. In the coming year, keep an eye open for news and opinion pieces illustrating how these trends are playing out.

## How to Use This Report

TrendsWatch 2012 highlights seven trends that CFM's staff and advisors believe are highly significant to museums and their communities, based on our scanning and analysis over the past year. For each trend, we provide a summary, list examples of how the trend is playing out in the world, comment on the trend's significance to society and to museums, and suggest ways that museums might respond. We also provide links to additional readings.

TrendsWatch provides valuable background and context for your museum's planning and implementation. We encourage you to share copies with:

- the museum's executive and planning teams
- the entire staff (paid and volunteer)
- members of your governing authority
- local foundations and major donors
- policymakers and government representatives
- members of key community groups and museum partners
- the press

To foster discussion, you might host brownbag lunches, make the report an agenda item for staff or board meetings, or organize a **forecasting workshop**. Encourage people to explore the following:

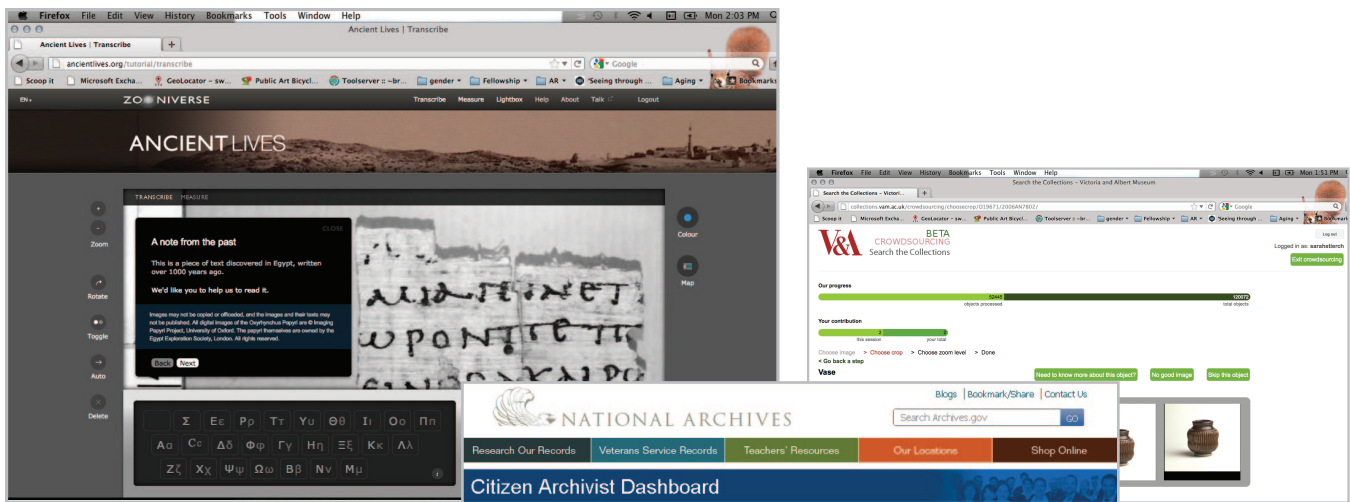
- How are these trends playing out in your community, state, region or country?
- Which trends are likely to have the greatest effect on your organization?
- How might your museum take advantage of the opportunities or avoid the risks these trends present?

If you are not directly involved in museum planning, we encourage you to organize similar conversations in other settings, such as a museum studies class or professional conference.

You can access more information, including all CFM forecasting reports and scanning tools, at the CFM Website ([www.futureofmuseums.org](http://www.futureofmuseums.org)). Please share your scanning hits with CFM via e-mail ([futureofmuseums@aam-us.org](mailto:futureofmuseums@aam-us.org)) or twitter ([@futureofmuseums](https://twitter.com/futureofmuseums)). And let us know what you think about TrendsWatch and how you use it in your work. Together we can build a formidable forecasting network to help museums chart a successful course to the future.

## The Trends

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Examples of crowdsourcing projects.



# Harnessing the Crowd

The Internet lets museums massively increase the number of volunteers doing meaningful work.

Everyone seems to be talking about “crowdsourcing” these days, but what does it actually mean?

Back in 2006, Jeff Howe introduced the word **crowdsourcing** to describe the process of soliciting content, solutions and suggestions from an undefined set of participants via the Internet. This is not a new phenomenon for museums, which have long relied on the work of **dedicated volunteers**. Museums have adopted crowdsourcing partly in response to an increased desire on the part of audiences to “do” in addition to “view.” Technology enables broader, deeper, more accessible engagement with a growing universe of amateur experts who may not otherwise be engaged with the museum and may reside halfway around the world.

Crowdsourcing is more than just interactivity or public feedback. Input from the crowd ranges from a simple sharing of opinions—for example, inviting the public to help **select exhibit content** or **pick a new logo** to reflect the museum’s identity—to learning new skills and engaging in real work. The expertise contributed by participants can be **personal** (e.g., identifying friends or family members in historic photographs) or **highly skilled and specialized** (e.g., identifying species of plants or animals). In many fields there are already “crowds” of skilled workers (genealogists, birders, backyard astronomers, costume buffs, graphics geeks) ready and eager to contribute their time.

## Examples:

- The New York Public Library is developing a **citizen cartography tool** that lets the public take information archived on digitized historical maps and use the data to tag a searchable interface built with Open Street Map. The goal: a larger, more detailed database that will help future researchers.
- The **Smithsonian American Art Museum** invited the public to vote via the Web on which examples of video games to include in its “Art of Video Games” exhibit.
- The National Library of Finland created the **Digitalkoot project** to help digitize millions of pages of archival material. Visitors to the site transcribe old books one word at a time while playing a video game. Think CAPTCHA meets Angry Birds!
- The United States Holocaust Memorial Museum (in partnership with the private company Ancestry.com) has recruited “citizen historians” to research historical documents from WWII. **The Children of the Lodz Ghetto project** is designed to teach historical skills while “restor[ing] names and stories to those whose identities were nearly silenced by a force that nearly succeeded in making them disappear completely from history.”
- Many natural history museums coordinate “citizen science” projects that enlist public help to tackle large research challenges, like **collecting and identifying** ants, **transcribing data** from the labels on century-old cicadas or **spotting celestial phenomena**.
- Several museums, including the **Smithsonian**, **The Children’s Museum of Indianapolis** and the **British Museum**, have established positions for **“Wikipedians in Residence.”** The Wikipedians push museum data and images into the Wikipedia universe, as well as soliciting and managing content from the wiki-editing crowd.

## What does this mean for society?

Crowdsourcing is undermining some traditional business models. For example, **amateur photographers** can provide images at a fraction of professionals’ rates while crowdsourced **design competitions** are starting to replace some traditional requests for proposals (RFPs).

Citizen history, citizen science and crowdsourced art may help fuel the renaissance of the amateur expert, fostering new opportunities for lifelong learning.

In the next educational era (see page 23), participation in crowdsourced projects may become an important part of a **self-directed learner’s curriculum**.

## What does this mean for museums?

Well-designed, carefully managed crowdsourcing projects can be a priceless tool for museums faced with organizing and realizing the value of huge amounts of digital data. (The blog **So You Think You Can Digitize** links to a number of these projects.)

Crowdsource volunteers may become a training ground for future museum workers—or a replacement for existing museum staff. Museums may hire staff to train the crowd, moderate, compile, vet and share input, while reducing or eliminating positions that provided expert services internally.

Crowdsourcing vastly increases the scope of work museums can tackle, but also increases the burden of oversight and quality control.

Crowdsourcing, like participatory design and community curation, challenges the traditional authority structure of museums.

## Museums might want to consider:

- Create staff positions devoted to enlisting, training and supervising crowdsourced input (e.g., “Wikipedian in Residence,” “curator of community engagement”).
- Change the role of curators to encompass facilitation and quality control of crowdsourced work, in addition to sharing their individual expertise.
- Explore the intersection of crowdsourcing with gaming, making the input and participation fun—“not like work”—while capturing hundreds or thousands of hours of volunteer time.

## Further reading:

Jared Keller, **“How Wikipedians-in-Residence are Opening Up Cultural Institutions,”** *The Atlantic* (June 16, 2011).

Jennifer Howard, **“Gaming the Archives,”** *Chronicle of Higher Education* (May 23, 2011).

Mia Ridge, **“Museum Crowdsourcing Games: Improving Collections Through Play (and some thoughts on the future of museums).”**



Image (modified) courtesy of cogdogblog on Flickr.

## NPO No Mo’?

Attacks on the nonprofit sector can spur alternative strategies for social enterprise.

Museums have traditionally been tax exempt, reaping, in effect, tax support in return for operating in the public interest. Now, with government at all levels desperately seeking new income sources, and museums being cast as “luxuries” or “amenities” rather than essential public goods, that deal is increasingly being called into question.

More than two-thirds of American museums operate as independent, nonprofit organizations (NPOs)—usually in the form of public charities as defined by section 501(c)(3) of the U.S. tax code. NPOs are exempt from many kinds of taxes. But as the economy continued to falter in 2011, nonprofits were attacked on three sides: by governments that sought to impose or expand taxes—or PILOTS, payments in lieu of taxes—on tax-exempt entities; by national leaders in Washington who debated cuts in the tax-deductibility of personal donations to charities (a major source of museum revenue); and by ideologues who questioned the public purpose of nonprofits in general.

It didn’t help the credibility of the nonprofit sector when thousands of charities, including museums, **lost their tax-exempt status** by failing to keep up with the paperwork required by the IRS. Meanwhile, donations for arts and cultural organizations remain well below 2007 levels (despite a **5.7 percent increase in 2010**), another long-term threat to museums that operate as public charities. As an alternative to both traditional charities and traditional businesses, some jurisdictions have begun to experiment with **new types of corporations** (sometimes called “low-profit limited liability corporations”—L3Cs for short—or benefit corporations) that put social goals ahead of making profits. These hybrid businesses are allowed to tap both philanthropies and the marketplace for funding while earning moderate profits.



*“We worry a lot because the amount of government funding is so small. When you start tampering with deductibility, it can become the proverbial slippery slope. The cumulative effect could be devastating.”*

Ford Bell, American Association of Museums

#### Examples:

- In April 2011, the **city of Boston** asked local nonprofits “to help offset the rising cost of city services and cuts in state financial aid” by making voluntary payments in lieu of property taxes. Although the payments were 25 percent (or less) of what a commercial firm in the same location might pay, the new bills were substantial: e.g., the Museum of Fine Arts, which already made a voluntary payment of \$66,000 in 2011, was asked to pay more than \$250,000 in 2012 and more than \$1 million a year by 2016. **A few months earlier**, the Boston PILOT Taskforce considered (but rejected) a payment plan for all the city’s museums based on a fixed rate multiplied by the number of museum visitors.
- In **his state**, Gov. Lincoln Chafee (Ind.-R.I.) proposed a new sales tax on admissions to museums, historical sites, zoos, parks, art galleries and libraries, plus a 1 percent sales tax on any item sold to charities (including museums). The proposed tax package was eventually defeated.
- In **New Orleans**, a city consultant offered “compelling arguments for eliminating the nonprofit exemption altogether and making property taxes a cost of doing business.” The actual recommendation to Orleans Parish (which has not made it into law yet) was a bit less drastic: In order to receive a property tax deduction, an NPO

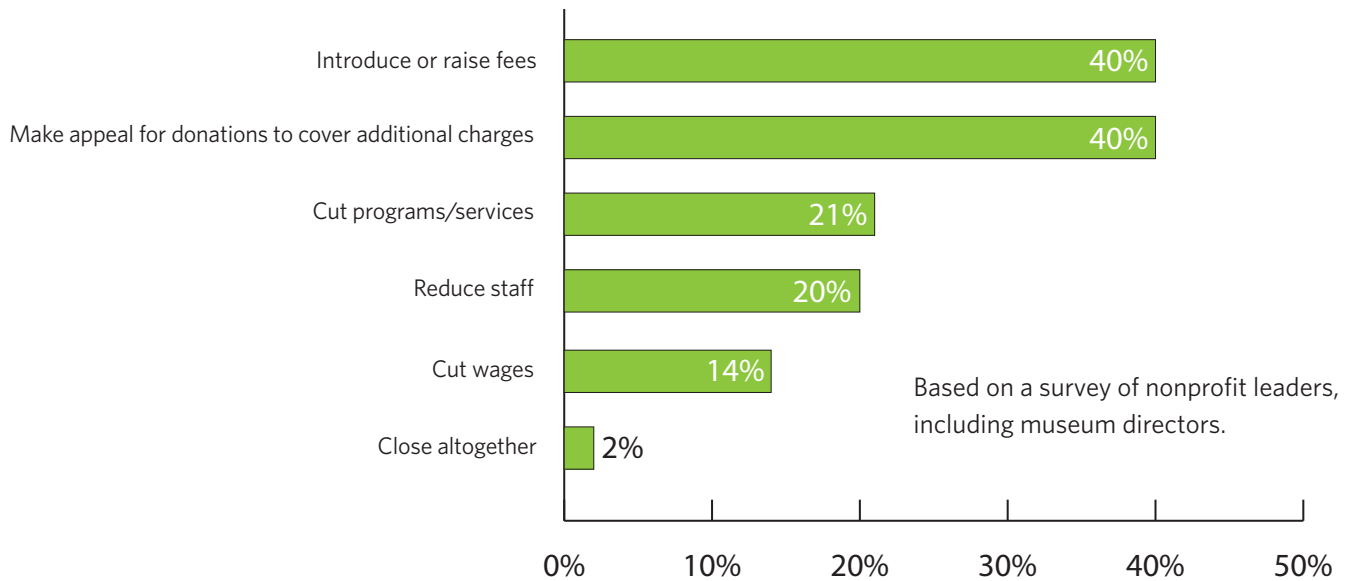
would have to prove that it “relieves the government of a burden or provides important public benefits.”

- For the past five decades, nonprofit museums, theaters and other performing arts groups in **Tacoma**, Wash., have been exempt from collecting taxes on ticket sales. In December 2011, the city council threatened to eliminate this exemption to help cover a local budget gap.
- In May 2011, Sen. Max Baucus (D.-Mont.), chairman of the powerful Senate Finance Committee, publicly **questioned the fairness** of charitable deductions. President Obama proposed a 2012 budget that limits charitable deductions for wealthy households (i.e., those earning more than \$250,000 a year). It was the **third year in a row** that he called for limits—and policymakers in both parties responded sympathetically.

#### What does this mean for society?

Americans **trust nonprofits** more than they trust government or industry. Part of the popular trust comes from the fact that “nonprofits ... raise capital and use it in ways that are different from corporate America,” to quote the late nonprofit leader **Peter Goldberg**. When the distinctive privileges of nonprofits—such as tax exemption and incentives for charitable donation—are threatened or removed, the public benefits provided by the nonprofit sector may also disappear. What will fill the resulting gap?

## How will NPOs respond if the tax man comes?



Source: Lester M. Salamon, et al., [Taxing the Tax-Exempt Sector—A Growing Danger for Nonprofit Organizations](#) (Nonprofit Listening Post Project, 2011).

### What does this mean for museums?

In the past, threats to nonprofit status that arose during financial downturns faded as the economy rebounded. Museums can't take this for granted. Their fate is tied to the rest of the nonprofit sector, and the current economic crisis may be fundamentally reshaping public attitudes and public policy about supporting nonprofits. If this is true, museums have to find new financial models for sustainability.

According to a 2010 survey conducted by the [Nonprofit Listening Post Project](#) at Johns Hopkins University, 4.3 percent of museums already pay "field-specific" taxes (mostly on ticket sales) and 53 percent pay user fees for things like municipal utilities. But expanded taxation will necessarily lead to reduced services and/or increased pressure to raise revenues—tough for museums that are already financially stressed.

### Museums might want to consider:

- Several of the recent proposals to expand PILOTS called upon nonprofits to prove their public benefit to the community. Museums should do this proactively, not just as a way to forestall tax proposals but as a way to promote the public benefit of the entire nonprofit sector.
- Remember that "nonprofit" has always been a tax status rather than a business model. Developing a diversity of funding sources and strategies, including earned income, is always a good idea.
- As the advantages of nonprofit status shrink, museums may decide that adopting new hybrid legal structures such as benefit corporations make more sense for an institution's long-term financial sustainability.

### Further reading:

For the latest news on the nonprofit sector, monitor the [National Council of Nonprofits](#) and [Independent Sector](#).

Peter Linett, "[Innovation, insecurity, and the real reason we need new business models](#)," *Asking Audiences* (Oct. 12, 2010).

Lester M. Salamon, Stephanie L. Geller and S. Wojciech Sokolowski, [Taxing the Tax-Exempt Sector—A Growing Danger for Nonprofit Organizations](#) (April 2011).



Inside/Out courtesy of the Detroit Institute of Art.

## Takin' It to the Streets

Community encounters can take place beyond the walls of museums.

From pop-up retail spaces and wandering food trucks to mobile museums and outdoor exhibits in unexpected places, all sorts of purveyors are finding new ways to meet their patrons—or encounter new ones—outside the confines of their traditional physical locations.

The modern **food truck phenomenon**—starting with the Kogi Korean BBQ taco truck in 2008 but exploding in 2010–11—is a new model for mobile cultural engagement, combining the savvy use of social media to cultivate followers with a unique place-based experience: restaurant-quality (sometimes even gourmet) food without a restaurant. Another model is the pop-up store, taking advantage of underused retail space (thank you, faltering economy!) to create temporary, low-risk, sometimes low-cost experiences—introducing consumers to unfamiliar product lines that include both luxury goods and museums. A third model is street art (from graffiti to **yarnbombing** to traditional artworks sprung from indoor galleries), which some museums are embracing as a way to transcend their walls and meet new audiences.

This trend has been fueled by social media platforms such as Twitter and Facebook that facilitate communication with legions of “followers.” But it also builds on a long tradition of performance art and other cultural mash-ups in public places.

*“Having an exhibit in an RV makes the museum experience less intimidating, and since our exhibits are hands-on, people really interact and connect with the content.”*

Kimberly Mann, Van of Enchantment, New Mexico

### Examples:

- The **San Francisco Mobile Museum** is a participatory touring exhibit that fits in the back of a car. It's designed to provide opportunities for people to explore their local communities through personal narratives (including the creation of personalized shadow boxes and shrines) and then share them with neighbors. San Francisco is also home to the **Mobile Arts Platform** (an installation in the back of a van) and **portable parks** transported via Dumpster.
- Unexpected venues for museum exhibits in 2011 included **modified RVs**, an **old Fotomat booth** and an **elevator**.
- In France, the **Centre Pompidou** offered a temporary exhibit of treasures from the collection in a trio of blue and orange tents in a Paris suburb: “Conceived as a circus—light, flexible, cheap and festive—it [was designed] to attract an audience unfamiliar with museums.”
- The biggest pop-up museum of 2011 was probably the **Guggenheim BMW Lab** in New York City, a temporary exhibit sitting in the middle of busy city park. “But maybe exhibition is the wrong word because, unlike a gallery where you go to a fixed space to view fixed works, the lab is a living museum in a state of constant curation, filled at any point with games, panels, group activities and a handmade kiosk serving organic meals.”
- In 2011, the **Inside/Out initiative** from the Detroit Institute of Art brought “nearly 80 high-quality, life-size reproductions of some of its greatest paintings [to] 11 cities in southeastern Michigan ... to woo new visitors downtown to visit the original paintings once they've seen the copies in their own backyard.”
- In Los Angeles, MOCA's **Art in the Streets** exhibit (street art brought into the museum) drew record crowds—and the unexpected participation by taggers who created a wave of new graffiti in the neighborhood outside the museum.

### What does this mean for society?

Takin' It to the Streets represents the confluence of several different social and economic trends: a weakened economy that makes it more difficult to attract paying customers yet easier to set up temporary, low-cost, low-risk experiential sites; a general loosening of cultural authority (“I don't need a high-end store, a gourmet restaurant or a museum to tell me where to consume my culture”); and a revival of localism (“I like experiences that take place in my own neighborhood—or even my own backyard”).

It may also be a reaction against a world becoming too global and too plugged-in. Face-to-face and participatory experiences, especially in unexpected places, can serve as a counterweight to digital, virtual experiences.

### What does this mean for museums?

Small, temporary, flexible excursions beyond the museum walls can provide opportunities for innovation and experimentation. As Maria Mortati, creator of the San Francisco Mobile Museum, says, “Working outside the political structure of a museum meant that I could work quickly—I was empowered to make decisions based on the needs of the project and the audience.”

Takin' It to the Streets can help introduce museums to new audiences and make museum buildings seem less imposing, but they still have to work to keep these audiences engaged after the initial introduction.

Pop-up, temporary locations could be a low-cost, low-risk way to **experiment with permanent locations** (for new museums) or **satellite locations** (for established museums). For many museums, highly adaptable infrastructure could be an effective strategy for sustainability.



At left: The Kogi Korean BBQ truck at the Japanese American National Museum, courtesy of Clement Hanami, JANM. Top: Yarnbombed Rocky outside the Philadelphia Museum of Art, courtesy of Conrad Benner, StreetsDept.com.

### Museums might want to consider:

- How can museums take offerings (exhibits, programs, stores, participatory experiences) “to the street” via mobile and/or pop-up locations? What group(s) in the community could be served more effectively by going off-site?
- Could a pop-up museum help you try out new ideas? What aspects of the museum could be more engaging in a pop-up setting? What’s ripe for experimentation?
- Are there opportunities to **partner with other pop-up businesses** (food trucks, retail stores) to attract new audiences in and around the museum?
- Who on staff (or in the community!) is well-suited to help the museum explore these options?
- Is “pop-up” a trend or a fad? Is it an enduring addition to the cultural lexicon, or will it soon enter the same cultural trash bin as the **flash-mob**?

### Further reading:

Michelle DelCarlo, **“Fool-Proof Guide to the Pop-Up Museum,”** The Pop-Up Museum (Aug. 10, 2011).

Grant McCracken, **“Why the Food-Truck Trend Is a Genius Lesson in Marketing,”** Harvard Business Review (Aug. 24, 2011).

Sharri Wasserman, **“Rebooting Museums (5),”** HiLobrow (July 12, 2011).

*“Will museum collections stay ‘inside the walls’ while fundraising moves to mobile phones, or is there some way that creative museum folks can move both their collections and their communities of supporters onto mobile platforms?”*

Lucy Bernholz, Philanthropy 2173

## Alt Funding

New forms of philanthropy exploit the potential of social networking tools and distributed technology.

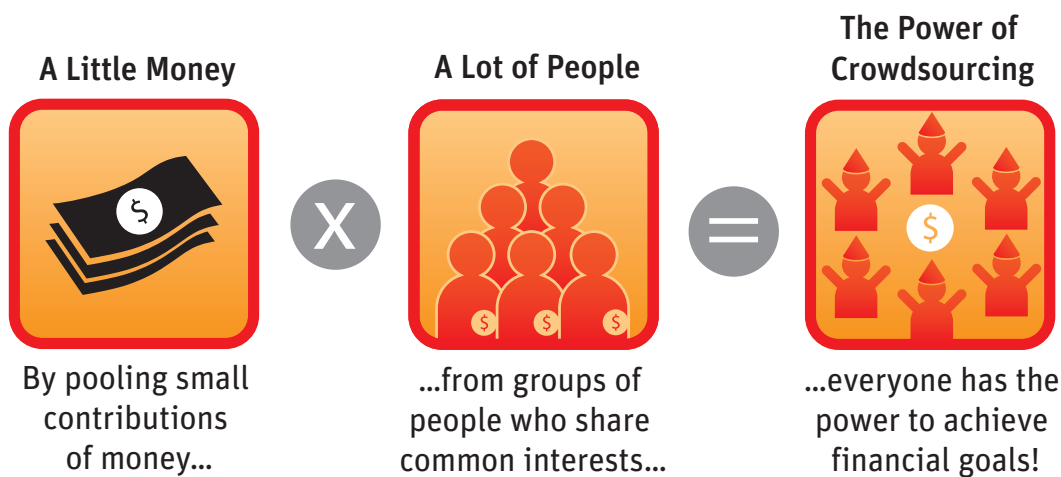
The ongoing financial crisis means that museums (and other nonprofits) are **scrambling for funds**. Some museums are deploying the traditional tactics: **increasing ticket prices**, turning to their own **collections for exhibits** and (when stressed) even selling items from their collections to cover operating expenses. Other museums are becoming more entrepreneurial, experimenting with **pop-up retail**, **partnering with for-profits** to market their goods or **starting for-profit ventures** of their own.

Nonprofits are using technology in especially creative ways to transform individual giving. Charities have long relied on microgiving, soliciting small amounts that add up through large numbers of donors. Ten years ago this primarily involved a “jar by the cash register.” Some museums are **still using the jar**, but increasingly it is being replaced by mobile phones, as nonprofits recruit donors via social media to yield mobile giving. The ubiquity of hand-held, Internet-connected devices facilitates donations via text messaging, Web links, waving a smartphone at a payment station (**Google Wallet**) or just stating your name (**Card Case**). Most famously, in 2010 the Red Cross raised more than \$32 million for Haitian earthquake relief via texting. According to an **AAM survey**, 13 percent of museums were planning to introduce or expand mobile giving opportunities in 2011.

Microgiving doesn’t have to rely on mobile devices. Embedded giving encourages people to add donations when they engage in commercial transactions such as **paying for groceries** or making **ATM withdrawals**.

Museums (along with a host of other individuals and organizations, nonprofit and for-profit) are also experimenting with **crowdfunding** (a close cousin of crowdsourcing, see page 6). Sites like Kickstarter, Indiegogo and Peerbackers reach people who may never have heard of your museum and invite them to support projects ranging from acquisitions to exhibits to building expansions. Some sites, like **United States Artists** and **FundScience**, focus on funding particular disciplines, and some are structured to accept **tax-deductible donations**.

**Philanthroper**, a small nonprofit startup, tweaks the popular model of online coupon sites such as Groupon and LivingSocial, sending an e-mail each day featuring a 501(c)(3) organization that subscribers can choose to support with donations of up to \$10.



#### Examples:

- Museums-in-planning such as the **Museum of Art and Digital Entertaining** and the **Videogame History Museum** have used Kickstarter to raise start-up funds, while established museums have funded collections acquisitions (the **Rock and Roll Hall of Fame**) or launched capital campaigns (the **Neversink Valley Museum of History and Innovation**).
  - Crowdfunding sites empower members of the public to start and fund museum-related projects. In Hartford, Conn., Brian Cook successfully funded a “**Museum Passport**” program, encouraging schoolkids to explore local museums. Aeronaut Productions raised more than \$11,000 with an exhibit taking a **Steampunk approach to history** at the Muzeo in Anaheim, Calif.
  - Boston’s **Museum of Science** challenged its network of Facebook followers to sponsor one seat in the renovation of its Hayden Planetarium at the cost of \$2,500. Using the FundRazr app, the museum’s Facebook fans could donate \$1 to \$50, receiving in return the opportunity to attend VIP events, win free passes and receive other bonuses provided to other Planetarium seat sponsors.
- Many museums—like the **Cameron Park Zoo**, the **Mississippi Museum of Art** and the **Mariners’ Museum**—are using mobile giving campaigns to solicit donations via text messaging. Donations via text are generally capped at \$20, but this can add up!

#### What does this mean for society?

In the face of increasing disparity of wealth in the U.S., microgiving may help counterbalance the disproportionate influence on culture and the arts wielded by the most affluent Americans.

Crowdfunding lets people vote with their wallets (or smartphones) for causes and businesses that align with their values. However, it’s too early to tell whether mobile giving is simply a replacement for current donation methods or a new mechanism that attracts new donors. (According to a recent survey by The mGive Foundation, 79 percent of respondents who give to charities via text also contribute via other mechanisms, such as e-mail, website or direct mail.)

Sites like **33needs** and **Kickstarter** contribute to the blurring of boundaries between nonprofits and social enterprise for-profits, as they encourage people to give non-tax-deductible donations to both kinds of organizations.

### What does this mean for museums?

Since 2007, the total amount of private giving to nonprofits has **shrunk**, while the number of Americans donating to their favorite charities remains strong—they are just giving less. Microfunding and crowdfunding provide museums with the potential to fill the gap by extending the “long tail” of small gifts.

Crowdfunding, like traditional philanthropy, isn’t just about money, it’s about relationships. Microdonors can become invested in the success of the project they fund, and some fraction can be nurtured into ongoing supporters. Many entrepreneurs funding start-ups through Kickstarter argue that it is not just about raising money; it is about building a community that will support their business once it is open.



Google Wallet image courtesy of Google.

#### Museums might want to consider:

- Ensure that development, marketing and IT staff work together to embed giving opportunities throughout the museum’s social media, and its overall online and mobile presence.
- Choose a compelling, modestly priced project to finance through a crowdfunding site. (The average project funded through Kickstarter is under \$10,000, but many have raised significantly more.)
- Experiment with mobile microgiving via text messaging or QR codes embedded in advertisements and other marketing materials (e.g., “Want to help save this object? Txt to ...”).
- Carefully assess the expected return on investment from a mobile giving campaign. (Some entail a fair amount of work for not a lot of pay-back. Yet they may still be worthwhile, given other benefits such as engaging a specific audience segment, raising public awareness or cultivating a hip image.)

#### Further reading:

The [Mobile Giving Foundation](#) and [The mGive Foundation](#) facilitate mobile giving by acting as middlemen among charities, the wireless industry and individual phone users.

[AAM 2011 Mobile Technology Survey](#) (AAM/Fusion Research + Analytics, 2011).

[Mobile Giving Goes Local: Innovative Ways for Your Nonprofit to Engage](#) (NTEN, 2011).

[Text Giving Donor Survey Report](#) (The mGive Foundation, 2011).

[Texting for Charitable Dollars: The Definitive Guide to Mobile Fundraising](#)





Visitors to SFMoMA, Image courtesy of jucyrai at Flickr.

## Creative Aging

An aging population presents museums with both challenges (of retention and access) and opportunities (for enhancing visitors' health, well-being and lifelong learning).

Thanks to the Baby Boom, at some point in 2012, the population of “older Americans” in the United States (aged 50 and older) will break the 100 million mark. The number of Americans aged 65 and older is expected to **more than double by 2040**. The expanding number of older people has already led some planners to distinguish between the “young old” (65-74), the “old” (75-84) and the “old-old” (85+)—all with different needs.

CFM has looked at the **changing demographics** of America before, with a focus on the mismatch between current museum-goers and the growing diversity of the population. Aging Americans are a special challenge—and not only because there are so many of them. The most recent Survey of Public Participation in the Arts (the best available trend data on museum attendance) suggests that the percentage of museum-goers **generally shrinks** as Americans pass their mid-40s.

Reasons for this decline may include decreased mobility and the other physical (and cognitive) impairments that inevitably affect aging populations. Museums have the opportunity to address **brain fitness**, which AARP and SharpBrains (among other groups) have identified as a high priority for all Americans over 50.

Museums that rely on older volunteers face additional challenges: Half the people approaching traditional retirement age **expect to keep working**, and those who have the **time to volunteer** “have expectations for their volunteer commitments that don't currently align with the perceived need for skilled volunteers among nonprofits.” (In other words, they don't want to come in to stuff envelopes and chat. They want to feel that their volunteer work is meaningful.)

But some of the most encouraging studies we saw in 2011 suggested that older people who spend more time **volunteering** or **engaged in cultural activities** actually live longer.

*“This is not just a social issue, it’s an economic issue and a tourism issue. We have the aging population, we have medical advances that indicate people are living longer with different conditions, and so it is a right for people to enjoy their lives fully and it’s an economic advantage to any organization that does it.”*

Christine Karcza, Royal Ontario Museum

### Examples:

- Contrary to popular belief, the Web isn’t just for the young. In 2011, Americans aged 55+ were the fastest-growing segment of online **social media users**. They also embraced smartphones and iPads, with an increasing number of **smartphone apps** being created with older users in mind (like SayText, which takes a snapshot of wall text and reads it out loud)—but we haven’t seen any museums yet with customized apps for older visitors! Seniors have also embraced **social gaming** online—but not necessarily the same games as their children or grandchildren. The **advice from one expert**: “As our society and the Web mature, we need to make sure we are building it to empower everyone, not just the young and tech-savvy. New technologies and Web services will need to be intuitive and easy to use but not insulting.”
- According to the head of the World Health Organization, “Almost every one of us will be permanently or temporarily disabled at some point in life,” so **good design for accessibility** potentially helps every museum visitor, not just the elderly. The **Transit Museum in Brooklyn**, located in an old New York City subway station, showed that any museum can make itself more accessible to visitors with disabilities. The **Royal Ontario Museum** in Toronto combines “new technology, innovative tours and displays ... [and] old-fashioned great service” to maximize accessibility. As an extreme example of accessible design, the **Art Museum Gösta** in Finland was designed without any physical obstructions, not even traditional building columns.
- The **Museum of Modern Art** in New York, the **Carnegie Museum of Art** in Pittsburgh, the **University of Virginia Art Museum** and others have established programs for people who have Alzheimer’s and their caregivers. The artworks stimulate memory and encourage self-expression, the museums provide a respite for caregivers and the small groups provide important opportunities for social interaction among adults with Alzheimer’s.

### What does this mean for society?

Some futurists project that the aging of America (and other industrial powers) will lead to a **profound social crisis** by the 2020s, as “traditional population pyramids ... [become] top-heavy with elders,” straining both younger workers and the social systems needed to care for elders. Others are more optimistic and see the **retiring Baby Boomers** as blazing the trail for a new approach to aging and “retirement” that is healthier, more productive and perhaps even more creative than previous models.

People increasingly want to “age in place” rather than consigning themselves to retirement homes; at the very least, they want housing options that allow for a gradual transition from relatively high levels of independence and activity to relatively low levels. As a result, elder housing is one of the **few growth sectors** for American construction right now. **Architects predict** that “suburbia will be the location for new forms of senior living because of the significant aging-at-home movement.”

Manufacturers of everything from cars to Styrofoam cups to bath fixtures (think “grab bars”) to adult diapers have already started **redesigning and retooling** for older consumers. Even more manufacturers are embracing the principles of **universal design**—“the idea that all new environments and products, to the greatest extent possible, should be usable by everyone regardless of their age, ability or circumstance.”

### What does this mean for museums?

Museums can do well for themselves and good for their communities by increasing the number of older visitors. This may mean addressing barriers to access, developing new programs to meet the specific needs of an aging population and experimenting with new technologies, while building on traditional museum approaches to lifelong learning. Museums might also need to consider where they locate their buildings, where they offer their programs and how they connect to elder-friendly transportation networks.

Museums need to embrace the principles of universal design and integrated accessibility. They need to pay more attention to the usability of physical spaces including companion care restrooms, assistive listening systems and the **size of fonts** on their signs and websites. Usable, friendly design, such as providing seating and reducing ambient noise, improves the museum experience for all visitors.

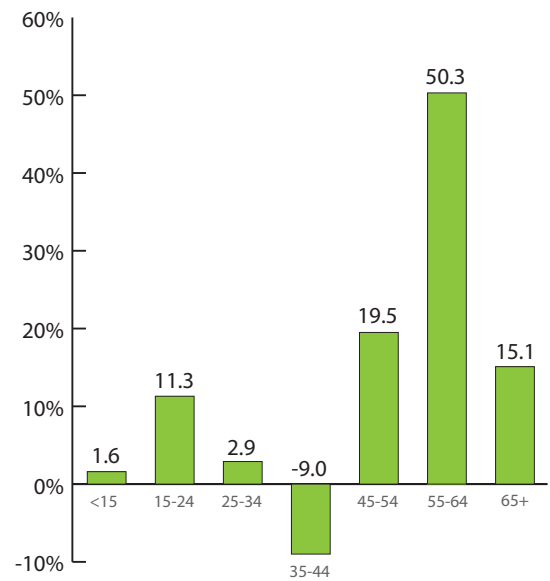
Museums can create more volunteer opportunities that take advantage of the life experience and skills that older volunteers bring to the museum. This may mean changing the conventions of how and when people volunteer—being flexible about hours, providing opportunities for virtual engagement, and confronting barriers to transportation and access.

An aging population means greater numbers of people experiencing limited mobility, impaired senses and cognitive disabilities. Museums should make a priority of meeting the specialized needs of disabled individuals and their caregivers, becoming an important part of the network of care and support provided by the community.

#### Museums might want to consider:

- Are programs and engagement strategies (including the use of new technologies) designed to attract younger audiences likely to turn off some older visitors?
- What role will museums play in a society with increasing numbers of active, healthy people aged 65+, 75+ and beyond?
- How should museums change their operations and physical structures to serve older visitors more effectively? What are the current barriers to access/use?
- Are there unmet needs in the network of community support for seniors that museums can help fill?

#### Boomer Tsunami: U.S. Population Change by Age, 2000–2010



Source: William H. Frey, *The Uneven Aging and “Younging” of America* (Brookings Institution, 2011).



Image courtesy of jucyrai at Flickr.

#### Further reading:

William H. Frey, *The Uneven Aging and “Younging” of America: State and Metropolitan Trends in the 2010 Census* (Brookings Institution, 2011).

*Great Expectations: Boomers and the Future of Volunteering* (Volunteer-Match, 2011).

*The MetLife Report on American Grandparents* (MetLife Mature Market Institute, 2011).

#### National Center for Creative Aging

Mark J. Stern, *Age and Arts Participation: A Case Against Demographic Destiny* (National Endowment for the Arts, 2011)

# More Than Real

Augmented Reality offers new ways for museums to enhance experiences for visitors and non-visitors alike.

Did Augmented Reality (AR) spring from the screen of a science fiction movie, or does it just seem that way? AR refers to a set of technologies that can **layer digital elements**—sound, video, graphics, even touch sensations—over real world experiences via mobile devices. The 2011 Museum Edition of the NMC Horizon Report predicts that Augmented Reality will become a **mainstream technology** in museums within two to three years; other sources predict a **much longer timeframe** for general adoption of AR.

Museums are already experimenting with AR to enhance their gallery exhibits, increase access to their collections and interpretive materials, and enrich environments outside their walls. Inside museums, visitor can already **“handle” objects** via their iPads and smartphones or see **dinosaurs prancing** through the gallery. Outside, they can use GPS-enabled devices to recognize their location and then populate a **Civil War battlefield** with video of reenactors, or perhaps compare the street view in front of their eyes with a 19th-century version **drawn from historic photos** in a museum’s collection. Or they can use **QR (“Quick Response”) codes**—a type of barcode designed for easy reading by handheld devices—to trigger augmented realities like a soundtrack or a **Picasso painting “projected”** on the wall of a building hundreds of miles away from its home museum.

AR is not limited to visual augmentations. For example, the Museum of London’s **Street-museum Londinium** provides soundscapes to accompany scenes of Roman life superimposed on the modern city and encourages users to brush away dirt by blowing into their iPhones, “excavating” virtual artifacts in the process. Soon AR may include **haptic feedback** (think vibrating cellphones) to simulate handling, such as **“touching” a bust of Sophocles**. **AR smells** could be next, building on existing desktop technology to produce specific scents for specific websites and tweets.

## Examples:

- Evolution comes to life at the **Attenborough Studio** at the Natural History Museum in London, an interactive space that makes heavy use of AR. Visitors use tablets (provided by the museum) to control content projected on one of three screens in the theater, webcams in different areas of the space and 80 LED markers—which all combine to allow visitors to interact with museum scientists, play with virtual specimens and take part in quizzes. Even the “tree of life” comes to life—moving and turning within the studio, all at the control of the visitor.
- In Rotterdam, AR replaces human tour guides. The Netherlands Architecture Institute has developed an **Urban Augmented Reality app**: When users point towards locations on the streets of Rotterdam, they can view historical images of buildings that used to exist, scale models and designs of buildings that might have been, and view artists’ renderings of buildings currently under construction or planned for the future.

*“Is AR the only way to tell your story? Technology for technology’s sake is never a good idea. It had better be worth it to the guest, and serve the narrative in a meaningful way.”*

Joshua Jeffery, Andy Warhol Museum

- Walk through Andy Warhol’s shoes! The **Andy Warhol Museum** in Pittsburgh has developed an add-on for the augmented reality application **Layar** that allows users to explore Pittsburgh and New York City through the eyes of Andy Warhol. Physical locations are virtually populated with stories and historical moments in Warhol’s life. Smartphone or tablet computer required.
- Is this the coolest postage stamp ever? In 2011, the National Postal Museum developed the Smithsonian’s inaugural AR app to celebrate the first mascot of the U.S. Postal Service: **Owney the Dog**, who served in the late 19th century. When the app user (Apple products only) holds a mobile phone over the stamp, Owney comes to life in 3D—barking, sitting, trotting and listening to the train whistle of the Railway Mail Service.

#### **What does this mean for society?**

With ownership of smartphones increasing for all age groups, AR may become an expected part of all travel and tourism experiences. But some experts already worry about **“technology overload”** in the experience industry.

In the next few years, marketing firms will start developing AR apps with **targeted promotional opportunities** (think *Blade Runner*). People will be bombarded with location-aware advertise-



National Postal Museum.

ments—or even personalized advertisements (using information plucked from social networks)—that target all the senses.

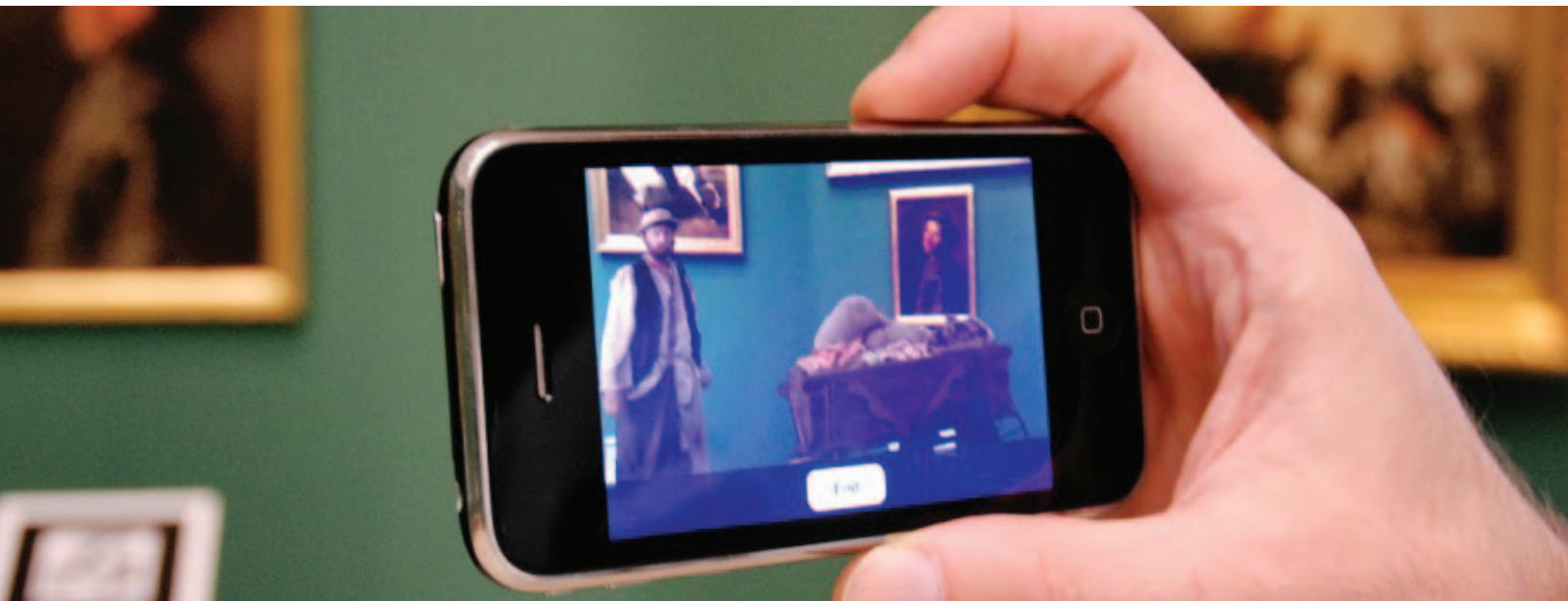
#### **What does this mean for museums?**

As AR becomes a mainstream technology, museums have a chance to take the lead in developing AR applications that provide unique experiences. For collecting institutions, AR can be a powerful **“object liberator,”** providing visitors with new ways to handle objects, view rarely seen artifacts or images, or tap into richer interpretations (through something as simple as virtual wall text).

AR is an opportunity for museums to enhance the “really real” with the virtual, potentially tapping the best of both worlds; it also represents a challenge, as superimposed layers of augmented reality can overwhelm the objects and reality underneath.

AR is another way for museums to break from the constraints of their walls (see “Takin’ It to the Streets,” page 11), bringing their collections and interpretative expertise to new and larger audiences.

Visitors may come to expect AR as part of nearly every museum experience, just as they are now beginning to expect Wi-Fi access in museums and online collections.



AR app from the Sukiennice Museum, courtesy of Aleksandra Kubiak, National Museum of Poland, Kraków.

#### Museums might want to consider:

- Does an immersive AR experience on a handheld device detract from the experience of real-world objects or environments? Will AR users become disconnected from their surroundings? Will AR enhance or detract from the social experience of visiting a museum? (Outside the museum, will your AR apps contribute to more pedestrian accidents caused by distraction?)
- Does AR present the opportunity for more customization of the museum experience, such as new varieties of self-guided tours or real-time translation of interpretive materials for a growing population of Spanish speakers and foreign tourists?
- Will AR and a ubiquity of handheld devices allow museums to shift resources from on-site interactives to digital alternatives? Or will AR experiences that rely on users bringing their own devices to a museum disenfranchise visitors who don't have (or can't afford) smartphones, iPads or other devices?

#### Further reading:

Deborah Boyer, [When the Future Meets the Past: Using Augmented Reality in Cultural Institutions](#) (MARCH, 2011).

[CHIN's TechWatch for Fall 2011](#) is devoted to "Mobile for Museums."

The [Mobile Museum website](#) features a series of semi-structured written interviews with people who have developed, authored or managed mobile projects, some in museums, some not.

[Museums & Mobile Survey 2011](#) (Learning Times, 2011).

Margriet Schavemaker, ["Is Augmented Reality the Ultimate Museum App?"](#) Museum, September/October 2011.

[Mobile Apps for Museums: The AAM Guide to Planning and Strategy](#), Edited by Nancy Proctor (The AAM Press, 2011).



Courtesy of The Children's Museum of Indianapolis.

## A New Educational Era

As formal learning methods are cast in doubt, the learning landscape is reinvented.

We see signs that the U.S. is nearing the end of an era in formal learning characterized by teachers, physical classrooms, age-cohorts and a core curriculum—what some people call the industrialized era of learning. The signs heralding this transformation include the rapid increase in non-traditional forms of primary education such as homeschooling; near record **dissatisfaction** with the existing K-12 education system; funding crises for schools at the state and local levels; a growing gender imbalance in higher education; and the proliferation of digital content and digital delivery platforms designed to transform the nature of classroom learning.

While a four-year college degree used to be the ticket to success, now it takes an advanced degree (and often massive educational debt) to capture that advantage. The prospects for those without a college degree are worse, and falling. At the same time, some of the most prominent new tech billionaires bypassed the traditional degree system and leapt directly into the workplace. In the new educational era, learning may become disassociated from age-cohorts; be individualized and self-directed; supported by educators who are primarily aggregators, facilitators and mentors rather than lecturers; draw on distributed sources of content (many of them virtual); and take place in a variety of physical settings. Educational attainment may be documented by a portfolio of **digital badges** and real-world projects, rather than traditional grades or certificates.



Courtesy of The Children's Museum of Indianapolis.

### Examples:

- In Houston, a **private Montessori high school** is turning the **whole museum district** into a classroom.
  - The nonprofit **Khan Academy** offers more than 2,400 online instructional videos and 150 practice exercises. Backed by mega-funders such as Bill Gates and Google, the academy is beginning to mainstream into schools, integrating its material into a hands-on, blended-learning experience. The academy recently merged with Smarthistory to incorporate art history into its content.
  - **MakeShop** at the Children's Museum of Pittsburgh pushes the envelope of informal learning via the integration of old and new technologies into DIY, project-based activities in a hands-on workshop environment that connects kids to indie crafters, hackers and inventors. Created in partnership with Carnegie Mellon University's Entertainment Technology Center (ETC) and the University of Pittsburgh Center for Learning in Out-of-School Environments (UPCLOSE), MakeShop is linked to "maker spaces" across the country that are exploring and evaluating the impact of making on learning for early and middle childhood.
- **ArtLab+** at the Hirshhorn Museum and Sculpture Gallery in Washington, D.C., is a digital media studio that gives local teens the opportunity to become integral members of a design team. Team-based learning is increasingly valued in the workplace, but poorly taught and assessed in the schools.

### What does this mean for society?

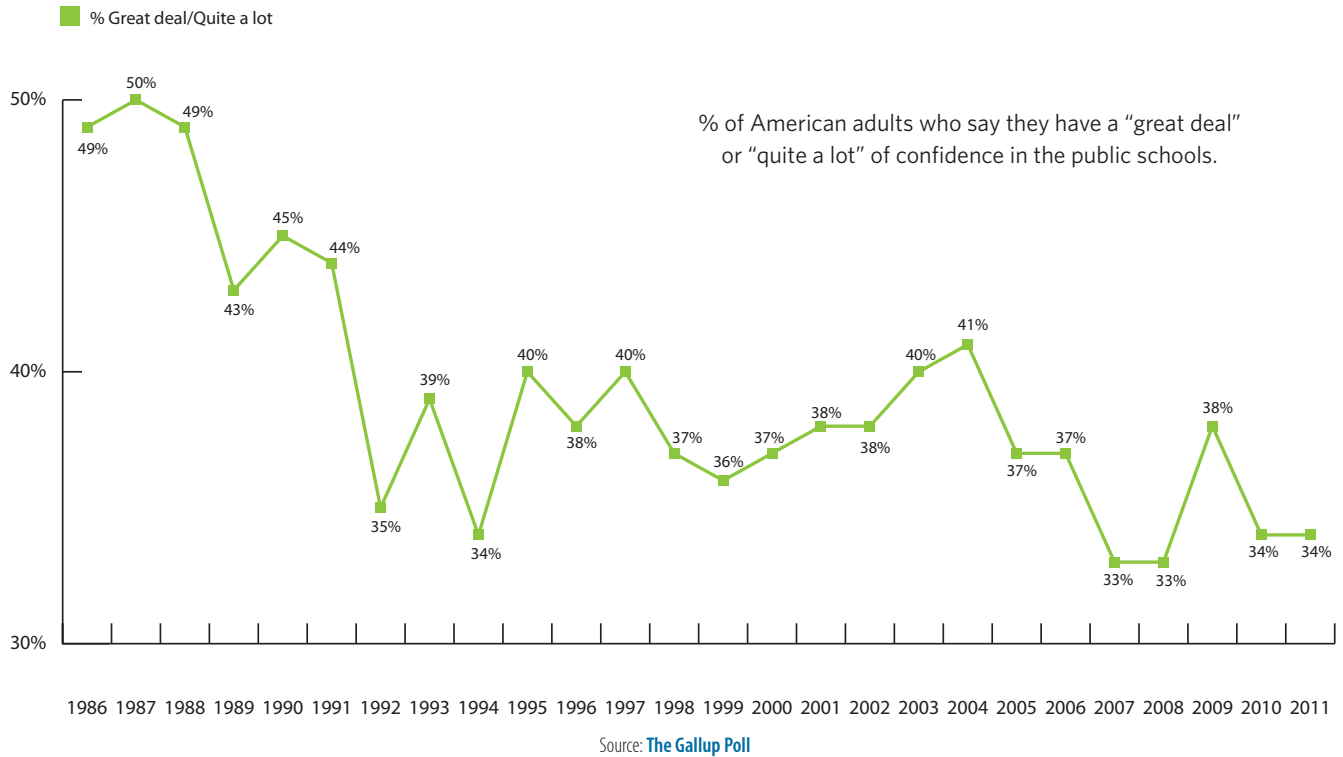
Educators, employers and government need to rethink and rebuild the educational infrastructure, and parents, community groups and a wide range of civic organizations, including museums, need to be involved. By acting now we may avoid creating a "lost generation" of students who fall between the cracks as affluent/savvy/engaged parents jump on new educational formats and old, underfunded, underperforming systems crumble.

### What does this mean for museums?

The contributions that museums already make to public education are usually seen as peripheral—nice, not necessary. Policymakers, reformers and practitioners need to understand the crucial role that museums can play in the new educational infrastructure. The U.S. needs to scale up the educational resources and skills provided by its museums via online access, better indexing of online resources, physically incorporating museums into schools and schools into museums, and making museums central points for teacher training. This will ensure that museums provide equitable access to their unique resources and fulfill their potential in the new educational landscape. Even as they help pioneer the new era, museums need to stay engaged with the current educational system, both to serve today's students and to ensure their own financial health. Museums will be offering field trips for a long time to come.



## Declining Confidence in America's Public Schools, 1986–2011



### Museums might want to consider:

- Contribute to the **"cycles of prototyping and experimentation"** necessary for the educational system to evolve into its new form.
- Partner with community organizations and groups to explore new ways of approaching learning.
- Focus on the broader educational needs and interests of communities; if necessary, change offerings and the way they are presented to stakeholders.
- Use technology to help students, teachers and the community access museum learning resources.
- Improve the assessment of informal learning, while asserting that some of the most valuable benefits of informal learning are not easily measured.
- Make decisions about physical infrastructure (where to place new buildings, what facilities to provide) that ensure museums are easily accessible to learners—next to schools, in schools, encompassing schools, supplementing schools.

### Further reading:

For an edgy glimpse of potential educational futures, see the [KnowledgeWorks Foundation's 2020 Forecast: Creating the Future of Learning](#).

To keep up with the latest developments in education reform, follow the [Futures of Reform blog](#) at Education Week, which periodically addresses the role of museums.

## **AUTHOR CREDITS**

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**AAM's 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. For more information, visit [www.futureofmuseums.org](http://www.futureofmuseums.org).

**The American Association of Museums (AAM)** has been bringing museums together since 1906, helping to develop standards and best practices, gathering and sharing knowledge, and providing advocacy on issues of concern to the entire museum community. With more than 18,000 individual, 3,000 institutional and 300 corporate members, AAM is dedicated to ensuring that museums remain a vital part of the American landscape, connecting people with the greatest achievements of the human experience, past, present and future. For more information, visit [www.aam-us.org](http://www.aam-us.org).

