



Smithsonian  
Institution

# Management's Discussion and Analysis FY 2022



## Our Shared Future: The Smithsonian's Role for a Better Tomorrow

In 2017, the Smithsonian Institution launched a Strategic Plan that built upon our unique strengths. It envisioned engaging and inspiring more people, regardless of their location, and fostering critical conversations on issues affecting our Nation and the world.

The massive challenges that have arisen or become more pronounced in the intervening years — the COVID-19 pandemic, climate change, and the persistent scourge of systemic racism among them — have underscored how urgent it is for the Smithsonian to apply its resources more effectively on behalf of the American people and the global population. It is our responsibility to repay the trust we have been given as keepers of some of the Nation's most revered artifacts, as scholars who examine our past and present, and as scientists who explore the fundamental questions that help us understand our world and universe.

Since becoming Secretary, I refocused our Strategic Plan by identifying five strategic areas the Smithsonian must target to help secure a better shared future for our Institution, our Nation, and our planet:

- Ensuring every home and classroom can access the Smithsonian's digital content;
- Taking advantage of our status as a trusted source of information to explore and grapple with what it means to be American;
- Harnessing the Smithsonian's expertise to elevate science in the global discourse;
- Engaging with educational systems across the country to build and enrich a national culture of learning; and
- Working together to build a nimbler and more effective Smithsonian.

We are grateful for the robust support we receive from the American people, Congress, and the Administration. It has always enabled the Institution to fulfill its mission to increase and diffuse knowledge. As we look to implement a series of Institution-wide initiatives that support our new strategic focus areas, the congressional budget will be more vital than ever. The following are the ways we have begun this implementation and highlight how we will actively support, evaluate, and measure progress on our plans for the Smithsonian.

### A More Digital Smithsonian

The pandemic accelerated the Smithsonian's transformation into a virtual museum complex that complements our physical spaces. Nothing replaces the authentic objects we display, but by using all the digital tools available to us, we will ensure that our treasures still reach millions across the country and the globe who cannot visit us in person.

For many years, we have digitized our objects, specimens, archival materials, and library books to make them more accessible to the public. Our museums and libraries have created digital images for more than 5 million objects, specimens, and books, and electronic records for more than 33 million artifacts and items in the national collections. Our Digitization Program Office has created 3D digital

images for collection objects people can access, explore, and even print, such as the Apollo 11 command module, Columbia. And in February of 2020, just as the first COVID-19 shutdowns were about to occur, we launched Smithsonian Open Access, an initiative that makes more than 4.5 million digital 2D and 3D objects in our collections freely available for anyone to download, share, and reuse for any purpose. In its first year, people viewed this content more than 35 million times and downloaded it more than 1.7 million times, using it to explore, discover, and create their own learning resources.

The Smithsonian needs to build digital capacity to be in every household, classroom, and community. That is why we are expanding on our efforts with a new Office of Digital Transformation that is prioritizing innovative and ongoing digital initiatives to help us reach audiences across the Nation and around the world. These initiatives will allow people to experience our world-renowned scholarship, research, and collections in new and exciting ways and will be organized around themes such as democracy, race, innovation, sustainability, and identity. By seeking out more innovative partnerships to leverage state-of-the-art resources, we can scale up our use of groundbreaking technology and inspire new audiences worldwide.

#### A Trusted Source for America

One of the Institution's strengths we want to leverage is the trust we have earned for more than 175 years. The Smithsonian, as the world's largest museum, education, and research complex, has a unique and vital role to play in finding common ground and giving hope to the American people. Accordingly, we have launched several initiatives to help the public grapple with the Nation's biggest challenges. For example, "Our Shared Future: Reckoning with Our Racial Past," the first coordinated Smithsonian effort to explicitly address racism and racial equity, is exploring how Americans confront race, the legacy racial discrimination has left on communities, and how the way we deal with issues of race will shape our Nation's future. It has begun to explore and expand the conversation about the historic roots of contemporary movements in social justice. It is also providing a collaborative space for dialogue about race and helps advance the work of others by offering live and digital resources and experiences to local communities throughout the country.

The American Women's History Initiative (AWHI) will continue to demonstrate the American people's confidence in us as well, as it helps us amplify the contemporary and historic stories of women, explaining their myriad contributions, with research, acquisitions, exhibitions, educational programs, and digital innovation. AWHI will embark on new collaborations with Smithsonian units, play a key role in developing the Smithsonian American Women's History Museum, and seek out new local, national, and global partnerships.

Another area where we can apply our status as a trusted source is in our collections stewardship. By working closely with communities from which our collections originate to evaluate these objects, we will develop stewardship practices to preserve and sustain them for future generations. More just, ethical, and inclusive management practices will foster goodwill with different constituencies and help make our collections and archives more accessible while adding context to the stories they tell.

We will also use our upcoming rural initiative to reach out to communities often overlooked in the national conversation. By exploring current, relevant issues in rural America, we can provide resources and tools to help them build resilience. We will expand our programming and services to identify and collaborate with rural stakeholders to meet the needs of, and learn from, rural and tribal communities in the United States. Through this initiative, the Smithsonian will provide space for dialogue, prioritize diversity, identify and root out bias in our collections and programs, and work with organizations to form partnerships around the country.

### **Elevating Our Science**

The Smithsonian is an institution historically driven by science. Our researchers have worked on endeavors from developing the precursor to the National Weather Service to creating the first image of a black hole at the center of our galaxy. To strengthen the capacity of our scientific activities, we are developing a strategic plan for science at the Smithsonian that captures our core priorities to probe life on a sustainable planet, solving the mysteries of the universe, and centering the Smithsonian in critical conversations around science. Under the umbrella of Smithsonian Science, this set of initiatives strives to expand our reach, relevance, and impact with strategic investments in and strengthened coordination of research, collections, long-term data sets, field stations, partnerships, digital infrastructure, and communication platforms. Through this work, we will catalyze change, action, and inclusion under three sub-initiatives: Life on a Sustainable Planet, Solving the Mysteries of the Universe, and Communicating Science for Impact.

Life on a Sustainable Planet will implement science strategies on Oceans, Environmental Justice, One Health, and Working Ecosystems. Solving the Mysteries of the Universe will focus on tipping and turning points in the evolution of the universe, galaxies, solar systems, and planets, helping us grasp our place in the universe. Communicating Science for Impact will inspire citizens of all ages to engage in scientific discovery, take advantage of science, technology, ingenuity, and culture, and cooperate to contribute to a new era where people and nature can thrive in harmony.

This focused and collaborative approach will allow us to research where communities and science come together, use what we find to create sustainable and effective solutions, and communicate what we learn to the public through our museums, facilities, and educational programs. We will showcase ways in which we lead, collaborate and share, expanding our understanding of life on Earth and our place in the universe. And we will emphasize the importance of partnerships, transdisciplinary research, and interdisciplinary collaboration, demonstrating the global impact of Smithsonian Science, most notably with respect to the United Nations' Sustainable Development Goals.

### **Reaching Everyone through Smithsonian Education**

Another strategic focus area is the Smithsonian's educational impact on creating a national culture of learning. We have many education, learning, and discovery spaces in our museums and research centers. Smithsonian education providers such as the Science Education Center, Affiliate museums, and the Smithsonian Institution Traveling Exhibition Service are working diligently to bring our virtual educational offerings in art, history, culture, and science, technology, engineering, and mathematics

(STEM) to every state nationwide and countries around the world.

To broaden our reach and maximize our impact, we have set a goal to access every pre-K–12 classroom in America. We are beginning to implement an Institution-wide effort to reach 56 state education agencies, including Tribal education agencies, 50 million students, and 3.2 million teachers with our educational resources and programming. The impact we can have with underserved students is particularly profound, since education indicators demonstrate significant achievement and opportunity gaps for low-income and racial/ethnic minority students, students with disabilities, and English learners. Smithsonian educators working with other educators around the country can help students thrive, making a substantial difference in national educational outcomes.

We will achieve this by enabling our educational specialists to work with key stakeholders in developing and implementing a comprehensive Smithsonian education strategy that will allow our education programming, tools, and resources to have greater reach, greater relevance, and a more profound impact, and provide a unified message to teachers, students, partners, and donors. The Office of the Under Secretary for Education will facilitate capacity building and resource distribution to strategically leverage the work that is already occurring in the units and scale signature offerings. Working with partners, collaborators, colleagues, and advocates for education, we will build a national culture of learning to ensure that our audiences have the tools they need to understand and navigate the world around them, even in underserved communities where resources can be scarce.

Part of our educational strategy will also be to use technology to reach more learners and develop needs-based content strategies, implementing a unified approach to educational research, broadening the distribution of resources and services through strategic partnerships, and growing the digital skills and capacity of the Smithsonian education community to increase the impact of our offerings. The Smithsonian Office of Educational Technology will lead this initiative, building on existing digital platforms such as our Smithsonian Learning Lab that have had great success in providing lesson plans, materials, and activities in arts, history, design, and STEM. It will also expand Web-based and broadcast technologies, seek out partnerships to increase our capacity and reach, and develop new resources aligned with educator needs.

### **A Nimbler and More Effective Smithsonian**

For the next five years, the Smithsonian will focus on increasing the nimbleness of the organization's administrative functions, both those that are managed centrally and those embedded within individual museums, research centers, and units. By building stronger connections within the Smithsonian, we will increase the efficiency of our processes, and generate more effective and integrated solutions. Equally critical is the goal of fostering an environment for staff that promotes attributes such as safety, professional development, and individual accountability. We must achieve these objectives to ensure the Smithsonian remains an employer of choice for all staff.

One of the most exciting ways we are looking forward to implementing the ideas and processes necessary to be more agile and responsive is through the addition of our new National Museum of the American Latino (NMAL) and the Smithsonian American Women's History Museum (SAWHM). Not only

will they integrate a digital mindset from their inception, but they will also apply efficient processes in their design and construction, develop a comprehensive funding model to carry the museums through the next decade, and adopt an audience-centric leadership approach to program development that values diversity and inclusion to better serve the public.

### **Looking Ahead**

With our new areas of strategic focus, the Smithsonian will be more equipped to address relevant topics through scientific research, collecting, and public programming on topics such as climate change, zoonotic diseases, life during the COVID-19 pandemic (as well as the science related to it), and understanding the impact of race on our Nation. By rigorously studying important societal issues, we will continue proving our relevance to the diverse and expansive national and global audiences we serve.

Thanks to the wisdom and boldness of Congress, we have been entrusted with bringing to life the SAWHM and the NMAL. They are both proceeding as planned. The recent opening of the *Molina Family Latino Gallery* in the National Museum of American History provides an important preview of what visitors can expect from the Latino museum, and the Institution's Board of Regents will soon choose the sites for each of these additions to the Smithsonian family. These museums will help the Smithsonian further reimagine what new museums look like in a post-pandemic world, expand the meaning of the American narrative, and be an even more responsive, representative institution to better serve our fellow citizens.

As the leader of this influential scientific, cultural, and educational institution, I believe it is essential for us to exercise our power to bring people together to share big ideas and conflicting perspectives, especially about important topics that touch all aspects of society like race relations, a deadly virus, or the meaning of democracy. The Smithsonian, as a gift to the United States, has an obligation to work for the common good by giving back value to our country and increasing the public's ability to understand our universe, our history, and our shared future.

With the continued support of the Administration, Congress, and the American people, I have no doubt we will achieve our goals. The Smithsonian will continue to welcome everyone to learn, marvel, and dream, using our creativity, imagination, and intellectual capital for the good of society. We will also continue the ongoing project and grand tradition of transforming this hallowed Institution into a cauldron of ideas, innovation, and understanding that reaches more people and has greater impact than ever before.



Lonnie G. Bunch III  
Secretary  
Smithsonian Institution



# Smithsonian Institution

## Budget, Performance, and Financial Snapshot Fiscal Year 2022

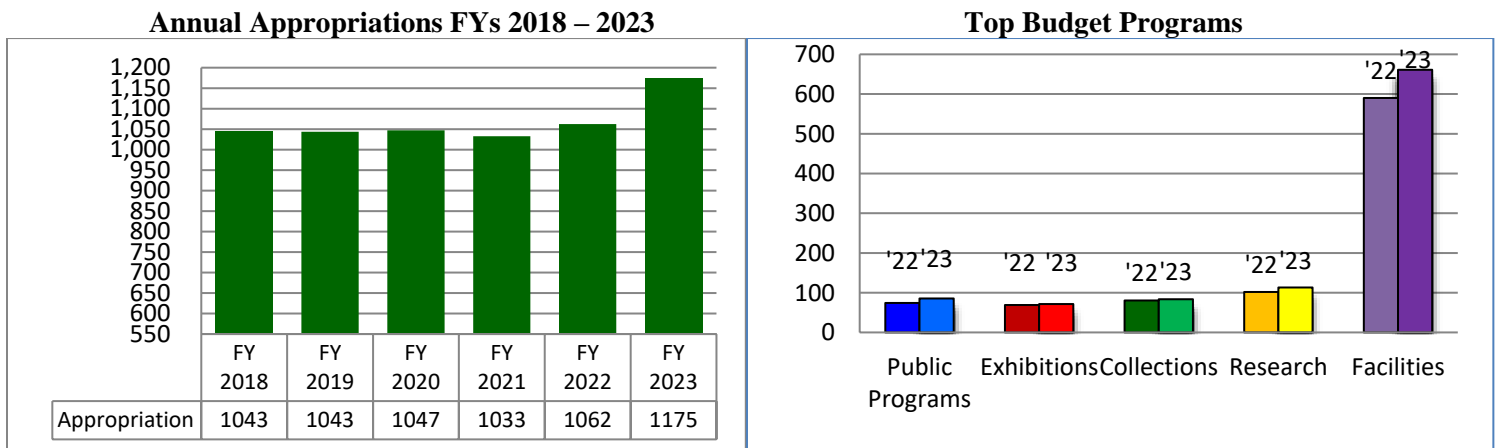
**Mission:** For 176 years, the Smithsonian has remained true to its mission, “the increase and diffusion of knowledge.” Today, the Smithsonian is not only the world’s largest provider of museum experiences supported by authoritative scholarship in science, history, and the arts, but also an international leader in scientific research and exploration. The COVID-19 pandemic continued to impact annual performance measurements.

**Organization:** The Smithsonian is a unique institution — a vast national research and educational center that encompasses the museums for which it is famous as well as laboratories, observatories, field stations, scientific expeditions, libraries and archives, classrooms, performances, publications, and more.

**Personnel:** The Institution’s workforce consists of more than 6,400 federal and non-federal employees and thousands of volunteers.

**Budgetary Resources:** The federal budgetary resources for FY 2022 totaled \$1,062.2 million. The FY 2023 budget request totals \$1,174.5 million (\$909.5 million for Salaries and Expenses, and \$265.0 million for Facilities Capital).

### Budget Snapshot (\$s in millions)



### Performance Snapshot

**Accomplishments:** The Institution’s FY 2022 appropriation exceeded \$1.1 billion and private sector giving was strong.

### Did You Know?

The Smithsonian is the largest museum and research complex in the world, with 21 museums and galleries, the National Zoological Park, and research centers in the Washington, DC area, eight states, and Panama.

### Financial Snapshot

Clean Opinion on Financial Statements	Yes
Timely Financial Reporting	Yes
Material Weaknesses	No

### FY 2022 (\$s in millions)

Total Assets	\$ 2,686.2
Total Liabilities	\$ 916.7
Total Net Assets	\$ 1,769.5



## SMITHSONIAN STRATEGIC PRIORITIES (*Note: Performance impacted by pandemic*)

### PERFORMANCE AREA: Research and Scholarship

*Produce outstanding research in the sciences and history, art, and culture*

Key Performance Indicator	Type	Prior year data	FY 2022 target	FY 2022 actual
Number of Book, Book Chapter, and Journal Publications	Output	FY 2019: 2,182 FY 2020: 2,560 FY 2021: 2,734	2,500	2,730 Book, Book Chapter, and Journal Publications

### PERFORMANCE AREA: Public Engagement

*Share knowledge with the public on-site, online, and across the nation and world through compelling exhibitions, educational programs, and media products.*

Key Performance Indicators	Type	Prior year data	FY 2022 target	FY 2022 actual
Number of physical visits to SI museums and the National Zoo	Output. Indicator of museum/zoo success	FY 2019: 23.3 million FY 2020: 7.7 million FY 2021: 3.2 million	10.0 million	13.7 million
Number of visitors to SI websites	Output. Indicator of level of public use of SI resources via Web	FY 2019: 154 million FY 2020: 178 million FY 2021: 205.6 million	189.9 million	168 million

### PERFORMANCE AREA: Smithsonian Facilities

*Preserve our natural and cultural heritage while optimizing our assets*

Key Performance Indicator	Type	Prior year data	FY 2022 target	FY 2022 actual
Number of major capital projects meeting milestones	Output	FY 2019: Met 5 of 7 FY 2020: Met 5 of 7 FY 2021: Met 6 of 6	Meet milestones on all 6 major projects	Met 3 of 6 milestones

### PERFORMANCE AREA: People and Operations

*Strengthen those organizational services that allow us to deliver on our mission.*

Key Performance Indicators	Type	Prior year data	FY 2022 target	FY 2022 actual
Percent of employees who are satisfied with working at the Smithsonian on annual employee survey	Outcome. standard indicator of a healthy organization	FY 2019: 81% FY 2020: 85% FY 2021: 82%	82%	78%
Dollar amount of Private Sources: Gifts	Input	FY 2019: \$225 million FY 2020: \$248 million FY 2021: \$480 million	\$230 million	\$320 million
Dollar amount of Sponsored Projects Revenue	Input	FY 2019: \$147.4 million FY 2020: \$135.7 million FY 2021: \$146 million	\$140 million	\$162 million



# MANAGEMENT'S DISCUSSION AND ANALYSIS

## MISSION AND ORGANIZATIONAL STRUCTURE

### Overview of the Smithsonian Institution

For 176 years, the Smithsonian Institution has remained true to its mission, “the increase and diffusion of knowledge.” In that time, it has become the largest museum and research complex in the world, the most respected provider of museum experiences supported by authoritative scholarship, and an international leader in scientific research and exploration.

The Smithsonian is unique among the world’s institutions. It is not simply a museum, or even a cluster of museums, so much as it is a vast national research and educational center that encompasses — in addition to its exhibition galleries — laboratories, observatories, field stations, scientific expeditions, classrooms, performing arts events, publications, and more. The Institution is an extensive museum and research complex that includes 21 museums and galleries, the National Zoological Park, and research centers around the nation’s capital, in eight states, and the Republic of Panama. In addition, the Smithsonian is the steward of more than 157 million objects, which form the basis of world-renowned research, exhibitions, and public programs in the arts, culture, and history, as well as various scientific disciplines. The Institution also preserves and displays many of our nation’s treasures, as well as objects that speak to our country’s defining inquisitiveness, bold vision, creativity, and courage.

The world requires a brave path to meet the complex challenges ahead. During the next decade, the Institution will be called upon to become more deeply and more visibly engaged than ever before with the great issues of our day. In response, the Smithsonian is committed to advancing our strategic plan by increasing access to its vast resources for all audiences through the latest technologies; strengthening the breadth and depth of its collections (as well as the scholarship involving collections); continuing both formal and informal education; working across disciplines; and pursuing excellence in public service at every opportunity.

Addressing complicated issues and global problems such as zoonotic diseases, climate change, the persistent scourge of systemic racism, and the rapid loss of natural resources resulting from human activities and population pressures requires cross-cutting work that spans disciplines and organizational boundaries. The Smithsonian's potential to tackle complex challenges, as well as to innovate in design, technology, and other pursuits, is greatest when our museums, galleries, Zoo, research and education centers, and mission-support offices work together as One Smithsonian.

The Smithsonian Dashboard highlights forward-thinking, interdisciplinary, and integrated Smithsonian activities which tackle pressing issues and chart new paths that the Smithsonian is particularly well suited to address due to its combination of science, history, art, and culture experts and global partnerships: <https://www.si.edu/dashboard>.

Financially, the Institution depends on the Federal Government for two-thirds of its funding. However, as a trust instrumentality of the United States, many of the laws and regulations applicable to federal agencies do not apply to the Smithsonian. Nevertheless, the Institution is ever mindful of and grateful for this support from the American public and will continue working with both the Office of Management and Budget (OMB) and the Congress to provide the information they need to justify their continued support and to allocate limited resources in a cost-effective manner.

The Smithsonian continues to improve its day-to-day operations by strengthening its financial and human resource management, using e-Government wherever possible and more closely integrating its budget with long-term performance goals. Specifically, the Smithsonian continues to conduct reviews with the Institution's directors to assess the Smithsonian's accomplishments against Institution-wide performance goals and integrate our budget with our performance objectives. In fiscal year (FY) 2022, the Smithsonian also continued to:

- execute its Strategic Plan;
- continued implementing the Smithsonian Digitization Plan that describes how the Institution will digitize its resources for the widest possible public use;

- link all funds to performance objectives and monitor progress toward individual goals;
- improve the Institution's performance plan so that it is linked directly to the Institution's financial reporting and budget formulation and execution structures; and
- refine a workforce plan that ties staffing levels to performance plans and the size of the Smithsonian's streamlined workforce.

## **The Smithsonian Organization**

As an independent trust instrumentality governed by a Board of Regents, the Smithsonian is served by a staff of approximately 6,400 federal and trust employees and thousands of volunteers. Together, these individuals support the operations of the largest museum and research complex in the world.

During FY 2022, the Institution continued to revise its organizational structure to fully realize all our goals by building an even more cohesive leadership team, one that will work more collaboratively within the Institution. The structure includes a Deputy Secretary/Chief Operating Officer position to better manage day-to-day operations, and four Under Secretary positions. This structure fosters more collaboration to focus on our core activities, spur new knowledge, emphasize education and science, and better integrate our work throughout the Institution.

An organizational chart, included as Attachment A to this report, shows the Institution's operational structure in detail.

## **Highlights of FY 2022 Accomplishments**

The Smithsonian realized a number of significant accomplishments in FY 2022, which continue to generate positive momentum for the future. The Smithsonian will continue to focus on productivity, measure and track progress, and improve efficiency. We continue to integrate budget and performance goals which are aligned with each other. In

addition, with our dashboard tool for reporting on key metrics, we can track progress on multiple fronts in real time as events occur. This has enabled us to be nimble in allocating our funds and personnel more effectively.

Besides the highlights noted below, the Smithsonian was notified in FY 2022 that we once again ranked as one of the best places to work in the Federal Government. Attachment B highlights the Smithsonian's most notable achievements in FY 2022.

## **1. Enhanced Interdisciplinary Research**

- reopening half of the National Air and Space Museum (NASM) flagship building on the National Mall. The museum has been undergoing a seven-year renovation that began in 2018, and includes redesigning all 23 exhibitions and presentation spaces, complete refacing of the exterior cladding, replacement of outdated mechanical systems, and other repairs and improvements. Eight new and renovated exhibitions, the planetarium, museum store and Mars Café recently reopened in the building's west end.
- continuing to explore the universe's boundless mysteries at the Harvard-based Smithsonian Astrophysical Observatory (SAO). For example, astronomers developed a new technique to identify small planets hidden in protoplanetary disks. Astronomers agree that planets are born in protoplanetary disks — rings of dust and gas that surround young, newborn stars. While hundreds of these disks have been spotted throughout the universe, observations of actual planetary birth and formation have proved difficult within these environments.
- Now, astronomers at the SAO have developed a new way to detect these elusive newborn planets — and with it, "smoking gun" evidence of a small Neptune or Saturn-like planet lurking in a disk. The results are described in *The Astrophysical Journal Letters*.
- cutting-edge work in biodiversity genomics that will address worldwide problems on disease transmission and environmental degradation, which includes continuing to build public libraries of both short (DNA barcoding) and long (genomes) DNA sequences to support many applications and address such

important issues as invasive species detection and management.

- continuing to monitor the Smithsonian's worldwide network of forest plots and their integration into a system of forest Global Earth Observatories (GEOs) which will advance the strategic goal of Enhanced Interdisciplinary Research;
- supporting the National Science Foundation-funded National Ecological Observatory Network (NEON) by hosting two sites and coordinating with ForestGEO;
- continuing work on MarineGEO (including the Tennenbaum Marine Observatories) that seeks to replicate the ForestGEOs' success and assess the health of coastal areas and the oceans;
- continuing construction of the Giant Magellan Telescope that will enable researchers to see distant stars 10 times more clearly than with the space-based Hubble telescope;
- supporting the Smithsonian Environmental Research Center online database, NEMESIS, which tracks the movements of hundreds of invasive species along our nation's coastal regions;
- continuing conservation-based training at the Smithsonian-George Mason University Conservation School, a collaboration between the university, the National Zoo, and the Smithsonian Conservation Biology Institute at Front Royal, Virginia. This is a global initiative to save species from extinction and to train and educate conservationists.
- continuing animal conservation efforts, including the birth of several new animals at the National Zoo; and
- ongoing research and training in One Health/Global Health in collaboration with many organizations in multiple countries, especially Kenya. This work is also represented in the Outbreak exhibit and outreach programs at the National Museum of Natural History.

## **2. Expanding Digital Technologies**

- making more than 4.4 million assets available for the Smithsonian's Open Access initiative, which removes the copyright restrictions from millions of digital

collections images.

- continuing to implement the Smithsonian Digitization Transformation Plan and make significant progress in improving digitization metrics and digitizing collection objects of the national collections so that more of them are available to the public.
- continuing the Web-accessible digital platform, Smithsonian Learning Lab, that offers thousands of lesson plans for educators and access to millions of digitized resources from our collections. The Learning Lab was previously honored as the Best Education Website in the Annual Webby Awards.
- working with researchers, as well as colleagues across the country, to create hands-on, interactive experiences at numerous museums and research centers;
- launching new mobile applications (apps) and mobile websites; and
- continuing to grow the Smithsonian TV cable channel audience that now includes millions of households.

### **3. Understanding and Impacting 21st-Century Audiences**

- attracting millions of personal visits to Smithsonian facilities.
- welcoming thousands of visitors to the National Mall for this year's Smithsonian Folklife Festival held from June 22 – 27, and June 30 through July 4, 2022.
- attracting more than 168 million visitors to our Smithsonian websites.
- reaching 151 venues in 36 states through the Smithsonian Institution Traveling Exhibition Service (SITES);
- continuing Smithsonian Affiliate membership with a total of 210 affiliates in 48 states, Puerto Rico, and the Republic of Panama.
- opening numerous new exhibitions.
- increasing the use of social media platforms, such as YouTube, Facebook, and Twitter, which are specifically directed to reach new audiences.
- collaborating with educators and working with schools, libraries, universities, and other cultural institutions to provide high-quality educational experiences to learners of all ages;
- continuing the initiative: "Race, Community, and Our Shared Future," which

- explores how Americans currently understand, experience, and confront race, its impact on communities and how that impact is shaping the nation's future;
- focusing on key areas, such as Science, Technology, Engineering, and Mathematics (STEM) education, and civic engagement; and
- continuing to operate education centers, such as:
  - the National Postal Museum, William H. Gross Stamp Gallery;
  - the National Museum of American History's Object Project;
  - the National Museum of Natural History's Q?rius science education center; and
  - the Hirshhorn Museum of Sculpture Garden's ARTLAB+ program for teenagers.

#### **4. Preserving Our Natural and Cultural Heritage**

- strengthening relationships with international organizations to assist cultural heritage recovery efforts, especially following devastating events such as civil wars, earthquakes, or hurricanes.
- continuing as a member of the Coordinating Committee on International Cultural Property Protection to train others to respond quickly to emergency situations.
- implementing unit collections management policies and collections stewardship plans for all collecting units, and incrementally improving the percentage of collections that meet or exceed unit-specific collections care standards;
- implementing the Collections Space Framework Plan to address near-term space requirements and serve as a roadmap to guide near, intermediate, and long-term facilities capital, real estate, and collections care projects;
- continuing to improve the operations, maintenance, and security of our facilities to provide a safe, healthy, and secure environment for both staff and visitors.
- continuing the major renovation project at the National Air and Space Museum, along with projects at the National Zoological Park, the National Museum of Natural History, and the National Museum of American History, as well as Revitalizing the Historic Core (consisting of the Castle and the Arts and Industries Building).



## **5. Enabling Cost-Effective and Responsive Administration**

- fundraising, private grant awards, business income, and endowment growth that supports the Institution's financial position;
- providing a nimble, cost-effective, responsive administrative infrastructure; and,
- improving the Institution's information technology systems, including increased teleworking capabilities for staff during the pandemic.

### **FY 2022 Financial Position**

The Smithsonian's financial statements are prepared with data from the Institution's accounting records and are audited annually. The Smithsonian Institution's management and financial controls systems provide reasonable assurance that the Institution's programs and resources are protected from fraud, waste, and misuse, and that its financial management systems conform to Government-wide requirements. Although the Smithsonian is not a department or agency of the Executive branch, the Institution has achieved the intent of the Federal Managers' Financial Integrity Act (FMFIA) (P.L. 97-255) to prevent problems by systematically reviewing and evaluating the Smithsonian's management and financial controls and financial management systems. Previous independent audits have found no material weaknesses in the Smithsonian's internal controls. In addition, the Institution reports no violations of the Anti-Deficiency Act.

### **Looking Forward**

The Smithsonian plays a vital role in the nation's educational, research, and cultural life. Our name is trusted because it represents excellence in research and education, and we are developing a reputation for excellence in management, operations, oversight, and governance, as well. Despite the inherent strength of the Institution, the Smithsonian faces significant challenges during this pandemic period as it continues to serve the public with both engaging, modern exhibitions and groundbreaking scientific research and exploration.

In FY 2023, we will continue to implement our Strategic Plan. The plan sets forth the following goals to be a more unified Institution: **Digital:** *Ensure every home and classroom has access to the Smithsonian’s digital content;* **Trusted Source:** *Be a trusted source that explores and grapples with what it means to be American;* **Science:** *Harness Smithsonian expertise to elevate science in the global discourse;* **Education:** *Build and enrich a national culture of learning by engaging with educational systems nationwide;* **Nimble:** *Work together to build a nimble and effective Smithsonian.*

In FY 2023, with the support of the Administration and Congress, the Smithsonian will continue to aggressively address our challenges and take advantage of our opportunities, using the dedication of our staff and the efficiencies of new technology to fulfill our longstanding mission “for the increase and diffusion of knowledge.”

## **HIGHLIGHTS OF PERFORMANCE GOALS AND RESULTS**

The Institution’s performance goals and results are tracked and reviewed throughout the year. The strategic goals of the Smithsonian, as set by the Secretary, are tracked via performance metrics, and accomplishments or outcomes are regularly evaluated against goals and objectives. The five main goals of the Smithsonian are: 1) Enhanced Interdisciplinary Research; 2) Expand Digital Technologies; 3) Understand and Impact 21st-Century Audiences; 4) Preserve Our Natural and Cultural Heritage; and 5) Enable Cost-Effective and Responsive Administration.

The Institution further delineates and tracks many sub-goals within each of these five main goals. However, because of the continuing COVID-19 pandemic, many of the FY 2022 measures were impacted by the pandemic and the consequent need to restructure Smithsonian operations in the interest of public safety and the need to provide a safe workplace for employees and visitors. The Annual Performance Report, Fiscal Year 2022, is presented as Attachment C to describe these accomplishments in some detail.

## HIGHLIGHTS OF FINANCIAL POSITION

### Overview of Financial Data

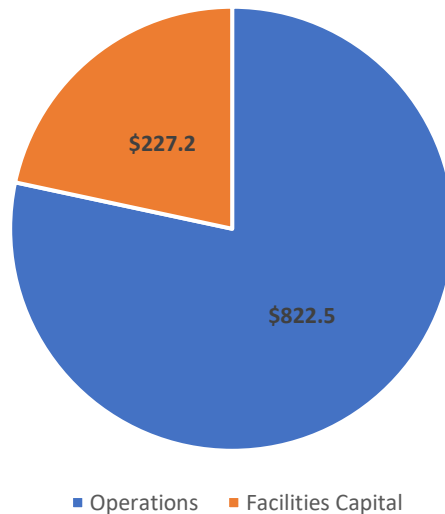
The Smithsonian's financial statements (e.g., balance sheet and statement of operations) and related footnotes were prepared by the Institution. These statements represent the results of all activities supported by federal resources. Additional financial activity, which is supported by non-federal activities, is not included in the financial information and discussions noted herein.

**Balance Sheet:** The Balance Sheet reflects total assets of \$2,686.2 million, a 4.6 percent increase over the previous year. Approximately 70.2 percent of these assets are invested in property and equipment, with the balance of assets (approximately 29.8 percent) represented principally by cash and balances with the United States Treasury. Liabilities (accounts payable and accrued expenses) comprise approximately 25.2 percent of the Smithsonian's liabilities and include \$46.1 million of environmental remediation obligations for buildings. The remaining liabilities (approximately 74.8 percent) consist of unexpended federal appropriation balances. Reflecting the higher growth in assets than liabilities, the total net assets grew by \$90 million or 5.4 percent in FY 2022.

**Statement of Operations:** Federal appropriations recognized in the current fiscal year are \$1,218.8 million (including reimbursables and other of \$12.3 million) and represent an increase of \$133.7 million over the prior year (\$1,104.9 million). Of the total appropriation recognized in FY 2022, approximately \$822.5 million (78.4 percent) were operating funds while \$227.2 million (21.6 percent) were construction funds, as shown in the graph below. Comparable recognized appropriation amounts from FY 2021 were \$773.9 million for operating costs and \$213.3 million for construction projects. Total expenditures (including \$3.9 million in collections items purchased) increased by \$80.5 million to \$1,128.8 million (7.7 percent) from FY 2021 total expenditures of \$1,048.3 million. Total program and support expenses were up by \$80.6 million or 7.7 percent.

## Federal Appropriations - FY 2022

(\$ in millions)



Federal spending for operations is the largest category of the Institution's budget and provides for pay and benefits for federal employees, utilities, postage, rent, communications, information technology modernization, collections care, scientific instrumentation, security personnel, and facilities operations and maintenance costs.

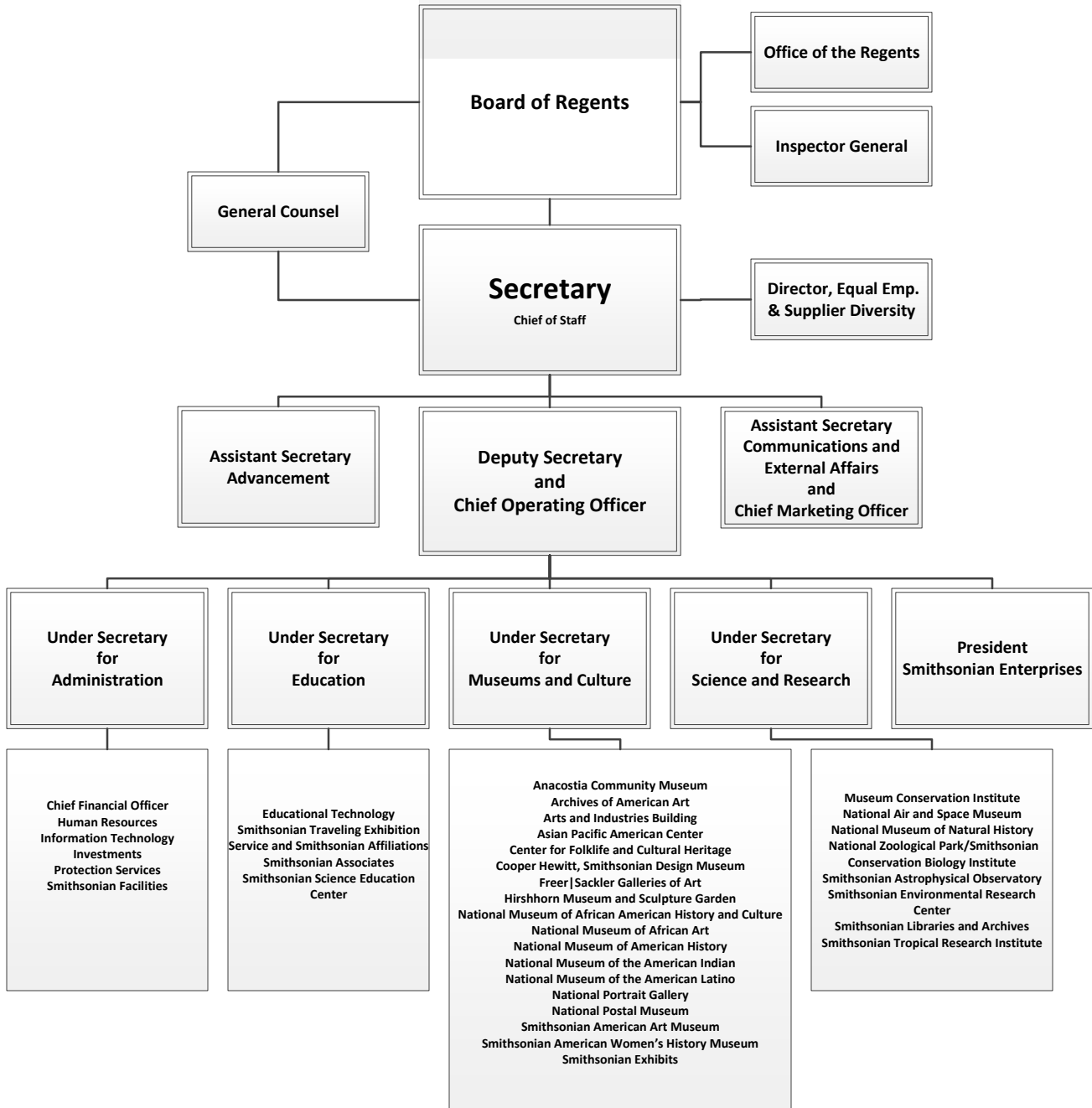
The remainder of the federal component of the Smithsonian's budget is spent to support the Institution's Facilities Capital Program. The Smithsonian depends on federal support for the revitalization and basic maintenance of its physical infrastructure. Facilities revitalization activities correct extensive and serious deficiencies, materially extend the service life of infrastructure systems, and often add capital value to the buildings and systems which form the backbone of the Smithsonian's physical plant. Maintenance, which is funded in the federal Salaries and Expense appropriation, is the more routine repair and maintenance work necessary to realize the originally anticipated useful life of a fixed asset. Although non-federal funds are often used to enhance the experience of the visitor in what would otherwise be an ordinary exhibition space, federal funding is essential to fulfill a federal obligation to revitalize the buildings for use by the public.

## **Attachments**

- Attachment A: Smithsonian Organizational Chart
- Attachment B: Smithsonian Highlights in Fiscal Year 2022
- Attachment C: The Annual Performance Report, Fiscal Year 2022

# SMITHSONIAN INSTITUTION

JANUARY 2022





# Smithsonian Institution

Fiscal Year 2022 Highlights





---

# Smithsonian Strategic Plan Priorities

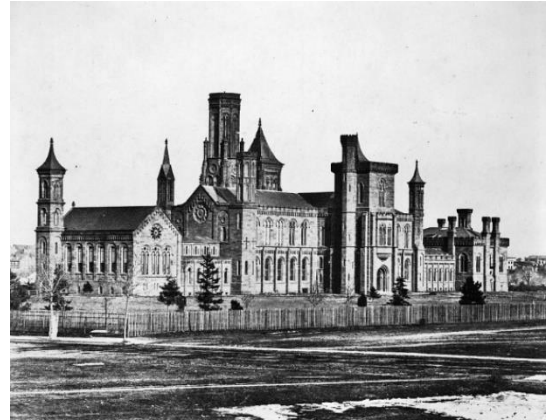
## Contents

Be One Smithsonian .....	3
Catalyze New Conversations and Address Complex Challenges .....	6
Reach One Billion People a Year with a “Digital First” Strategy .....	7
Understand and Impact 21st Century Audiences .....	9
Drive Large, Visionary, Interdisciplinary Research and Scholarly Projects ....	16
Preserve Our Cultural Heritage while Optimizing Our Assets .....	18
Provide a Nimble, Cost-Effective, and Responsive Administration .....	20
Construction, Renovation, and Facilities Projects .....	22

# Be One Smithsonianian

## The Smithsonian at 175

On August 10, 1846, the U.S. Senate passed the act organizing the Smithsonian Institution, which was signed into law by President James K. Polk. Construction began on the Smithsonian Institution Building, better known as the “Castle,” in 1846. The building was designed by renowned architect James Renwick, Jr., (1818-1895) who won the design competition for the building. Renwick was known for his Gothic Revival Church design in New York City. The legislation founding the Smithsonian Institution stated that the building had to house a museum, laboratories, a library, lecture halls, a gallery of art, and living quarters for staff and their families.



Today, the Smithsonian Institution is the world’s largest museum, education, and research complex, with 21 museums and the National Zoo — shaping the future and preserving heritage, discovering new knowledge, and sharing our resources with the world. As we commemorate this milestone, it is important for us to not only look back at where we have been but also ahead to what is on the horizon. With that in mind, the Smithsonian hosted several events in FY 2022 to explore our history and imagine our next 175 years.

To celebrate the Smithsonian’s 175th anniversary in 2021, the Arts and Industries Building (AIB) reopened for the first time in two decades with *FUTURES*, the first building-wide



exploration of the future at one of our museums on the National Mall. *FUTURES* was on view November 21, 2021 through July 6, 2022 and welcomed 650,000 visitors. *FUTURES* featured a vast array of interactive components, artworks, technology, and ideas that were glimpses into humanity’s next chapter. From an air taxi to fish-skin fashion, a space sail to a tree burial pod, and a hyperloop to a wetland that cleaned clothes, *FUTURES* guided visitors through ideas that are glimpses into humanity’s next chapter. This first-of-its-kind digital museum combined technology with Smithsonian

storytelling to invite visitors on an imaginative tour of the year 2050. Through dynamic talks, performances, workshops, and virtual experiences, *FUTURES* public programs were a central platform for speculative thinking, experimental ideas, and collective action.

In March of 2022, the AIB’s *FUTURES* exhibition, the **National Museum of Natural History, the National Air and Space Museum, and Smithsonian Gardens** partnered to host the Smithsonian debut of *#IfThenSheCan — The Exhibit®*, the largest collection of statues of women ever assembled on and around the National Mall. The 120 life-size, 3D-printed statues are of a diverse coalition of contemporary women innovators in science, technology, engineering, and mathematics (STEM), and role models in a variety of fields from protecting wildlife, discovering galaxies, and building YouTube’s platform to researching cures for cancer. *If/Then®* is an initiative of the Lyda Hill Philanthropies that is dedicated to encouraging young girls to pursue STEM careers. *The Exhibit* was unveiled to the public with a weekend of exciting programs at the AIB that invited visitors to dream big and see themselves as scientists in the making. Visitors met the women scientists and inventors behind the statues who are changing the world during a free Career Day and enjoyed inspiring activities during a Spark the *FUTURES: Science Family Day*.



# Be One Smithsonian

## Smithsonian Institution-wide Programs and Initiatives

The **Asian Pacific American Initiatives Pool (APAIP)** continues to expand the Asian Pacific American presence in the Smithsonian's presentation of and research into the American Experience. In FY 2022, the pool supported 11 projects at nine Smithsonian units in research, collections, and public and educational programs dedicated to telling the stories of Asian Pacific Americans. Project awards in FY 2022 included the research and traveling exhibition *Japanese War Brides*. The exhibition shared the stories of almost 30,000 Japanese women who immigrated to the United States as brides of U.S. military personnel after World War II. The pool also supported acquiring Vietnamese American artist Tuan Andrew Nguyen's work at the **Smithsonian American Art Museum (SAAM)**. The APAIP supported the *Wavelength Public Art Project*, which was a multi-unit research, public program, and collection project at the FY 2022 Folklife Festival. *Wavelengths* was an interactive art project that invited the public to reflect on their personal and cultural relationships with ocean life and think beyond ocean preservation. Together, the artists of *Wavelengths* illustrated the intersection of indigenous knowledge, immigrant histories, and climate care. The pool also continues to support the Mother Tongue Film Festival, which is a collaborative Smithsonian festival organized by Recording Voices to promote the power of language.



In FY 2022, the APAIP supported two curatorial positions at the **National Museum of American History (NMAH)** dedicated to the study of Asian Pacific American history and culture, and announced a new position at the **National Museum of the American Indian (NMAI)** dedicated to the Native Hawaiian History and Culture.

The Smithsonian is working to create a more equitable America by researching, disseminating, and amplifying the histories of American women through its **American Women's History Initiative (AWHI)** in preparation for the future **Smithsonian American Women's History Museum (SAWHM)**. The Smithsonian wants the role of women in American history to be well-known, accurate, acknowledged, and empowering. With a digital-first mission and focus, the AWHI and SAWHM will amplify a diversity of women's voices in a new Museum and throughout the Institution's other museums, research centers, cultural heritage affiliates, and anywhere people are online. In FY 2022, the AWHI pool awarded funds to 22 Smithsonian units to support 26 projects to magnify the contributions of women through exhibitions, internships, programs, and educational content along with new acquisitions and digitization of collections that expand the presence of American Women's History throughout the Smithsonian and online. The AWHI also supports seven curators in several units who are focusing on studies of American Women in history, the arts, and sciences.

In addition, the AWHI, in partnership with Smithsonian educators, announced the release of *We Built This: How Women Innovators Shaped the World*, the latest in our ongoing series of printed educational activity guides produced in collaboration with *USA Today*. In honor of Women's History month, this edition examines the important roles women and girls have played as innovators and problem-solvers.

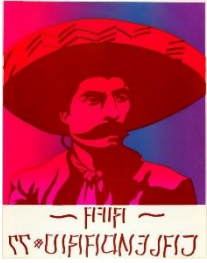
This 12-page premium edition features many examples from the Smithsonian's collections and programming that illustrate women's historic but often underappreciated contributions; from the inventor who developed invisible glass to the woman who was the first American with disabilities to earn a pilot's license. Stories like these are accompanied by objects from our collections, puzzles, and other activities, creating a guide that embodies the Smithsonian's ability to combine education and inspiration, encouraging readers to exercise their own creativity and curiosity along the way. *We Built This* will be distributed to more than one million learners and their families nationwide.



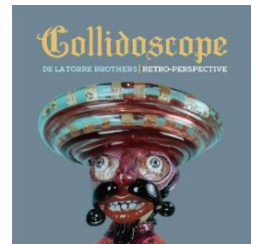


# Be One Smithsonian

The **Latino Initiatives Pool (LIP)**, managed by the **National Museum of the American Latino's (NMAL)** Center for Latino Initiatives, awarded funds to 11 Smithsonian units in support of 19 projects in FY 2022 to expand research, education, programs, collections, archives, Fellowships, and internships on Latino Studies throughout Smithsonian museums and online. Project awards included research and educational programs such as the **Smithsonian American Art Museum's** *iPrinting the Revolution! The Rise and Impact of Chicano Graphics, 1965 to Now* project educational posters. The project distributed 10,000 bilingual posters to teachers in all 50 states, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, and 21 countries in support of the exhibit. The LIP also supported many research and collection projects such as the Undocumented Organizing Collecting Initiative at the **National Museum of American History (NMAH)**. This initiative preserves a rare moment in U.S. political events by collecting history as it happens in close partnership with those making history.



The LIP also supported the **NMAL's** co-exhibit with the Cheech Marin Center for Chicano Art & Culture at the Riverside Art Museum in California, *Collidoscope: de la Torre Brothers Retro-Perspective*. The exhibit highlights almost 30 years of work by the brothers, Einar and Jamex de la Torre, who work in crafts ranging from glass blowing to lenticular printing.



In addition, the LIP provided seed funds for 10 more curatorial positions and contractors across Smithsonian units to expand the Institution's focus on U.S. Latino contributions to science, history, and culture. Along with many generous sponsors, the LIP helped support the planning, design, and fabrication of the first exhibition and public space in the NMAH to be dedicated to presenting the U.S. Latino Experience.

In FY 2022, Jorge Zamanillo, former executive director and CEO of HistoryMiami Museum, was named the founding director of the NMAL. Although there is no building for the Museum yet, the new director and his staff continue working on virtual exhibitions, programs, and fund raising. The **Molina Family Latino Gallery**, the Smithsonian's first gallery solely dedicated to Latino contributions to America, opened on June 18 at the **NMAH**. The 4,500-square-foot gallery will offer temporary exhibitions and educational programs in the decade or so leading up to the grand opening of the NMAL's own building. The next big step in the Museum's launch will be the site selection for its building on or near the National Mall, which is home to many Smithsonian museums.



*iPresente! A Latino History of the United States* is the Museum's first exhibition in the gallery. It introduces visitors to critical concepts, moments, and biographies that shine a light on the historical and cultural legacy of U.S. Latinos. It will be on view through December 1, 2024. A companion website highlights select oral histories, 3D objects, historical biographies, and objects.



The public can also tour this landmark exhibition through the Smithsonian and *USA Today* collaboration on a print edition of the featured works. This edition highlights the five main exhibition components, starting with "Colonial Legacies" and wrapping up the tour with "Latinos Breaking Boundaries." Visitors will have the opportunity to meet María Ruiz de Burton, the first published Mexican American author to write in English, or check out cool objects like Mark Gonzales' skateboard, which he used to pioneer the street style of the sport in California during the 1980s.

# Catalyze New Conversations and Address Complex Challenges

Every day the news brings us more evidence that our planet faces unprecedented and interrelated crises of climate change, biodiversity loss, and a global pandemic. Nationally, the United States is also confronting our complicated history of race and legacy of systemic racism. As the largest museum, education, and research complex in the world — with 21 museums, numerous research centers, and the National Zoo and Conservation Biology Institute — the Smithsonian’s vast collections, exhibits, current and historical data sets, and in-house expertise provide the public with a unique opportunity to inform interdisciplinary approaches and solutions to many of these challenges.

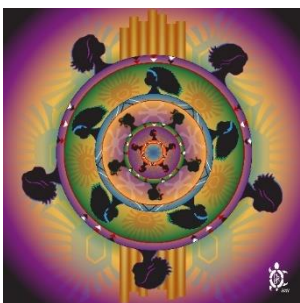
Through a new initiative, Our Shared Future: Life on a Sustainable Planet, the Smithsonian aims to advance solutions that fill us with optimism for our planet and all species that call our planet home. We announced our *Climate Change Action Plan* in FY 2022, focusing on the Smithsonian’s climate-related priorities for public programming, research endeavors, collections management activities, administrative processes, and facilities infrastructure to help us not only mitigate the risks we are facing, but also create a more sustainable future. We house the nation’s scientific and cultural heritage and, as such, must act as stewards to ensure future generations can be inspired by our collections, research, and impressive spaces. Together, the *Climate Change Action Plan* and Our Shared Future: Life on a Sustainable Planet will provide a roadmap of priorities as we create a more sustainable and climate-ready Smithsonian and educate and inform staff and visitors about what they can do to create positive environmental change

As part of this initiative, the Smithsonian is launching two new Fellowship programs: the Smithsonian Climate Change Fellowship and the Smithsonian Environmental Justice Fellowship. Each program will support a cohort of two to five Fellows for a period of two years. Fellows will receive a stipend to conduct independent research that uses Smithsonian resources to advance knowledge in these areas.

Furthermore, Our Shared Future: Reckoning with Our Racial Past is a national initiative that will be catalyze ongoing discussions — often challenging but always authentic — in community-based institutions throughout the United States. Events from across the Smithsonian enable all of us to understand, experience, and confront our complex history and celebrate the creativity, resilience, and power of people and communities to reconcile our past with the present and shape a more just, shared future. In FY 2022, this initiative highlighted a two-part program that included conversations with Anna Malaika Tubbs, author of *The Three Mothers: How the Mothers of Martin Luther King, Jr., Malcolm X, and James Baldwin Shaped a Nation*, and Christy Turlington Burns, founder of Every Mother Counts; as well as a panel discussion on maternal health moderated by Smithsonian AWHI curator Angela Tate.



The **Smithsonian’s National Museum of the American Indian (NMAI)** also launched the digital exhibition *Ancestors Know Who We Are* on June 15, 2022. The exhibition features works by six contemporary Black-Indigenous women artists that address issues of race, gender, multiracial identity, and intergenerational knowledge. The women featured in this exhibition tell their powerful stories through the art they created, said Cynthia Chavez Lamar (of the San Felipe Pueblo, Hopi, Tewa, and Navajo tribes), director of the NMAI. “As a Museum, it’s important we share the perspectives of indigenous women to provide insight into their diverse experiences through exhibitions like this as well as our programs.” In addition to the works of art, the exhibition also features artist interviews and writings from Black and Black-Indigenous scholars in the fields of history, gender studies, art history, and education.



# Reach One Billion People a Year with a “Digital First” Strategy

FY 2022 marks our second year of Smithsonian Open Access, an initiative that removed Smithsonian copyright restrictions from millions of its digital collection images and nearly two centuries of data. Since the initiative was launched, artists, researchers, and collaborators around the world have been able to



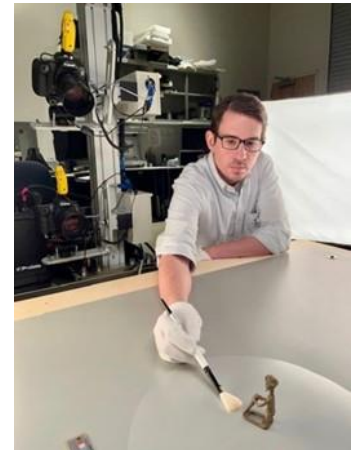
download, transform, and share this content for any purpose, for free, without needing further permission from the Smithsonian. As part of the Open Access program, we have continued to make more items available for public use. With new platforms and tools, our audience has easier access to more than 4.4 million 2D and 3D digital items from our collections — with many more to come. This includes images and data from across the Smithsonian’s 21 museums, nine research centers, libraries, archives, and the National Zoo and Conservation Biology Institute.



**The Digitization Program Office’s (DPO) “Collections Digitization”** (formerly “Mass Digitization”) Program continues its programmatic approach to Smithsonian-wide digitization. From the priorities defined in all the museums’ Unit Digitization Plans (UDPs), the Collections Digitization Program undertakes a steady stream of mass-digitization projects across the Institution year-round. Our pivot to digitizing collections records during the pandemic continued into 2022, but with the easing of COVID-19 pandemic restrictions, we also began ramping up object digitization as collections staff returned to the Smithsonian’s museums.

This year we added a third team to the Collections Digitization Program. In addition to our existing Mass Digitization and Informatics teams, we now have an Imaging Services team that provides digital imaging support for newly accessioned objects and for small-scale collections (particularly those located in smaller museums and departments that lack staff photographers). To date, the Imaging Services team has executed projects at the **National Museum of Natural History (NMNH)**, the **National Museum of African Art**, the **National Portrait Gallery**, **Smithsonian Gardens**, and the **Smithsonian Castle**, digitizing scores of collections objects at all these facilities.

As part of our continued work with collections record digitization, the Informatics team completed two projects: digitizing handwritten ledgers documenting tens of thousands of locality records from the NMNH’s Department of Paleobiology, and scanning accession records from dozens of handwritten volumes at the **National Museum of American History**. Work on a third project continues to digitize the hundreds of thousands of handwritten object records from the **Cooper Hewitt, Smithsonian Design Museum’s** card catalogue.



We reached a huge milestone this year when our Mass Digitization team completed a multi-year effort to digitize more than 3.8 million botanical specimens in the U.S. National Herbarium (located in the NMNH), the first herbarium in the United States to be completely digitized. The Mass Digitization team is now embarking on several large and medium-scale projects, including a restart of two projects suspended during the pandemic: completion of the NMNH Paleobiology fossil project, and the launch of the NMNH Invertebrate Zoology mollusk project. Finally, in a first-of-its-kind collaboration with the Getty Research Institute, the team worked with the **National Museum of African American History and Culture** to plan the digitization of the Johnson Publishing Company Archive, one of the most important collections of African American culture documenting the second half of the 20th century.



# Reach One Billion People a Year with a “Digital First” Strategy

The **Smithsonian DPO’s** 3D Program continues using 3D digitization to enable students, researchers, and aviation, space, and sports enthusiasts to explore iconic Smithsonian objects such as Alan Shepard’s Mercury spacesuit, women’s athletic garments featured in the Title IX 50th Anniversary exhibit at the **National Museum of American History**, and numerous other culturally, historically, or scientifically significant objects held by the Institution. These 3D digitized objects bring greater access and new levels of engagement to Smithsonian audiences, letting the public interact with our collections remotely by downloading them or viewing them in unique ways via our online 3D viewer (which also allows audiences to explore them with Augmented Reality [AR] modules). These tools broaden the Smithsonian’s impact beyond its walls, reaching millions of people who may never be able to visit the museums at their physical locations.

The Smithsonian’s 3D digitization team has long been a recognized leader in developing powerful and innovative approaches to support cultural heritage preservation and storytelling using 3D technology. In 2022, the team won a Webby Award for an educational AR experience on ocean corals, which was developed with The Hydrous (a marine education non-profit group) and Adobe. The 3D team also presented its work at international conferences and co-authored a book on 3D data preservation. The team continued to support the cultural heritage 3D storytelling community by developing the Smithsonian 3D viewer called Voyager. This open-source tool has been adopted by several other educational institutions which are contributing to its continued development.

The 3D team’s digitization efforts focus on equality of access and the development of cutting-edge, inclusive museum exhibits. Collaborating with teams at the newly established **National Museum of the American Latino** and the **Smithsonian American Women’s History Museum**, the 3D team created Voyager interactives using collection objects from these new Museums, helping them reach audiences before they are even built. As 3D storytelling becomes part of the Museums’ digital-first strategies, major improvements have been made to the Voyager platform to increase accessibility, such as the integration of multiple language options and adding modern accessibility features to reach larger and more diverse audiences. Going beyond current best practices, the team is also experimenting with techniques like sonification to make 3D models understandable to the visually impaired. And, to lower the barrier to using Voyager in schools, the team partnered with the District of Columbia Schools’ system to create guides that help educators integrate Smithsonian 3D collections into a variety of common Web-based teaching platforms.



In addition, the **Smithsonian Learning Lab** puts the treasures of the world’s largest museum, education, and research complex within reach of scholars and students of all ages. The Lab is a free, interactive platform for discovering millions of authentic digital resources, creating content with online tools, and sharing in the Smithsonian’s expansive community of knowledge and learning. There are millions of digital images, recordings, texts, and videos in history, art and culture, and the sciences available in the Learning Lab, for which thousands of resources have been organized and structured for teaching and learning by educators and subject-matter experts. Especially during these changing times, when schools nationwide are still struggling to navigate the “new normal” post-pandemic environment, the Learning Lab provides distance-learning resources, training, and support to assist caregivers, teachers, and students as they face new learning challenges.

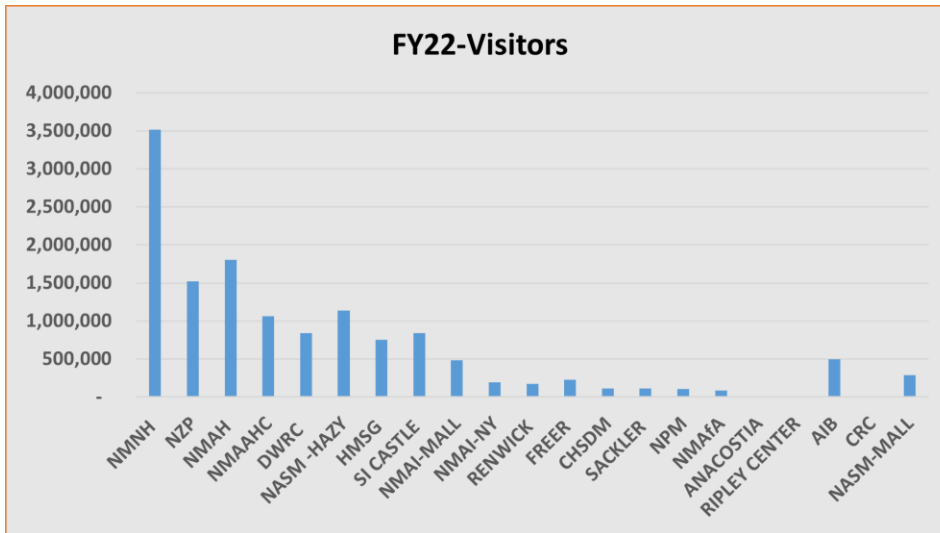




# Understand and Impact 21st Century Audiences

## Smithsonian Visits:

In FY 2022, the Smithsonian recorded 13.7 million in-person visits by the public to its museums and exhibition venues in Washington, DC and New York City, including the National Zoo and the National Air and Space Museum's Steven F. Udvar-Hazy Center in Northern Virginia. With the Institution's museums back open full time and COVID-19 pandemic restrictions being relaxed, visitors are back in our halls at last. Smithsonian museums saw visitor counts increase by 333 percent in FY 2022 from the numbers for FY 2021.



Through the World Wide Web, social media, and mobile applications (apps), we reached millions more visitors online.

In FY 2022, the Smithsonian's Office of the Chief Information Officer (OCIO) tracked 168 million visitors to Smithsonian websites and another 19.8 million from social media sites such as Twitter and FaceBook. In addition, Smithsonian videos were viewed on YouTube a total of 1.7 billion times in FY 2022.

twitter **Twitter Followers: 6.6 million**

facebook **FaceBook Likes: 7.7 million**

instagram **Instagram Followers: 5.5 million**

**Smithsonian Enterprises Audiences:** *Smithsonian Magazine*, 5.6 million per issue. *Smithsonian Digital*: Smithsonianmag.com: Average 10.3 million monthly unique visitors accessing content on Smithsonianmag.com and Apple News; 98 million visitors annually on the website; and *Smithsonian Channel*: 41 million households in the United States and 31 million internationally.



# Understand and Impact 21st Century Audiences

## Through Public Programs, Exhibitions, and Education, whether in our hallways or virtually:

The **Center for Folklife and Cultural Heritage's (CFCH)** research is grounded in a community-oriented approach that shapes the rich programming of the Smithsonian Folklife Festival and the Mother Tongue Film Festival, the music and spoken-word releases of Smithsonian Folkways Recordings, and our Cultural Sustainability initiatives. Our curators and scholars, drawn from folklore, anthropology, ethnomusicology, and a broad range of cultural studies, are distinguished leaders in their practice of collaborative research and representation.

The FY 2022 **Smithsonian Folklife Festival** was the first full festival since 2018. As the festival director said, "The Smithsonian Folklife Festival has been called an exercise in many things — cultural democracy, civic and creative participation, intercultural engagement, and more. This year, we add another to the list: an exercise in our ability to conjure a sustainable world. It is one in which diverse reservoirs of knowledge from craft and



science to cooking and falconry are put in the service of protecting land, sea, and sky." Both featured

programs, *Earth Optimism x Folklife: Inspiring Conservation Communities* and *United Arab Emirates: Living Landscape | Living Memory*, offered clues to the world we want to create. By grounding festival activities in stories of culture and community, we face hard truths, seek equitable solutions, and embrace divergent histories in pursuit of a more just and sustainable path forward.



Since its founding in 1967, the Smithsonian's **Anacostia Community Museum (ACM)** has been powered by the people and stories of the Washington, DC region. In celebration of the Museum's 55th anniversary, the ACM asked residents of the DC metro area to submit pictures of themselves in their communities as the Museum looks to its next 55 years and beyond. *Portraits by the People*, which ran from June 13–September 15, 2022, continues the ACM's tradition of preserving and celebrating the local stories which make up our diverse neighborhoods.



In April of 2022, the **Hirshhorn Museum and Sculpture Garden** hosted Build Day, the culminating event of the District of Columbia Public Schools' Arts Enchanted City Cornerstone unit. Elementary students from across the city designed and



built large structures — some up to six feet tall and equally as wide — to create a miniature city within the Sculpture Garden. The Enchanted City encourages students to explore and observe their immediate surroundings: classrooms, neighborhoods, and other physical environments in their daily lives. They learn what it takes to make livable cities by thinking about the shared beliefs and values of those who will live there, and to see the relationships between different types of structures: residential areas with homes, commercial areas with businesses, schools, parks, and monuments. In its own way, this is an informal introduction to the importance of recognizing the human dimension in urban planning and zoning.

# Understand and Impact 21st Century Audiences

During the Smithsonian Education Awards Ceremony, held on July 28, 2022, educators from across the Smithsonian came together to celebrate the more than 300 staff specialists who advance the Smithsonian’s mission for the increase and diffusion of knowledge. Stamp Stories from the **National Postal Museum (NPM)** received the 2022 One Smithsonian Education Award for exemplary Institution-wide collaboration. [Stamp Stories](#) is a series of videos created by the NPM’s Education Department. Each month, the NPM collaborates with an educator from another Smithsonian museum or office on a topic that links their two collections. Together, educators read a children’s book, explain collection objects, and use the connection to encourage exploration throughout the Smithsonian. Families and teachers of young students enjoy multi-sensory learning opportunities on subjects ranging from outer space to the *T-Rex* dinosaur — all inspired by the common postage stamp.



September of 2022 marked the sixth-year anniversary of the opening of the **National Museum of African American History and Culture (NMAAHC)**. When it first opened, the NMAAHC Library, housed on the second floor, displayed a noteworthy selection of highlights from its collection. The library has just unveiled a new exhibit featuring another set of books and materials significant to the African American story. Items in *Highlights of the NMAAHC Library Collection* span more than a century and are presented in a variety of formats — from an 1886 biography of Harriet Tubman to a 2009 artists’ book celebrating the inauguration of President Barack Obama. An exciting feature of the exhibit is the incorporation of the Hi App, an innovative gallery guide that encourages in-person visitors to use their mobile devices to connect with additional online content. While browsing the library selections, visitors can also explore blog posts, Museum objects, and digitized books to broaden their experience.



The NMAAHC also launched its newest digital initiative, The Searchable Museum, which reaches beyond the walls of the Museum to provide a rich digital experience that includes a multi-media presentation of the NMAAHC’s historical narratives, collections, and educational resources. The project’s first digital exhibition shared on the site is the *Slavery and Freedom* foundational feature from the Museum’s *David M. Rubenstein History Galleries*, entirely reimaged for the digital space. The exhibition has been transformed into an online experience that combines existing and newly created digital collection assets; digitized exhibition content; multi-media components such as 3D models, videos, and audio podcasts; and state-of-the-art technologies to deliver an innovative virtual exhibition. The site will also be responsive to user interests, offering opportunities for inquiry into specific topics via links to related online content and educational resources, making it possible to share new artifacts from the Museum’s collections via the internet for the first time.

The Smithsonian’s **National Portrait Gallery (NPG)** and *The Atlantic* magazine have a new, multi-platform collaboration titled “Perspectives: *The Atlantic’s* Writers at the National Portrait Gallery.” As part of the reinstatement of the NPG’s permanent collection, the Gallery and *The Atlantic* will feature a selection of the country’s founding voices in literature, politics, philosophy, and culture with interpretive wall texts by some of *The Atlantic’s* contemporary writers and editors. The project premiered on July 1, 2022, with the reopening of the Gallery’s *Out of Many: Portraits from 1600 to 1900* exhibition, and coincides with the magazine’s 165th anniversary year. The collaboration presents commentary from *The Atlantic’s* writers reflecting on the work of prior *Atlantic* contributors whose portraits are on view at the NPG, such as



Louisa May Alcott, Frederick Douglass, Booker T. Washington, Martin Luther King, Jr., and the late congressman John Lewis. The new wall texts, written by *The Atlantic’s* journalists, connect the magazine’s historic focus on abolition and current support of social justice and civil rights with the Gallery’s many portraits of diverse activists.



# Understand and Impact 21st Century Audiences

This fall, the **National Museum of Asian Art** is presenting *Freer's Global Network: Artists, Collectors, and Dealers*, a groundbreaking exhibition that shines new light on the Freer Gallery of Art's founder Charles Lang Freer. The exhibition opened on October 15, 2022, which is near the start of the Museum's centennial celebrations. An innovative digital feature makes the exhibition accessible to global audiences. As the National Museum of Asian Art charts its next 100 years, Freer's Global Network offers an opportunity to reflect on the past. The Global Network looks closely at the interconnected web of artists, dealers, and collectors who helped shape the Gallery's collection amid the shifting political and economic environment of the early 20th century. The exhibition and its accompanying digital media are part of the Museum's work to uncover and amplify the many voices and perspectives in its diverse and vast collection. The hybrid on-site and online exhibition highlights often-unseen elements of art history and museum practice, including provenance research, which documents the ownership of objects in the Museum's collection. The accompanying digital StoryMap allows visitors to explore the stories of four individuals, Bunko Matsuki, Dikran Kelekian, Mary Chase Perry Stratton, and Yamanaka Sadajirō, each of whom played a major role in shaping the collection that Freer bequeathed to the nation.



The Smithsonian's **National Museum of Natural History (NMNH)** opened *Our Places: Connecting People and Nature* on



July 1, 2022. The new exhibition explores how peoples' experiences with nature inspire them to connect, care, and act. *Our Places* offers visitors a chance to meet dedicated scientists and community members working to protect dynamic environments around the globe, from tropical rainforests and coastal mangroves to local neighborhood greenspaces spread across Washington, DC. The participatory displays invite visitors to incorporate places and experiences from their own lives into the exhibition.

The NMNH is also presenting *Cellphone: Unseen Connections*, a new exhibition exploring the technological, environmental, and cultural impact of cellphones.



Through an impressive array of objects, personal profiles, and interactive displays, *Cellphone* will offer visitors a chance to explore the many ways that cellular phones bring us closer to one another, often in ways we never realized. The multi-faceted, first-of-its-kind exhibition debuted on June 23, 2022 with its suite of educational programming made possible through a generous gift by lead sponsor Qualcomm. As the fastest spreading technology in human history, cellphones have reshaped entire industries and revolutionized how people document and express their lives. But, behind their screens, cellphones hold a deeper story about the ways people are connected to each other through the technology they create.

In December of 2021, the **Cooper Hewitt, Smithsonian Design Museum** presented *Design and Healing: Creative Responses to Epidemics*, an exhibition examining design's role in times of crisis. Organized during the unfolding COVID-19 pandemic, the exhibition features the work of communities and individuals who came together to aid each other, push for change, and create new spaces, objects, and services. Architectural case studies and historical narratives appear alongside creative responses to current pandemics. "Collaborating with MASS Design Group allowed



Cooper Hewitt to explore design responses to the pandemic alongside experts in the field of design for health care," said Ellen Lupton, Cooper Hewitt's senior curator of contemporary design. "The exhibition highlights hospitals designed by MASS Design Group as well as products, prototypes and graphics by dozens of designers, entrepreneurs, and individuals. The exhibition features a variety of artifacts gathered by Cooper Hewitt's Responsive Collecting Initiative."

# Understand and Impact 21st Century Audiences

The National Air and Space Museum (NASM) recently reopened half of its flagship building on the National Mall. The Museum has been undergoing a seven-year renovation that began in 2018 and includes redesigning all 23 exhibition and presentation spaces, complete refacing of the exterior cladding, replacing outdated mechanical systems, and other repairs and improvements.



Eight new and renovated exhibitions, the planetarium, Museum store, and Mars Café reopened in the building's west end. The exhibitions reopening in the new West Wing galleries include [\*America by Air\*](#), [\*The Wright Brothers & the Invention of the Aerial Age\*](#), [\*Nation of Speed\*](#), [\*Thomas W. Haas We All Fly\*](#), [\*One World Connected\*](#), the [\*Kenneth C. Griffin Exploring the Planets Gallery\*](#), [\*Destination Moon\*](#), and [\*Early Flight\*](#).

The renovated Museum features hundreds of new artifacts in the National Mall Building, such as Jackie Cochran's T-38, the plane Cochran flew when she became the first woman to break the sound barrier; the Sharp DR 90 Nemesis air racer, the most successful aircraft in air racing history flown by pilot and co-designer, Jon Sharp; and Sean Tucker's custom-built aerobatic biplane, the Aviation Specialties Unlimited Challenger III. In addition, the full-sized X-Wing Starfighter that appeared in *Star Wars: The Rise of Skywalker* is on loan from Lucasfilm and will also be displayed to the public for the first time in a location outside of the planetarium.



Speaking of which, the newly renovated **Albert Einstein Planetarium** immerses visitors on a journey beyond Earth, flying through space and time with a 360-degree view of the universe and allowing audiences to explore the cosmos in its giant domed theater. Shows include *Worlds Beyond Earth*, which takes viewers on an exhilarating adventure through our cosmic neighborhood, and the *Dark Universe*, which examines the invisible dark matter spread among galaxies that, together with dark energy, accounts for the other 95 percent of the universe's total energy and mass beyond what we can readily see with our current instruments.

The Museum also includes the Steven F. Udvar-Hazy Center in Chantilly, Virginia, which displays thousands of aviation and space artifacts, including the space shuttle *Discovery*, a Blackbird SR-71, and a Concorde, in two large hangars. The Udvar-Hazy Center also has an Airbus IMAX theater where visitors can immerse themselves in space and flight exploration stories such as *APOLLO 11: First Steps Edition*, which is a thrilling cinematic experience that showcases the real-life moments of humankind's first steps on the moon. Visitors can also watch other shows in the theater, such as *Aircraft Carrier: Guardians of the Sea*, *Journey to Space*, and *The Dream is Alive*.





# Understand and Impact 21st Century Audiences

In FY 2022, the **Smithsonian American Art Museum (SAAM)** announced its second series of *Drawn to Art: Ten Tales of Inspiring Women Artists*, featuring Web comics that illustrated the stories of rule-breaking, visionary artists who hope to inspire young people. The inaugural digital-first series in FY 2021 featured diverse voices that spanned centuries and included artists working in a variety of media from paint to textiles to glitter. The common thread linking the comics was a glimpse into defining moments in each artist's life and her artmaking. The second series tells stories of women artists belonging to marginalized communities and those who did not get the attention they deserved in their lifetimes.

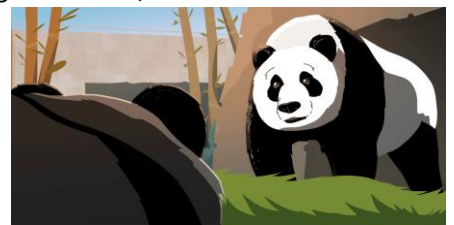


Now more than ever, the Oral History Program of the **Archives of American Art** is focused on recording diverse life stories and points of view. This fiscal year, for their podcast *Articulated: Dispatches from the Archives of American Art*, the program began a new six-part series, "Between Artists," featuring contemporary women artists in dialogue with voices from our oral history collection. This series was funded by the Alice L. Walton Foundation and the Smithsonian's American Women's History Initiative and has strengthened our relationships with new artists and audiences. The second season began in September of 2022 with Mari Hernandez interviewing Kathy Vargas about the intersection of the personal and political spheres of life.

The **National Museum of the American Indian** presented Native Cinema Showcase 2021, which was free on Demand from November 12–18, 2021. Seven features and 40 short films were presented, representing 39 Native nations in 13 countries: the United States; Canada; New Zealand; Australia; Mexico; Colombia; Chile; Guatemala; Peru; Brazil; Sweden; Greenland; and the Solomon Islands. This year's showcase focuses on Native people boldly asserting themselves through language, healing, and building community and a continued relationship with the land. Activism lies at the heart of all these stories. In addition to the films, the Showcase includes a series of pre-recorded panel discussions with the Native filmmakers and writers talking about all aspects of indigenous storytelling based on their own personal experiences.



The Smithsonian's flagship podcast *Sidedoor* returned on June 15, 2022 for its eighth season, which kicked off with a sex-education lesson on giant pandas. The episode explored the unexpected challenge veterinarians, scientists, and animal care experts at the National Zoo have been facing for 50 years — why it is so hard for giant pandas to successfully mate and reproduce. The newest season of *Sidedoor* will feature 15 episodes covering topics from the importance of lawns in American society to the people working to preserve art and cultural heritage across the globe in times of crisis. In July, *Sidedoor* released *A Culture in Crisis* about the effects of the current war in Ukraine where scores of museums, cemeteries, archeological sites, and places of worship



representing the country's history and national identity are memorialized. But when bombs are exploding, who's pulling a sculpture from the rubble? Enter the **Smithsonian Cultural Heritage Initiative**: a team of professionals devoted to protecting the world's treasures from threats by humankind and mother nature alike. This season of *Sidedoor* will also include spooky ghost stories and special holiday-themed episodes. Since its debut in 2016, the podcast has had more than 10 million downloads. It is a collaboration between the Smithsonian

and PRX, a public media pioneer that brings listeners iconic audio programming such as "This American Life," "The Moth Radio Hour," "Latino USA," "Snap Judgment," and "The World" as well as the Radiotopia podcast network.

# Understand and Impact 21st Century Audiences

In addition to the Smithsonian Institution's commitment to providing equitable access to its buildings, exhibitions, programs, and websites, **Access Smithsonian** offers several individualized programs for people with disabilities. As part of the Smithsonian Accessibility programs, **See Me at the Smithsonian** is usually an in-gallery program for adults with dementia and their caregivers. Educators and docents lead a dialogue with participants to help them explore some of the Smithsonian's most treasured objects. See Me provides intellectual engagement, socialization opportunities, and stress reduction for all participants. However, due to the COVID-19 pandemic, See Me had to be fully virtual in FY 2022, although its 44 programs still served 491 participants. **See Me en Espanol** is also offered for Spanish-speaking adults with dementia and their care partners. Staff from the **National Museum of Natural History** were trained in the program last fiscal year, so they can join the See Me rotation in FY 2023.



In FY 2022, the **Smithsonian Institution Traveling Exhibition Service (SITES)** traveled large and small exhibitions to museums and provided educational materials to schools and libraries to 156 venues in 36 states. Poster exhibitions were sent to 4,136 schools, museums, and libraries in all 50 states, the District of Columbia, Puerto Rico, and every continent except Antarctica. Smithsonian Affiliations welcomed new Affiliates in FY 2022, bringing the total to 210 Smithsonian Affiliates in 48 states, Panama, and Puerto Rico. Some additional statistics follow:

The traveling exhibition *Life in One Cubic Feet* went on tour in the summer of 2021 and will run through late 2024. From Central Park to South African shrubland to a coral reef in the South Pacific, *Life in One Cubic Foot* reveals the diversity of nature and inspires visitors to become citizen scientists. The exhibition reveals the amazing variety of life found by people using "biocubes" — one-cubic-foot frames for surveying the animals and plants living in an ecosystem. With stunning photographs by David Liittschwager, the exhibition includes biocube-related objects and tools, animal models, hands-on interactive components, and videos. Host venues will also receive digital files to produce multiple wall quotes and background imagery as well as a graphic design template that can be used to display local biocube results. The exhibition was at the Idaho Museum of Natural History in FY 2022 and moves to the Texas International Museum of Art and Science in December of 2022.



The **Museum on Main Street (MoMS)** is a part of SITES that provides access to the Smithsonian for small-town America by giving local communities the chance to explore museum exhibitions, research, educational resources, and programming. MoMS has visited more than 1,900 communities across America since 1994. Since 2012, MoMS has engaged students in 25 states through youth programs such as [Coming Home](#) and *Stories from Main Street*, which is a collaboration that combines the Rural Community Assistance Partnership's Rural Homecoming initiative with the MoMS program. *Coming Home* engages young people in exploring their town's past and thinking about its future. This program is a remarkable experience for local participants. Rural youth often feel disconnected from local culture. They may feel that adults do not listen to them or that their town's history does not matter. This project helps minors overcome those barriers. Approximately 1,200 youths from small communities have researched topics of importance to their towns' histories, conducted interviews, collected photos and video footage, and assembled a final digital project to share the results of their work.





# Drive Large, Visionary, Interdisciplinary Research and Scholarly Projects

Astronomers agree that planets are born in protoplanetary disks — rings of dust and gas that surround young, newborn stars. While hundreds of these disks have been spotted throughout the universe, observations of actual planetary birth and formation have proved difficult within these environments. Now, astronomers at the **Center for Astrophysics | Harvard and Smithsonian** have developed a new way to detect these elusive newborn planets and — with it — observe evidence of a small Neptune- or Saturn-like planet lurking in a disk. The results were described in *The Astrophysical Journal* Letters section in the September 2022 issue:



“Directly detecting young planets is very challenging and has so far only been successful in one or two cases,” says Feng Long, a postdoctoral Fellow at the Center for Astrophysics, who led the new study. “The planets are always too faint for us to see because they’re embedded in thick layers of gas and dust.” Scientists instead must hunt for clues to infer a planet is developing beneath the dust. Long dove into new high-resolution data from the Atacama Large Millimeter Array (ALMA) radio telescope in Chile, obtained primarily in 2019, and discovered two faint features that had not previously been detected. She discovered a dusty ring with two separate and bright bunches of material orbiting within it. The material took the shape of a small clump and a larger arc and were separated by 120 degrees. Long points to positions in space known as Lagrange points, where two bodies in motion — such as a star and orbiting planet — produce enhanced regions of attraction around them where matter may accumulate. She hopes her new approach for detecting planets — with material preferentially accumulating at Lagrange points — will be used by future astronomers.

As above, so below. Six scientists from Panama, Costa Rica, Colombia, and Ecuador spent two weeks exploring the recently expanded Cordillera de Coiba marine protected area, a region unknown to science. After almost 30 hours of sailing from Panama City, the *M/V Argo*, with six researchers and two science communicators on board, stopped near the fifth parallel: a few meters from the line that divides Panamanian and Colombian waters. There, a long underwater mountain range shared by both countries rises from the sea floor, one of its peaks directly below the ship at a depth of about 130 meters. The Colombian side of the seamount had been explored before, but the Panamanian side had not.



The scientific expedition led by marine ecologist Héctor Guzmán from the **Smithsonian Tropical Research Institute** and MigraMar would be the first to do so. Guzmán would descend twice a day in the *DeepSee*, a three-seat yellow submarine piloted by the crew of the *Argo*, reaching up to 350 meters deep — about 10 times deeper than a technical dive. The data collected during the 10 days at sea will help scientists better understand and protect the marine reserve designated as a Hope Spot by Mission Blue: that is, a unique place identified as critical to the health of the oceans.

Meanwhile, scientists at the **Smithsonian Environmental Research Center (SERC)** are studying how to preserve marshes threatened by rising sea levels due to climate change. The marshes being studied are dotted with plexiglass squares and cylinders with infrared lamps to maintain different temperatures inside each of them. Pipes snake through the water, pumping carbon dioxide at different rates into each of the containers. It is all part of a carefully controlled experiment to figure out how best to preserve Chesapeake Bay marshes. Based on their preliminary findings, scientists on the team say healthier marsh grasses soak up more carbon dioxide, potentially easing some effects of climate change.

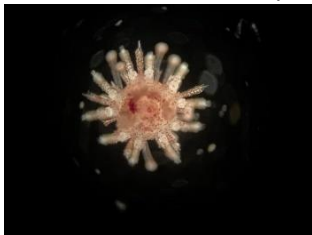


# Drive Large, Visionary, Interdisciplinary Research and Scholarly Projects

Smithsonian researchers have discovered a new extinct species of lizard-like reptile that belongs to the same ancient lineage as New Zealand's living tuatara. A team of scientists, including the **National Museum of Natural History's** curator of Dinosauria Matthew Carrano and research associate David DeMar, Jr., as well as University College London and Natural History Museum, London scientific associate Marc Jones, describe the new species *Opisthamimus gregori*, which once inhabited North America in the Jurassic Era about 150 million years ago, alongside dinosaurs like *Stegosaurus* and *Allosaurus*. In a paper published in the September 2022 issue of *The Journal of Systematic Paleontology*, the scientists wrote that, in life, this prehistoric reptile would have been about 16 centimeters (roughly six inches) from nose to tail — so it would fit curled up in the palm of an adult human hand — and likely subsisted on a diet of insects and other invertebrates. The discovery comes from a handful of specimens, including an extraordinarily complete and well-preserved fossil skeleton excavated from a site near an *Allosaurus* nest in what is now northern Wyoming's Morrison Formation. Further study of the find could help reveal why this animal's ancient order of reptiles was winnowed down from being diverse and numerous in the Jurassic period to just New Zealand's tuatara surviving today. The fossil has been added to the Museum's collections where it will remain available for future study, perhaps one day helping researchers figure out why the tuatara is all that remains of the Rhynchocephalian order, while other lizards are still found across the globe.



For the first time, a tropical sea urchin — a species intrinsically linked to the long-term health and survival of coral reefs — was grown successfully from cryopreserved embryos at the Smithsonian's **National Zoo and Conservation Biology Institute** laboratories at the **Hawaii Institute of Marine Biology**. More than 950 species of sea urchins play a vital role in reef ecosystems as grazers, reducing algae cover and maintaining the critical balance needed for coral to thrive in tropical waters. *Tripneustes gratilla*, also known as collector urchins, are found at depths of seven to 100 feet in the warm waters of Hawaii, the Indo-Pacific Ocean, the Red Sea, and the Bahamas. While embryos from urchins in cooler, more temperate habitats have been cryopreserved and settled, *T. gratilla* is the first tropical urchin to have settled and metamorphosed after cryopreservation. Working with the Smithsonian cryopreservation and aquaculture team, University of Hawaii graduate student Charley Westbrook cryopreserved the embryos and then banked them for several months. After thawing, the samples were fed a diet of phytoplankton, which allowed the embryos to develop through various planktonic forms in aquaculture during the pelagic larval phase of their lives. Coral reefs are nurseries for one-quarter of all marine life, help protect and feed more than 14 percent of the human population, and contribute billions of dollars to the global economy. The potential to successfully cryopreserve tropical sea urchin embryos and grow them in a lab is the first step in a proof-of-concept process for warm water coral restoration efforts and a new food production opportunity for the aquaculture industry.



Most of the astonishing diversity of marine life is hidden in plain sight: tiny and often transparent organisms that drift in the ocean as plankton. Paula Pappalardo is an **NMNH** ecologist studying their distribution to learn why certain species exist in some parts of the ocean and not others. Why are some places hotspots of biodiversity and how does environment affect the spread of species? She uses DNA-based methods to investigate the best strategies for getting an accurate list of species. Specifically, DNA barcoding uses a short portion of DNA from a single animal to identify it, which is somewhat like using a barcode in a grocery store to scan a particular item. This is useful if a fragile organism gets damaged during collection or when larval or juvenile specimens do not resemble adults.



# Preserve Our Cultural Heritage while Optimizing Our Assets

The National Collections are central to the Smithsonian's core activities of scholarship, discovery, exhibition, and education. They are also a vital cultural and scientific resource, accessed by millions of visitors and researchers who explore subjects ranging from aeronautics to zoology. The National Collections play a significant role in addressing scientific and societal issues in the 21st century. Collections acquired a century or more ago are still being used to address issues as varied as climate change, racial injustice, and the loss of biological and cultural diversity. That is why the Institution has prioritized digitizing the collections to make public access to them possible anywhere, anytime, for a wide variety of purposes. Collections staff at the Smithsonian's 21 museums and galleries, the **National Zoo and Conservation Biology Institute**, archives, and libraries are responsible for more than 157.1 million items, 146,500 cubic feet of archival material, and 2.2 million library volumes.

The **National Collections Program (NCP)** is dedicated to improving the overall stewardship and management of Smithsonian collections by providing central leadership and policy oversight of Institution-wide collections initiatives. By working with senior management, the NCP develops long-term strategies, priorities, policies, and plans to address Institution-wide collections needs. The NCP also administers the Collections Care and Preservation Fund and the Collections Care Initiative, which together have provided more than \$87.8 million for collections care projects at 25 Smithsonian collecting units since the funding program was established in 2006. The **Cooper Hewitt, Smithsonian Design Museum's** Dorothy Liebes textile conservation work and the **National Museum of Natural History's** Paleobiology object re-housing project are just two examples of successful collections awards in the past year.



The Smithsonian's **National Museum of Natural History** unveiled *Great American Diamonds* on June 10, 2022.



The new exhibit displays four of the most stunning diamonds ever found in the United States. Some of the new gems going on display are record holders, including the Freedom Diamond, the largest faceted diamond ever to originate in the United States, and the Uncle Sam Diamond, an emerald-cut stone fashioned from the largest uncut American diamond ever discovered. For decades, the Uncle Sam Diamond was feared to have been lost before recently resurfacing in a private collection. The *Great American*

*Diamonds* exhibit marks the first time it has been displayed in more than 50 years. These American diamonds join the Smithsonian's famous National Gem and Mineral Collection, the world's most visited collection of gems, thanks to gifts by Peter Buck (Uncle Sam Diamond) and Robert E. and Kathy G. Mau (Freedom Diamond). The National Collection contain more than 10,000 precious stones and pieces of jewelry, including the iconic Hope Diamond.

Following the Secretary's lead, the Smithsonian recently made its first deaccession of collections under our new ethical returns policy. At a ceremony in early October of 2022 at the **National Museum of African Art**, the Smithsonian formally transferred ownership of 29 Benin bronzes to the National Commission for Museums and Monuments in Nigeria. The bronzes, which had been part of the Museum's collection, were stolen during an 1897 British raid on Benin City. The Institution's Board of Regents voted to deaccession the bronzes in June, in keeping with the ethical returns policy



that authorizes the return of Smithsonian collections to the community of origin, when appropriate, based on ethical considerations such as the manner and circumstances in which the items were originally acquired.



# Preserve Our Cultural Heritage while Optimizing Our Assets

Some of our most precious living collections are the animals at the **National Zoo and Conservation Biology Institute (NZCBI)**. Founded in 1889, the Smithsonian's National Zoo sits on 163 acres in the heart of Washington, DC's Rock Creek Park and is home to about 2,700 animals, representing more than 390 species. The Zoo's commitment to conservation, research, and education also extends to the Smithsonian Conservation Biology Institute in Front Royal, Virginia. There, NZCBI scientists and animal care experts conduct veterinary and reproductive research to save rare wildlife and habitats for some of the world's most endangered animals that have found a sanctuary on the sprawling 3,200-acre



campus. A few vulnerable and endangered species were born in FY 2022, including golden lion tamarin twins, five cheetah cubs, four snake-necked turtle hatchlings, two lesser kudu calves, two brown kiwi chicks, and a prehensile-tailed porcupine, along with two critically endangered, blue-billed curassows.



Other animals were brought to the Zoo through agreements and breeding programs with outside domestic and international institutions. Two of our older whooping cranes even became surrogate parents to a newly hatched whooping crane after the International Crane Foundation and Necedah National Wildlife Refuge staff in Wisconsin sent the NZCBI an abandoned egg found in a wild nest.

While our youngest panda, Xiao Qi Ji (Chinese for "Little Miracle") turned 19 months old in April of 2022, the NZCBI also celebrated 50 years of achievement in the care, conservation, breeding, and study of giant pandas. The Zoo held online and on-site events through August to celebrate this milestone. Our giant panda team continues to watch the bears' behavior closely and regularly tracks their activity. On any given day the staff adjusts how much food they get, the kinds of toys and enriching activities offered (such as husbandry training), and the time they spend together.



Zoo staff also keep a close eye out for our older animals, such as when the Reptile Discovery Center keepers noticed Murphy the Komodo dragon wasn't exploring his surroundings as often as usual. Zoo veterinarians examined the 26-year-old lizard and radiographs revealed arthritis in both of his knees and one of his elbows. Our animal care team turned to an innovative treatment — one that is typically used for dogs — to block the inflammation and ease Murphy's discomfort, lessening his need for pain-relieving medications. With a little help from science and a lot of care from his keepers, the Zoo's largest lizard is regaining the pep in his step!



The Smithsonian's NZCBI invites visitors to prowl the new *Claws and Paws Pathway* exhibit that opened to the public on May 27, 2022. Visitors encounter four species, including a North American porcupine, bobcats, and the Zoo's newest residents — binturongs (also known as the bearcat) and Pallas's cats (also called the manul), which are native to South and southeast Asia and Central Asia, Mongolia, and the Tibetan Plateau, respectively. While walking along the pathway, visitors can sniff out the odd odors associated with these animals and look for their shared fascinating traits — paws and claws — as well as their more distinctive features.



# Provide a Nimble, Cost-Effective, and Responsive Administration

The Smithsonian has grown in many ways during the past 175 years but perhaps the most profound change has involved our people. As we begin our 176th year and look forward to the Nation's 250th anniversary in 2026, we do so with through the lenses and experiences of an increasingly diverse, inclusive, and representative staff and leadership. This August 2021 photograph captures the Smithsonian's current leadership. Secretary Lonnie Bunch is flanked to his left by Deputy Secretary Meroë Park and Under Secretary for Museums and Culture Kevin Gover, and to his right by Chair of the Board of Regents Steve Case and Assistant Secretary for Communications and External Affairs and Chief Marketing Officer Julissa Marengo.



**Dr. Brandie Smith** was named the John and Adrienne Mars Director of the Smithsonian's National Zoo and Conservation Biology Institute (NZCBI) in November of 2021. Previously, Brandie served as acting director of the Zoo since the retirement of Steven Monfort that May. As director, Brandie oversees the 163-acre Zoo facility in Washington, DC's Rock Creek Park and the 3,200-acre CBI campus in Front Royal, Virginia. She is responsible for the operations of the public Zoo, which gets approximately 1.8 million visitors a year, while also managing the Zoo's groundbreaking conservation biology research team that works to help save endangered species in more than 30 countries.



On February 14, 2022, the Secretary appointed **Cynthia Chavez Lamar** director of the Smithsonian's National Museum of the American Indian. She is the first Native woman named director of a Smithsonian museum. Chavez Lamar has a long association with the Museum, most recently since 2014, and earlier in her career was a Museum intern (1994) and later an associate curator (2000–2005). At the time of her appointment, she also served as the Museum's acting associate director for collections and operations. As director, Chavez Lamar oversees the Museum's three facilities: the main building on the National Mall in Washington, DC, the Museum's George Gustav Heye Center in Lower Manhattan, and the Cultural Resources Center in Suitland, Maryland.



**Maria Nicanor** was named the director of the Cooper Hewitt, Smithsonian Design Museum, effective March 21, 2022. An architecture and design curator and historian, Nicanor has an established career in museum and curatorial work and brings a rich background in architecture and design to the role. As director of Cooper Hewitt, Nicanor oversees 86 employees, an annual budget of more than \$15 million, and a collection of about 215,000 objects. She also leads the Museum's innovative exhibition programming, featuring a newly launched digital exhibition platform and robust educational offerings and programs, including the annual National Design Awards which recognize the best in American design across a range of disciplines. Nicanor joins Cooper Hewitt as it celebrates its 125th anniversary, sharing content throughout the year that highlights the importance of design in the past, present, and future life of the United States and the world at large.





# Provide a Nimble, Cost-Effective, and Responsive Administration

In April of 2022, **Beth Ziebarth** was appointed to the Institution-wide role of Deputy Head Diversity Officer. In her new capacity, Ziebarth envisions expanding her work for people with disabilities into the broader area of diversity, equity, access, and inclusion. During the last year, she has played a critical role in assessing and generating recommendations on the Institution's diversity, equity, access, and inclusion (DEAI) efforts, leading working groups to address Executive Orders on these topics.



**Christopher U. Browne** was named the John and Adrienne Mars Director of the National Air and Space Museum in May of 2022. Browne served as acting director of the Museum since 2021, and before that as deputy director since 2017, helping lead the multi-year renovation of our flagship building on the National Mall in Washington, DC after an accomplished career in the Navy and in airport management. As director, Browne oversees the Museum's main building and the Steven F. Udvar-Hazy Center in Chantilly, Virginia, as well as a staff of about 320 full-time employees, an annual operating budget of more than \$49 million, and the care of a massive collection with an excess of 60,000 artifacts. Browne will continue to lead the renovation of the National Mall Museum that began in 2018.



On May 2, 2022, **Jorge Zamanillo** took charge as the founding director for the Smithsonian's National Museum of the American Latino. Zamanillo was previously the executive director and CEO of HistoryMiami Museum, where he began working in 2000 as the curator of object collections and, over time, organized several key exhibitions and programs. Before he was promoted to executive director and CEO, he served as deputy director, vice president of expansion projects, and senior curator. In legislation establishing the Museum within the Smithsonian, Congress stated the purposes of the Museum "to illuminate the story of the United States for the benefit of all by featuring Latino contributions to the art, history and culture of the nation since its early history." In recognition of that charter, Smithsonian Secretary Lonnie Bunch praised Jorge's past work and qualifications, saying: "Zamanillo's accomplishments at HistoryMiami Museum highlight his commitment to exploring the full sweep of the American story by bringing to life the complex and profound narratives of Latinos in the United States. His transformational leadership will be invaluable as we build this necessary Museum from the ground up, helping us create a robust, dynamic, responsive Museum that exemplifies what a 21st-century cultural institution should be."



With her eyes on both science and the stars, **Lisa J. Kewley** was named the director of the Center for Astrophysics | Harvard & Smithsonian on July 1, 2022. A world-recognized leader in astrophysics, Kewley brings 20 years of experience to the role. She previously served as the director of ASTRO 3D, a \$40-million Australian Research Council Center of Excellence that seeks to understand the evolution of matter, light, and the elements from the Big Bang to the present, and oversaw 270 members from 19 national and international partner organizations in that effort. As director of the Center for Astrophysics, Kewley supervises about 800 Harvard and Smithsonian staff in eight scientific divisions across the Center's nine major scientific facilities and institutes, which include the Fred Lawrence Whipple Observatory in Arizona, the Submillimeter Array in Hawaii, and the Chandra X-Ray Center in Massachusetts.



# Construction, Renovation, and Facilities Projects

## **National Air and Space Museum (NASM) Revitalize Building Envelope and Infrastructure \$998 Million Total Estimated Project Cost.**

This Leadership in Energy and Environmental Design (LEED)-Gold candidate project will replace the building's Tennessee Pink marble façade, improve blast and earthquake resistance, upgrade the energy efficiency of the exterior envelope, replace the Museum's mechanical and plumbing systems, provide more secure access and egress, and transform the exhibition spaces. It is funded with \$729 million in federal funds and \$269 million in trust funds. Construction of the project began in September of 2018, and renovation is approximately 68 percent complete, with the west half of the building (phase 1) 100 percent complete. Substantial completion is planned for August of 2024, with the remaining exhibit and artifact installation expected to be finished in December of 2025.



## **National Air and Space Museum (NASM) Udvar-Hazy Center (UHC) Restore Exterior Envelope and Replace Roof \$35.9 Million Total Estimated Project Cost.**

This project will repair and replace the leaking sections of the exterior envelope by applying a poly-methyl methacrylate overlay on the entire Aviation Hangar roof as well as installing exit door canopies to prevent snow falling off the barrel roof and blocking the exit doors. The construction contract was awarded in September of 2019 with the notice-to-proceed issued in December of 2019. When the project reached substantial completion in March of 2022, extensive staining of the roof was observed. Therefore, the contract was modified in June of 2022 to resolve the issue by adding a topcoat, which increased the cost by \$4.2 million (for a total of \$35.9 million in federal funds) but will also extend the service life of the work done. The modified Renovation project is approximately 87 percent complete, with a target date for completion in June of 2023.



## **National Zoological Park (NZIP) Renew Bird House and Great Flight Aviary \$69.2 Million Total Estimated Project Cost.**

This LEED-Gold candidate project renews the 46,090-square-foot Bird House/Great Flight Cage and about one acre of the Bird House Plateau for the *Experience Migration* exhibit. Improvements include new site utilities and heating, ventilating, and air-conditioning equipment, storm and wastewater management systems, and animal/human life-safety, electrical, plumbing, security, and data systems. It is funded with \$63.4 million in federal funds and \$5.8 million in trust funds. Renovation is roughly 96 percent complete, and a Conditional Occupancy Permit was issued on October 5, 2022 to begin housing and acclimating the animals. Final handover is planned for early 2023.



# Construction, Renovation, and Facilities Projects

## Hirshhorn Museum and Sculpture Garden Repair Building Envelope, Roof, and Exterior Panels \$30.9 Million Total Estimated Project Cost.

This project will replace the roof and balcony envelope systems as well as the precast concrete exterior panels and their attachment system, which includes adding insulation and a vapor barrier to the exterior wall. These efforts will fix the water leaks and poor thermal performance of the building. Design was completed in FY 2020 and the construction contract was awarded in September of 2020. Renovation is approximately 65 percent complete, with an estimated completion date in December of 2022.



## Revitalize Historic Core The Smithsonian Institution Building (SIB) \$550 Million to \$600 Million Total Estimated Project Cost.

The Historic Core project will refurbish both the historic Smithsonian Institution Building (the “Castle”) and the Arts and Industries Building. However, at this time the project is proceeding only with the SIB portion. The SIB will have all its building elements and systems replaced, including mechanical, electrical, plumbing, life-safety, security, telephone, and data systems. The SIB’s windows, roofs, and exterior stonework will also be refurbished, and the building will be strengthened against blast and seismic vulnerabilities. A newly expanded loading dock in the adjacent Quadrangle facility will improve the efficiency and safety of materials handling. Project costs will be finalized in early FY 2023. Prep site work is planned to begin in March of 2023.



## Museum Support Center Construct Pod 6 Storage Module \$160.1 Million Total Estimated Project Cost.

This future LEED-Gold project will create approximately 183,000 square feet of storage space, which will be split between the National Gallery of Art (NGA) and the Smithsonian Institution. The project costs will be divided between the Smithsonian (\$94.2 million) and the NGA (\$65.9 million). The construction contract was awarded on September 29, 2022, based on 100 percent design documents. Completion is expected in October of 2024.



*Pod 6 Section (top) and Rendering (bot.) 3 levels - Level 1 is High Bay*

**Footnote:** For more information on the 2022 *Highlight* stories, please refer to the Smithsonian website at: <https://www.si.edu/> under the Newsdesk at: <https://www.si.edu/newsdesk>, or the *Torch* at: <https://torch.si.edu/> or by searching the name of the museum highlighted in the document.





Smithsonian  
Institution

**Annual Performance Report**  
*Fiscal Year 2022*

**ATTACHMENT C**



## One Smithsonian: Greater Reach, Greater Relevance, Profound Impact

### Our Purpose

*The increase and diffusion of knowledge*

### Our Mission

- The Smithsonian **creates knowledge through high-impact research** in science, art, history, and culture.
- It preserves our national and natural heritage, as well as aspects of other cultures, through art and its curation, by maintaining important historical artifacts, and by **caring for and expanding the National Collection**.
- It **shares knowledge with the public** through compelling exhibitions, education programs, and media products, by telling the American story, and by showcasing American artistic, intellectual, and technological leadership.

### Our Vision

*The Smithsonian will build on its unique strengths to **engage** and to **inspire** more people, where they are, with greater **impact**, while catalyzing critical conversation on issues affecting our nation and the world.*

### Introduction

The Smithsonian's **Strategic Plan** sets goals to help us be more collaborative and efficient in our work, build and deploy digital competency, and engage new and more diverse audiences in meaningful ways. We also continue to improve facilities maintenance and collections care to be even better stewards of America's treasures and seek out new strategic partnerships to expand our reach.

**Many of the FY 2022 measures continued to be significantly impacted by the COVID-19 pandemic. The Institution expects this trend to continue and has set performance targets accordingly.**

## **The Smithsonian's Seven Mission goals**

Goal 1: Be One Smithsonian

Goal 2: Catalyze new conversations and address complex challenges

Goal 3: Reach 1 billion people a year with a “digital first” strategy

Goal 4: Understand and impact 21st century audiences

Goal 5: Drive large, visionary, interdisciplinary research, and scholarly projects

Goal 6: Preserve our natural and cultural heritage while optimizing our assets

Goal 7: Provide a nimble, cost-effective, and responsive administrative infrastructure

## **Annual Performance Plan for Fiscal Year 2022**

To ensure that our ambitious goals will be successfully implemented over the next five years, a dedicated Strategic Plan Implementation performance tracking structure will enable us to focus on accomplishment of a focused set of annual strategic priorities and measures of goal success. As part of this effort, we will continue to track core metrics of performance results and organizational accountability across the major programs and functions of the Institution as mandated by the Government Performance and Results Act (GPRA), GPRA Modernization Act of 2010, and related Office of Management and Budget (OMB) performance standards. Our Annual Performance Plan and Report align with the program structure used in the Smithsonian's Federal budget documents and Enterprise Resource Planning (ERP) financial accounting system, enabling us to relate dollars budgeted and results achieved. The Smithsonian has made great progress in integrating performance indicators throughout the Institution to track program results and incorporating linked performance metrics in individual performance plans. The Smithsonian Dashboard shares metrics related to its core activities and performance with the public at <http://dashboard.si.edu/>.

## Index to Strategic Goals by Programmatic and Functional Performance areas

PERFORMANCE AREAS	STRATEGIC GOALS
<p><b>Research and Scholarship:</b> We will create knowledge through high-impact research in science, art, history, and culture.</p>	<p>Goal 2: Catalyze new conversations and address complex challenges</p> <p>Goal 5: Drive large, visionary, interdisciplinary research, and scholarly projects</p>
<p><b>Public Engagement:</b> We will share knowledge with the public on-site, online, and across the nation and world through compelling exhibitions, educational programs, and media products.</p>	<p>Goal 2: Catalyze new conversations and address complex challenges</p> <p>Goal 3: Reach 1 billion people a year with a “digital first” strategy</p> <p>Goal 4: Understand and impact 21<sup>st</sup> century audiences</p>
<p><b>National Collections:</b> We will preserve our national and natural heritage, as well as aspects of other cultures, by caring for and expanding the National Collections.</p>	<p>Goal 6: Preserve our natural and cultural heritage while optimizing our assets</p>
<p><b>Smithsonian Facilities:</b> We will maintain our historic and diverse infrastructure that is essential to the care of fragile collections, support for critical scientific research, and hosting millions of visitors.</p>	<p>Goal 6: Preserve our natural and cultural heritage while optimizing our assets</p>
<p><b>People and Operations</b></p> <ul style="list-style-type: none"> <li>• Operational Efficiency and Effectiveness: We will institute nimble and cost-effective pan-Institutional administrative processes.</li> <li>• Diversity and Inclusion: We will ensure that diversity, inclusion, cultural awareness, and sensitivity are hallmarks of the Institution.</li> <li>• Financial Strength</li> </ul>	<p>Goal 1: Be One Smithsonian</p> <p>Goal 7: Provide a nimble, cost-effective, and responsive administrative infrastructure</p>

## Research and Scholarship

We create knowledge, and share it with professional communities, through high-impact research in science, art, history, and culture.

- Links to
  - Goal 5: Drive large, visionary, interdisciplinary research, and scholarly projects
  - Goal 2: Catalyze new conversations and address complex challenges
- Ties to Program Category in ERP:
  - RESEARCH (Program Code 4XXX)

### Key Performance Indicators – Research and Scholarship

Key Performance Indicators	Type	Prior year data	FY 2022 target	FY 2022 actual
Number of Book, Book Chapter, and Journal Publications*	Output	FY 2019: 2,182 FY 2020: 2,560 FY 2021: 2,734	2,500	2,730
Number of Fellows in residence	Output	FY 2019: 845 FY 2020: 772 FY 2021: 778	775	857
Number of Grant and Contract proposals submitted	Output	FY 2019: 584 FY 2020: 608 FY 2021: 559	585	481

\*Note: Metric for quality/high impact Smithsonian publications formerly reported as “peer-reviewed” publications

## Public Engagement

We share knowledge with the public on-site, online, and across the nation and world through compelling exhibitions, educational programs, and media products.

- Links to
  - Goal 2: Catalyze new conversations and address complex challenges
  - Goal 3: Reach 1 billion people a year with a “digital first” strategy

- Goal 4: Understand and impact 21<sup>st</sup> century audiences
  - Ties to Program Categories in ERP:
- PUBLIC PROGRAMS (Program Code 1XXX)
  - WEB DEVELOPMENT ACTIVITIES IN SUPPORT OF PUBLIC PROGRAMS
  - IT ACTIVITIES IN SUPPORT OF PUBLIC PROGRAMS
- EXHIBITIONS (Program Code 2XXX)
- EDUCATION (Program Code 11XX)

**Key Performance Indicators – Public Engagement**

Key Performance Indicators	Type	Prior year data	FY 2022 target	FY 2022 actual
Number of physical visits to SI museums and the National Zoo	Output. Indicator of museum/zoo success	FY 2019: 23.3 million FY 2020: 7.7 million* FY 2021: 3.2 million*	10 million	13.7 million
Participations in Smithsonian education programs	Output. Indicator of level of public use/quality of SI education programs	FY 2019: 11.5 million** FY 2020: 9.3 million** FY 2021: 5.9 million**	9 million**	4.0 million
Number of visitors to SI websites	Output. Indicator of level of public use of SI resources via Web	FY 2019: 154 million FY 2020: 178 million FY 2021: 205.6 million	189.9 million	168 million
Number of Social media followers: <ul style="list-style-type: none"> <li>• Facebook</li> <li>• Twitter</li> </ul>	Output. Indicator of level of public use of SI resources	FY 2019: Facebook 7 million; Twitter 5.9 million FY 2020: Facebook 7.2 million; Twitter 6.1 million FY 2021: Facebook 7.5 million; Twitter 6.3 million	Facebook: 7.8 million Twitter: 6.6 million	Facebook: 7.7 million; Twitter: 6.6 million

\*Note: Museums not fully opened during the FY due to COVID-19

\*\* Figures for past fiscal years revised since previous Performance Report to correct for an earlier program misclassification; FY2022 target was based on non-revised figures

Key Performance Indicators	Type	Prior year data	FY 2022 target	FY 2022 actual
Number of states and territories with Smithsonian Traveling Exhibitions and poster exhibits	Output. Indicator of outreach success and national access to SI resources	FY 2019: 130 locations in 38 states and DC + 6,314 poster exhibits FY 2020: SITES exhibitions in 128 venues + poster exhibits in 20,657 locations reaching 50 states, DC, Puerto Rico, and worldwide* FY 2021: SITES exhibitions in 151 venues + poster exhibits in 6,911 locations reaching 50 states, DC, Puerto Rico, and worldwide	SITES exhibitions in 133 venues + poster exhibits in 10,700 locations reaching 50 states, DC, Puerto Rico, and worldwide	SITES exhibitions in 156 venues + poster exhibits in 4,136 locations reaching 50 States, DC, Puerto Rico, and worldwide
Number of Smithsonian Affiliates	Output. Indicator of extent/success of outreach and national access to SI collections	FY 2019: 214 Affiliates in 46 states + PR, Panama FY 2020: 210 Affiliates in 46 states, PR, Panama FY 2021: 213 Affiliates in 46 states, PR, Panama	212 Affiliates in 46 states, Panama, and Puerto Rico	210 Affiliates in 48 states, Panama, and Puerto Rico

\*Note: Metric changed to combine locations of traveling exhibitions and smaller poster exhibits

## National Collections

We preserve our national and natural heritage, as well as aspects of other cultures, by caring for and expanding the National Collections.

- Links to Goal 6: Preserve our natural and cultural heritage while optimizing our assets
- Ties to Program Categories in ERP:
  - COLLECTIONS (*Program Code 3XXX*)

## Key Performance Indicators – Preserve Our Natural and Cultural Heritage Collections

Key Performance Indicators	Type	Prior year data	FY 2022 target	FY 2022 actual
<p>Percentage of <b>museum collections (objects and specimens)</b> that meet/exceed unit standards for:</p> <ul style="list-style-type: none"> <li>• <b>Physical Condition:</b> Measures the need for intervention to prevent further or future deterioration of the collections.</li> <li>• <b>Housing Materials:</b> Measures the appropriateness and stability of the materials used to house or contain collections.</li> <li>• <b>Storage Equipment:</b> Measures the appropriateness of equipment intended to provide long-term protection of the collection.</li> <li>• <b>Physical Accessibility:</b> Measures the extent to which the collection is organized, arranged, located, and retrieved for intended use.</li> </ul> <p><i>Collections Totals:</i>  FY 2019: 155.4 million objects / specimens  FY 2020: 155.5 million objects/ specimens  FY 2021: 157.1 million objects/ specimens</p>	<p>Outcome. Indicator of established standards and sound management practices for collections</p>	<p>FY 2019:</p> <ul style="list-style-type: none"> <li>• Physical Condition: 75%</li> <li>• Housing Materials: 69%</li> <li>• Storage Equipment: 72%</li> <li>• Physical Accessibility: 87%</li> </ul> <p>FY 2020:</p> <ul style="list-style-type: none"> <li>• Physical Condition: 75%</li> <li>• Housing Materials: 69%</li> <li>• Storage Equipment: 71%</li> <li>• Physical Accessibility: 87%</li> </ul> <p>FY 2021:</p> <ul style="list-style-type: none"> <li>• Physical Condition: 75%</li> <li>• Housing Materials: 69%</li> <li>• Storage Equipment: 71%</li> <li>• Physical Accessibility: 87%</li> </ul>	<p>Increase over prior year</p>	<p>Data currently not available</p>
<p>Percentage of <b>museum collections (objects and specimens)</b> that are digitized:</p> <ul style="list-style-type: none"> <li>• <b>Digital Records:</b> Measures percentage of Collections Totals with digital records that meet or exceed unit standards</li> </ul> <p><i>Collection Totals:</i>  FY 2019: 155.4 million objects/ specimens  FY 2020: 155.5 million objects/ specimens  FY 2021: 157.1 million objects/ specimens</p> <ul style="list-style-type: none"> <li>• <b>Digital Images:</b> Measures percentage of Collections Prioritized for Digitization with digital images that meet or exceed unit standards</li> </ul> <p><i>Collections Prioritized for Digitization:</i>  FY 2019: # of prioritized objects: 18.5 million  FY 2020: # of prioritized objects: 18.7 million  FY 2021: # of prioritized objects: 23.2 million</p>	<p>Outcome. Indicator of public access to SI collections</p>	<p>FY 2019:</p> <ul style="list-style-type: none"> <li>• Digital Records: # completed: 33.1 M (21%)</li> <li>• Digital Images: # completed: 5.6 M (30%)</li> </ul> <p>FY 2020:</p> <ul style="list-style-type: none"> <li>• Digital Records: # completed: 34.2 M (22%)</li> <li>• Digital Images: # completed: 6.5 M (35%)</li> </ul> <p>FY 2021:</p> <ul style="list-style-type: none"> <li>• Digital Records: # completed: 35 M (22%)</li> <li>• Digital Images: # completed: 7 M (30%)</li> </ul>	<p>Increase over prior year</p>	<p>Data currently not available</p>



## Smithsonian Facilities

- Links to Goal 6: Preserve our natural and cultural heritage while optimizing our assets
- Ties to Program Categories in ERP:
  - FACILITIES (Program Code 5XXX)
  - SECURITY & SAFETY (Program Code 6XXX)

### Key Performance Indicators – Smithsonian Facilities Capital/Maintenance and Safety/Security

Key Performance Indicators	Type	Prior year data	FY 2022 target	FY 2022 actual
Percent of available capital funds obligated compared to funds available	Efficiency (obligation rate is indicator in initiating capital work in a timely manner)	FY 2019: 92% FY 2020: 94% FY 2021: 91%	85%	82%
Number of major capital projects meeting milestones (see below):	Output	FY 2019: Met milestones on 5 of 7 projects FY 2020: Met milestones on 5 of 7 projects FY 2021: Met milestones on all 6 major projects	Meet milestones on all 6 major projects	Met Milestones on 3 of 6 major projects
Revitalize Historic Core (SIB)	Output	FY 2019: Pre-Design 100% FY 2020: Design awarded FY 2021: Design 5% Complete	Design 35% complete	Design 35% complete
Renew Bird House and Great Flight Aviary - National Zoological Park	Output	FY 2019: Renovation is 43% complete FY 2020: Renovation is 73% complete FY 2021: Renovation 89% complete	Renovation 100% complete	Renovation 96% complete
Repair Building Envelope, Roof, and Exterior Panels - Hirshhorn Museum Building	Output	FY 2021: Renovation 27% Complete	Renovation 75% complete	Renovation 65% complete
Revitalize Building Envelope and Infrastructure - National Air and Space Museum – National Mall Building	Output	FY 2019: Renovation is 12% complete FY 2020: Renovation is 40% complete FY 2021: Renovation 55% Complete	Renovation 65% complete	Renovation 68% complete

Key Performance Indicators	Type	Prior year data	FY 2022 target	FY 2022 actual
Restore Exterior Envelope and Replace Roof - National Air and Space Museum - Udvar Hazy Center	Output	FY 2019: Construction awarded FY 2020: Renovation is 24% complete (on completion schedule) FY 2021: Renovation 77% complete	Renovation 95% complete	Renovation 87% complete (Additional scope was added)
Construct Pod 6 - Museum Support Center	Output	FY 2019: 100% Feasibility Study completed FY 2020: 35% design has been submitted FY 2021: Design 75% complete	Construction Award complete	Construction was awarded
Percent of revitalization projects designed to 35% prior to request for construction funding	Efficiency (35% design prior to funding improves cost estimates; early award avoids cost escalation and project delays)	FY 2019: Target not met due to lack of planning funds FY 2020: Target not met due to lack of planning funds FY 2021: Target not met due to lack of planning funds	Complete 35% design prior to Cong. budget submission for 80% of major projects in the FY 2023 capital program	Target not met due to lack of planning funding
Percentage of buildings with Facilities Condition Index (FCI) above 90%	Output. Higher % shows improvement of buildings condition	FY 2019: 66.5% FY 2020: 61% FY 2021: 61%	68%	57.5%
Planned maintenance cost as percent of total annual maintenance costs	Efficiency — a higher proportion planned vs. unplanned is indicator of more efficient use	FY 2019: 60.4% FY 2020: 57% (impacted by COVID19: minimum staffing, buildings closed) FY 2021: 49% (impacted by COVID19: minimum staffing, buildings closed)	62%	54.5% (More unplanned repairs than anticipated)
100% of facilities at level 3 “managed 1” for cleanliness on the APPA scale	Output. Shows improvement in buildings cleanliness	FY 2019: Achieved 80% APPA Level 3 FY 2020: 33% @ Level 3 (impacted by COVID 19: minimum staffing, buildings closed, less cleaning) FY 2021: 33% @ Level 3 (Impacted by COVID 19; minimum staffing, buildings closed)	85% APPA Level 3	Achieved 85% APPA Level 3
Safety: total recordable case rate (injuries per 100 employees)	Output (annual basis)	FY 2019: 1.76 FY 2020: 1.44 FY 2021: 1.16	<2.00	3.35 (increase due to return to work/COVID cases)

## People and Operations

Strengthen those organizational services that allow us to deliver on our mission.

➤ Links to:

- Goal 1: Be One Smithsonian
- Goal 7: Provide a nimble, cost-effective, and responsive administrative infrastructure

➤ Ties to Program Categories in ERP:

- SMITHSONIAN ENTERPRISES (SE) AND UNIT BUSINESS ACTIVITIES (Program Code 01XX)
- INFORMATION TECHNOLOGY (Program Code 7XXX)
- PERFORMANCE MANAGEMENT (Program Code 81XX)
- HUMAN RESOURCES MANAGEMENT (Program Code 8200)
- DIVERSITY/EEO Program Code 8210)
- FINANCIAL MANAGEMENT (Program Code 8300)
- INVESTMENT MANAGEMENT (Program Code 8310)
- PUBLIC AND GOVERNMENT AFFAIRS (Program Code 8400)
- PROCUREMENT AND CONTRACTING (Program Code 8600)
- DEVELOPMENT (Program Code 9XXX)

## Operational Effectiveness

We will institute nimble and cost-effective pan-Institutional administrative processes.

### Key Performance Indicators – Organizational Efficiency and Effectiveness

Key Performance Indicators	Type	Prior year data	FY 2022 target	FY 2022 actual
Workdays to complete recruitment action against OPM End-to-End Hiring Model of 80 days	Efficiency	FY 2019: 98.5 average days FY 2020: 132 average days FY 2021: 132 average days	Goal of 80 days	174 days
Percent of SI contract actions completed within Federal Standard Time Frames	Efficiency	FY 2019: 94.6% FY 2020: 93.4% FY 2021: 87%	92%	92%
Customer satisfaction with quality and timeliness of IT services	Outcome	FY 2019: Quality 97.75% Timeliness 97.33% FY 2020: Quality 97.76% Timeliness 96.97% FY 2021: Quality 97.73% Timeliness 97.30%	Quality 95% Timeliness 95%	Quality 97% Timeliness 95%
Percent of employees who are satisfied with working at the Smithsonian on annual employee survey	Outcome. Employee satisfaction is a standard indicator of a healthy organization	FY 2019: 81% FY 2020: 85% FY 2021: 82%	82%	78%

## Diversity and Inclusion

We will ensure that diversity, inclusion, cultural awareness, and sensitivity are hallmarks of the Institution.

### Key Performance Indicators – Diversity and Inclusion

Key Performance Indicators	Type	Prior year data (%)	FY 2022 target	FY 2022 actual
Percent of workforce diversity by race/ethnicity	Output	FY 2019 2020 2021	<u>Meet or exceed</u>	
		Nat Am 1.4 1.4 1.3	<u>DC Metro CLF</u>	Nat Am 1.4
		Asian 5.7 6.1 5.9	<u>standard</u>	Asian 6.3
		NHPI 0.1 0.1 .2	Nat Am 0.4	NHPI 0.1
		Black 29.2 29.1 28.9	Asian 9.6	Black 29.7
		Hispanic 10.5 10.7 10.6	NHPI 0.1	Hispanic 10.9
			Black 25.4	
	Hispanic 13.2			

## Financial Strength

### Key Performance Indicators – Financial Strength

Key Performance Indicators	Type	Prior year data	FY 2022 target	FY 2022 actual
Dollar amount of Private Sources: Gifts	Input	FY 2019: \$225 million FY 2020: \$248 million FY 2021: \$480 million	\$230 million	\$320 million
Dollar amount of Sponsored Projects Revenue	Input	FY 2019: \$147.4 million FY 2020: \$135.7 million FY 2021: \$146 million	\$140 million	\$162 million
Dollar amount of Private Sources: Business Revenue	Input	FY 2019: \$167 million FY 2020: \$109 million FY 2021: \$89 million	\$120 million	\$134 million