



STRATEGIC PLAN  
2021-2025

# Our World, Our Future

*May 2021*




NATIONAL  
MUSEUM *of*  
**NATURAL  
HISTORY**

 Smithsonian

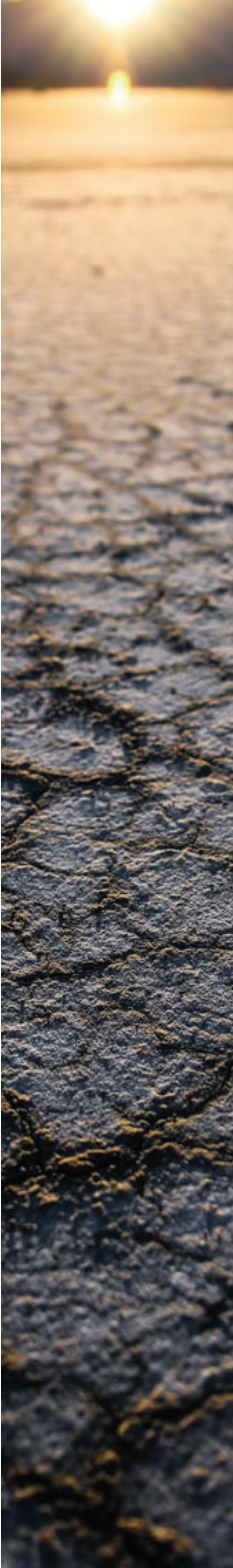


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# Letter from the Sant Director and Board Chair



## The coming years will be among the most consequential in human history.

Our impact on the natural world and on the future of humanity itself will come into sharp focus. We will experience the ever-growing impact of human activity on nature resulting in habitat destruction, biodiversity loss, reduced agricultural productivity, global pandemics, and scarcity of natural resources. These challenges will be compounded by the many impacts of global climate change.

It is also clear that environmental impacts will not be felt equally by all people and that our society faces a reckoning on how it addresses social injustice.

The Information Age is being derailed by disinformation. This has given rise to movements to deny the existence of core scientific discoveries such as evolution, climate change, and the effectiveness of vaccines. The diversity of communication channels has splintered audiences and devalued expertise.

As we face these challenges, human ingenuity continues to invent new technology at a rapid rate. Digital and information sciences are revolutionizing the way we communicate with one another and how we collect, analyze, and use data. The growth of data science and artificial intelligence promises to unlock insights that are presently beyond reach.

Our task as the national museum is to harness these emerging innovations and apply them to help solve environmental and societal challenges.

Over the next five years, the Smithsonian National Museum of Natural History will deploy our science and our role as a trusted educational source to provide people and society with knowledge, insights, assets, and opportunities to inspire them to understand and overcome the immense challenges of the upcoming decades.



**Kirk Johnson**  
Sant Director



**John Foster**  
Chair, Advisory Board



# Mission, Vision, and Values



“an establishment for the increase  
and diffusion of knowledge...”

JAMES SMITHSON, 1826

## **Our Mission**

Understanding the natural world and our place in it.

## **Our Vision**

A future-facing Smithsonian museum that confronts the big questions in nature, science, and society.

## **Our Values**

**One Smithsonian** We collaborate across the museum and the Smithsonian family to leverage our collective institutional resources and be more than the sum of our parts


**Excellence** We create a culture that expects, recognizes, and rewards excellence in our achievements as individuals, teams, and as an institution

**Diversity** We are committed to diversity, equity, accessibility, and inclusion throughout all our activities


**Integrity** We are transparent, collaborative, and ethical in our collective work as a public body and a scientific institution

**Engagement** We develop deep relationships that foster true engagement and partnerships with our audiences, collaborators, and supporters

**Creativity** We drive a culture of creativity and innovation throughout our work, and we take risks to spark curiosity



# A Global Leader in Science and Outreach



The Smithsonian National Museum of Natural History connects people everywhere to the unfolding story of our solar system, the planet we call home, and the life upon it.

**We curate an irreplaceable archive** of physical, cultural, and biological diversity. Our researchers, scientific collections, free exhibitions, and educational programs address fundamental questions, spark curiosity, and illuminate the beauty, wonder, and fragility of our planet.

**Now more than ever**, we are called upon to fulfill our promise to science and to our audiences. We will uncover new knowledge about our 4.6 billion-year-old planet—how it works, how it supports life on land and sea, and how people and cultures both shaped and have been shaped by it. Our research is critical because it tells us what has been, what is now, and what could be. Equally important is our ability to break down barriers and invite diverse audiences into the world of science and to catalyze within them a passion for the natural world and their place in it.

In the past decade, the Smithsonian National Museum of Natural History has:

- Welcomed over 50 million museum visitors
- Engaged 130 million visitors across our web platforms
- Opened 48 new exhibitions
- Delivered 41,000 online and onsite programs
- Published 8,185 books and scientific papers
- Discovered and named over 2,600 new species
- Secured over \$86 million in competitive grant funding
- Grown the national collection by nearly 18 million objects and specimens
- Mentored 6,150 interns and fellows
- Hosted 71,400 research visitors to the collections



# A View for the Future

What does it mean to be one of the world's great public museums and a trusted science powerhouse as we enter the third decade of the 21st Century?

It means we must do everything in our power to use our privileged position, irreplaceable scientific collections, and skilled workforce to make a positive difference for nature, science, and society.

It means that we must respond to the imminent perils of climate change and species extinction while simultaneously striving to enhance social and environmental justice.

It means that we must re-invent what it means to be a natural history museum.

It means that we must re-invent what it means to be the national museum of the United States of America.

Time is short and we intend to maximize our reach, relevance, and impact and to become a driving and optimistic force for global sustainability.

This plan attempts to balance our necessary ambition with our present reality. It considers lessons learned from the COVID-19 pandemic, it is unafraid to address our shortcomings, and it aspires to fulfill our promise to be inclusive, diverse, and accessible.

Over the next five years, we will learn and grow together as we make scientific discoveries and share what we learn with millions of people. We will also make the museum a better place than we found it. We will:

- Uncover and share the story of the Earth, its ocean, people, and nature, and clearly articulate the urgency of the present moment.
- Collaborate with the Smithsonian to enhance our role as a trusted source for all Americans, not just those who come to Washington, D.C.
- Take meaningful steps to build a more diverse and inclusive environment.
- Build a healthy and resilient community that promotes work-life balance.
- Collaborate with strategic partners to achieve our mission and extend our reach.
- Invest in the facilities, technologies, and tools needed to advance science, improve access to research collections, engage audiences, and improve our operations.
- Work to create an adaptable and sustainable financial model to support our ambitions.



# A View for the Future continued

A central element of this plan is a set of four Signature Initiatives which are intended to be high-impact, cross-disciplinary projects that provide an opportunity for us to accelerate our evolution as an institution and serve to focus our communications and fundraising.

**The Inclusive Science Initiative** will focus on youth from underserved communities and underrepresented groups and provide them with training to be the next generation of scientists and science-savvy citizens.

**Our Unique Planet** will combine our Earth science assets and a NASA mission to understand the origin of Earth's oceans, continents, and the geologic conditions that allowed for the evolution of life.

**The Ocean Science Center** will consolidate our vast marine portfolio and the Ocean DNA big idea to create a suite of new tools, techniques and collections that will allow for rapid measurement of marine biodiversity.

**The People in Nature Experience** will immerse museum visitors in a dazzling display of global imagery and nimble story-telling that will drive home the reality and urgency of the climate and biodiversity crises while focusing on success stories that inspire visitors to understand the possibility of positive outcomes.



# A View for the Future continued

In addition to the four Signature Initiatives, we will also create a 'Big Ideas Incubator' to foster the development of future initiatives, with the overall aim of harnessing new technologies, expanding our role as a national museum, and deepening our partnerships with Smithsonian colleagues, federal agencies, corporations and non-profit organizations. Initially, we will focus on four areas for incubation:

**Genomics and Informatics** will enable us to increase access to our research collections and create a coordinated national infrastructure for genomics and digital collections.

**Community Science** will empower individuals across the nation and around the world to directly engage in the scientific process.

**Digital Education and Outreach** will connect us to homes and classrooms across the nation to make our Smithsonian digital content freely available.

**The Science of People in Nature** will broaden our understanding of how the relationship between people and nature has changed over time and across cultures and inform the development of new exhibition halls.





# A View for the Future continued

## How will the National Museum of Natural History be different at the end of this plan?

- We will use our unique strengths to tackle the big questions in nature, science, and society.
- We will have expanded our role as the national museum in education, collections, and research.
- We will operate a museum that is a national model for sustainability.
- We will have established a creative and collaborative 'One Smithsonian' culture.
- We will be a diverse and inclusive community that actively works to break down barriers.
- We will have fully embraced new digital, genomic, and analytical technologies.
- We will have a resilient financial base and effective systems to support our mission.



# A View for the Future continued

## What impact on the World will we have achieved by the end of this plan?

- Our audiences will have a deeper appreciation for the natural world, a better understanding of current threats, and a sense of what they can do to be part of a positive future for people and nature.
- Our audiences will be much more aware of what it takes to decrease carbon in the atmosphere, to regenerate ecosystems, and to prevent pandemics.
- Children, parents, and teachers will have access to rich digital education tools to inspire their learning about nature, science, and sustainability and be empowered to take part in community-led science projects that explore the big questions relevant to them.
- A new generation of science leaders from diverse backgrounds will be ready to explore the world and find solutions to tomorrow's challenges.
- The global research and education communities will have open access to the natural history collections and research through a digital knowledge platform linked to other major sources of information.
- Conservation leaders and environmental managers will have access to cutting-edge molecular tools to identify key areas for conservation, test which methods work best, and make informed decisions.

# Signature Initiatives

## STEM Education and Careers: The Inclusive Science Initiative

*Objective: Expand Access to Science Careers and put a diverse face on Smithsonian science*

A variety of historical barriers have resulted in a diversity imbalance in the fields of science, technology, engineering, and mathematics (STEM). For example, African Americans and Hispanics/Latinx together make up 31% of the population but represent just 13% of the STEM workforce. Direct engagement, professional experiences, mentorships, and training are critical success factors for all students who seek to enter the STEM fields.

The Inclusive Science Initiative is designed to provide high-quality paid internships and fellowships to promising students from traditionally underserved and underrepresented groups by partnering with specific high schools, colleges, and universities. All museum staff can provide their expertise and training to prepare these individuals for careers in museum or natural history science.

Opportunities for high school through post-graduate students will focus on training related to natural history and 21st century museum science. Peer-mentoring, science education, and communication training will link the age cohorts in a way that is mutually supportive and presents a variety of potential career pathways. An alumni program will track and support program graduates as they progress in their careers. High school interns will be drawn from schools in the DC-MD-VA region, while students beyond high school will come from the entire country.

Digital elements of the Initiative will target teachers and middle and high school students nationally to showcase STEM careers to a wide range of students. This part of the initiative will be tested with DC-area schools before expansion to our affiliate museums.

The Inclusive Science Initiative has three goals:

- Increase access to natural history and museum science careers to students from all backgrounds through programs of paid internships, assistantships, and fellowships.
- Share our expertise and enthusiasm with underserved communities through schools, learning communities, and local partnerships, piloting in DC schools before expanding to a pan-Smithsonian national education network.
- Create and distribute a portfolio of digital learning and teacher support resources through the Smithsonian's Learning Lab platform and other relevant channels.





# Signature Initiatives continued

## Earth and Planetary Sciences: Our Unique Planet

*Objective: Address fundamental questions about the origin of Earth and its Ocean, continents, and life and share that knowledge with the public through exhibits and public programs*

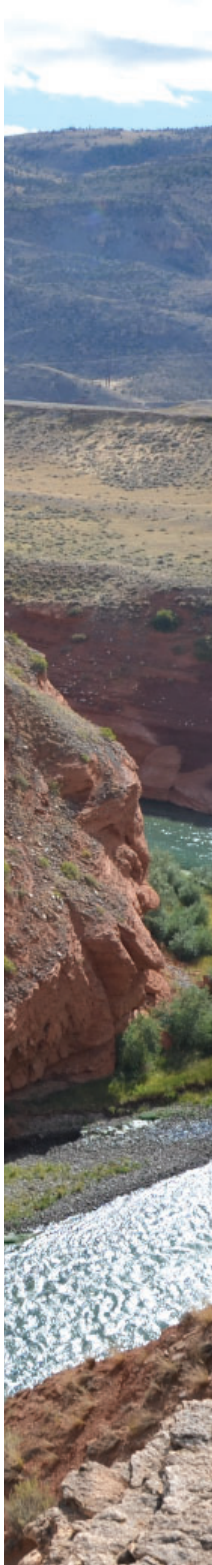
As a long-time leader in Earth and Planetary Science research, the museum pushes back the boundaries of our knowledge of our planet and solar system and inspires public audiences with new discoveries in this rapidly evolving field. It also offers exciting opportunities to amplify our reach and impact through collaboration with other Smithsonian museums and research centers, NASA, and others engaged in the pursuit of space exploration.

The centerpiece of Our Unique Planet is the analysis of a sample from the asteroid Bennu currently slated to arrive on Earth in September 2023 as part of NASA's OSIRIS-REx mission. Equally critical to this project is the focus on training of early-career scientists by the museum's Mineral Sciences team in the key scientific elements of the initiative:

- What was the source of the Earth's oceans?
- How did silica-rich continental crust first form?
- What was the role of minerals in the origin of life?

The research will be in two phases – from 2021-2023 and 2023-2025 – which correspond to the time before and after the arrival of a key sample retrieved from the Bennu asteroid. Insights from the Bennu samples will be enhanced by analyses of the oldest rocks on Earth and by samples from the museum's extensive meteorite collection.

These new discoveries will result in two new public-facing programs: A "Time Machine" virtual reality experience, giving audiences the opportunity to experience the early Earth; and enhancements to the museum's Hall of Gems and Minerals. On a longer timeframe, the project will provide the foundational scientific knowledge and inspiration for a brand-new exhibition about the origins of our solar system, Earth, and life itself that we expect to part of the next strategic plan.



# Signature Initiatives continued

## Marine Science and Conservation: The Ocean Science Center

*Objective: Develop new suites of tools to map ocean life and monitor ocean health, and consolidate the museum's marine research expertise and vast collections into a collaborative center to advance stewardship and the sustainable use of the ocean.*

Earth's ocean covers more than 70% of the planet's surface and is essential for humanity's survival, but it faces unprecedented human-mediated impacts from habitat destruction, pollution, over-fishing, industrialization, acidification and climate change. Warming of the ocean is driving more destructive storms and increasing the rate of sea level rise. Our ability to mitigate these threats relies on our ability to characterize what lives in any part of the ocean at any given time, and to identify the conditions necessary for their survival. New approaches, including environmental DNA and machine learning, promise to deliver real-time assays of marine biodiversity.

The museum has a unique set of ocean-related collections, field stations, scientific research programs, educational assets, expertise and exhibitions that are of broad value and utility to the scientific community, policy makers, and the public. To maximize these assets, we will establish the Ocean Science Center to convene, expand, and highlight the relevance of our diverse portfolio of marine expertise. A new Sant Chair of Marine Science will be hired to lead the Ocean Science Center.

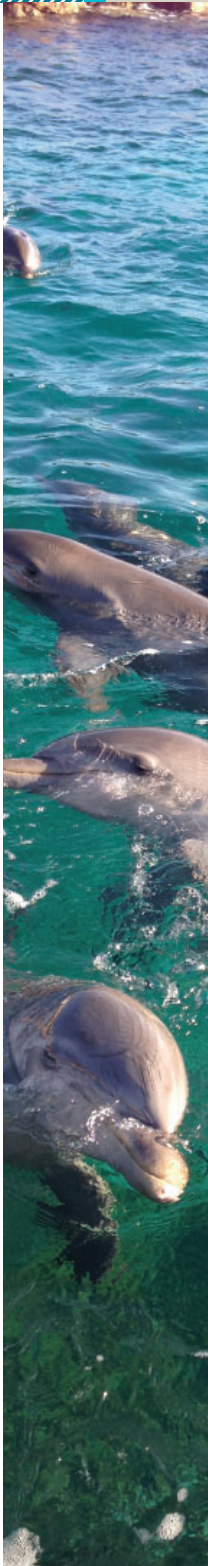
The Ocean DNA project will lead the global effort to develop a genomic toolkit to rapidly assess ocean health, and curate a DNA reference library to enable large-

scale surveys of marine life, especially of undiscovered "dark taxa" that may play a critical role in ecosystems. We will develop this toolkit which can be applied to discover new species, detect invasive species, monitor change, assess the effectiveness of marine reserves and management practices, and inform priorities for conservation.

The Ocean DNA project will catalyze change and action through sharing and advancing our knowledge of ocean science and will focus on three goals:

- Construct and curate a comprehensive voucher-based DNA reference library that leads to an unprecedented map of marine life.
- Provide a toolkit to assess ocean health and determine how marine diversity responds to change.
- Launch an ambitious national community science project that monitors change in marine life around America's coastlines.

With the addition of a new Sant Ocean Chair, and the newly launched Ocean Science Center, the museum is poised to provide leadership in marine research as we enter the UN Decade of Ocean Science for Sustainable Development (2021-2031).






# Signature Initiatives continued

## Climate Change and Sustainability: People in Nature

*Objective: Empower local and national audiences to become informed participants in discussions about climate change and sustainability.*



The natural world around us is changing at an unprecedented rate, with human population growth and climate change threatening species and habitats, as well as the resources and ecosystems services that underpin our society. The People in Nature Initiative will transform how the museum engages on-site and digital visitors on the most important challenge facing humanity over the next 30 years: how to achieve a sustainable future for ourselves and Earth's millions of species in the face of rapid climate change and sustained human population growth.

the People in Nature Experience—will combine digital imagery, geographical data, audience participation, storytelling, exhibitions, and personal narratives to equip our audiences with the information they need to understand the world as it is today and what it will be in the future.

Our ultimate goal is to empower and motivate citizens to become informed participants in the decisions that lie ahead for society, for them to understand the need for urgent action, and to give them the confidence they need to take action.

The key public component of the Initiative—

People in Nature integrates three core elements to provide comprehensive coverage of the major issues facing the planet. We will:

- Convene and curate programs and conversations about the environmental challenges we face, and the decisions that we need to make to ensure the continuation of life on a sustainable planet. We will seek to engage local and national audiences in this discussion through a variety of channels and technologies, depending on the needs of the audience.
- Deliver a series of provocative special exhibitions and related digital resources that will challenge audiences to reconsider their relationship with nature and the impact of humans on the future of our planet.
- Construct a major new experience at the heart of the museum. This exhibition will use cutting-edge technologies that combine an immersive visitor experience with a compelling examination of the consequences of climate change and population growth for society and nature.



# Big Ideas Incubator

As this plan's four Signature Initiatives are developed and deployed, new priorities will continue to emerge.

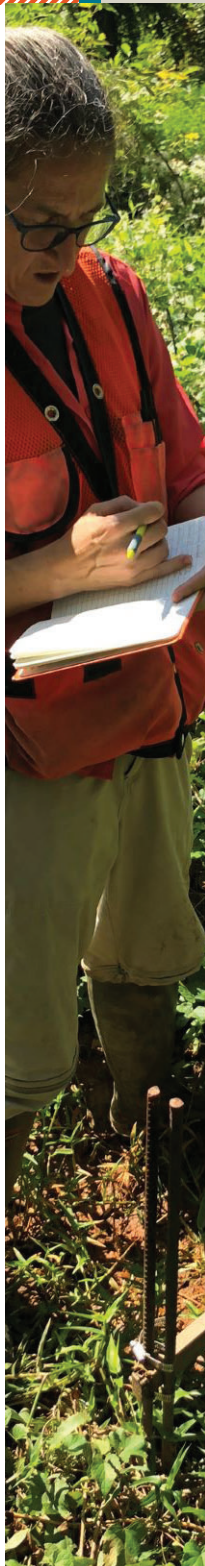
The museum will develop a Big Ideas Incubator to ensure our pipeline of new opportunities is focused, robust, and relevant. The Incubator will draw on ideas from inside and outside the museum to identify programs that reflect our values, advance our mission, and broaden our impact. It will also identify the funding sources and partners critical to these programs' success. The programs that emerge will be poised to become the Signature Initiatives of the future.

We will cultivate projects that will have an impact on science and society; harness the museum's unique assets; encourage collaboration within the museum, across the Smithsonian and beyond; deliver the museum's strategic priorities; and are attractive to external funders and supporters.

## Genomics and Informatics

Natural history specimens collected decades or even over a century ago are increasingly critical elements in understanding the biological, geological, and cultural diversity of our planet. Access to these specimens through digital, genomic, and analytical technologies continues to revolutionize how collections and their data are used in our own science and shared across the global research community—arguably making them more valuable than ever. We will develop genomics and informatics strategies

that leverage our unique strengths and we will work with national and international partners to scope what a coordinated national infrastructure for genomic and digital collections and their associated information platforms could look like. This will require significant investment in digitization of specimens, the development of facilities for new environmental collections, and the data science capacity required to aggregate and share these resources.





# Big Ideas Incubator continued

## Community Science

Community science is increasingly showing its power to both engage the public as citizen scientists as well as scale and revolutionize how we collect data on the natural world. By providing people with access to scientific tools and results, museums can vastly increase their reach and impact while also growing their constituencies. This is particularly true when community science is combined with digital platforms that allow

the collection and analysis of data at a continental scale. Our ambition is to develop a scientific project that harnesses the scale and breadth of community science at a national scale. We will work with partners to empower individuals to explore nature and answer questions only possible with the scale of data collection made possible by community science.

## Digital Education and Outreach

Digital technologies make it possible for the museum to make its scientific knowledge and public programs available to classrooms and homes across the nation. The COVID pandemic has rapidly accelerated our use of these technologies and has shown us what is possible, especially in the realm of education, virtual tours, and live interactions

with our experts. Our challenge now is to determine the right balance between our digital programming and our on-site and community programs. This is an area where there are huge opportunities for collaboration across the Smithsonian that make full use of pan-institutional platforms and partnerships.

## The Science of People in Nature

The relationship between people and nature has never been so important, yet these two topics are often studied separately. With expertise spanning the life, earth, and human sciences, the museum is well-equipped to develop a cross-disciplinary research environment to explore how the relationship between people and nature has changed over time and how it is understood by different cultures. We anticipate this project will also inform the redevelopment of our second-floor public galleries, which we expect to be a major focus of the museum's 2026-2030 plan.

Arguably the most important challenge that humanity faces over coming years is navigating a sustainable relationship

between humans and the other organisms, habitats, and ecosystems on which our well-being, society, economy, and happiness depend. The museum's unique position as a collections-based research institution with a substantial public audience affords us the opportunity to address the big questions that society faces and our fundamental understanding how people and nature interact.

The goal of this incubator is to develop a cross-disciplinary research environment that encompasses the many themes and program areas where the museum's science enhances our understanding of sustainability and the human relationship with the natural world.





# Strategic Priorities and Goals



# Strategic Priorities and Goals continued

## PRIORITY 1: MISSION SUPPORT

*Establish an inclusive culture that actively promotes creativity and diversity, and strengthen our mission-enabling operations, facilities, and relationships.*

A central concept of this plan is to nurture a collaborative 'One Smithsonian' culture across the museum and beyond to improve morale, teamwork, and collaboration. We will be guided by the Plan for Inclusion, Diversity, Equity, and Accessibility developed by the museum's Inclusion, Diversity, Equity, and Access (IDEA) Council. We will also undertake a major overhaul of our administrative structure to provide a modern working environment and support our administrative staff and the full museum community. In so doing we will build on the lessons learned during the pandemic to create a 'New Normal' environment in which we promote workplace flexibility, leverage digital communication platforms, prioritize the work-life balance of our people,

and improved communication across the community.

We will also work with colleagues across the Smithsonian and our embedded Federal partners to create effective and efficient systems for recruitment, promotions, travel, procurement, financial management and contracts, as well as improve our ability to manage our key facilities and buildings responsively and sustainably.

To increase our financial resilience, we will expand and diversify our sources of income; strengthen our fundraising capacity; and broaden our commercial enterprises to provide revenue streams that complement our federal support.

### Goal 1.1: Museum Culture

Foster a culture of collaboration, communication, and transparency to increase morale, teamwork and use of resources.

#### **One Smithsonian**

Promote a 'One Smithsonian' approach to delivering activities, developing new initiatives, and problem-solving by creating opportunities for collaboration and improving communication across teams and with embedded Federal partners.

#### **Administrative systems and clusters**

Create effective and efficient administrative structures and systems and introduce administrative clusters to support major areas of activity.

#### **Transparency and decisions**

Improve transparency by providing access to information on finances, resource management data, and decision-making across the museum.





# Strategic Priorities and Goals continued

## PRIORITY 1: MISSION SUPPORT continued

### **Goal 1.2: People and Careers**

Develop a holistic approach to managing our workforce that balances development and retention of existing staff with recruitment of new talent; supports our contractor, academic, volunteer, and partner communities; enables enhanced diversity; and incentivizes succession planning.

#### ***Recruitment and staffing plans***

Accelerate the rate at which we can hire staff and embed recruitment in broader plans to improve diversity and achieve sustainable long-term staffing plans.

#### ***Promotion and career development***

Retain our staff and advance the careers of our talent base by promoting and mentoring staff and providing training and development opportunities to create the next generation of museum professionals and leaders.

#### ***Performance and recognition***

Put in place robust systems of performance management and celebrate outstanding contributions through awards and other forms of recognition.

#### ***Volunteer community***

Develop a proactive plan to support our volunteer community across public and scientific programs and make our volunteer programs available to a wider array of people.

### **Goal 1.3: Diversity and Inclusion**

Improve diversity, equity, inclusion, and access across all aspects of our activity, so we better represent society, address societal inequity, and deepen our community relationships

#### ***A diverse and inclusive community***

Support the IDEA Council and implement the recommendations of the Plan for Inclusion, Diversity, Equity and Accessibility to increase diversity across our community and create a more inclusive and supportive working environment across all activity areas and levels.

#### ***Indigenous knowledge and decolonization***

Deepen partnerships with indigenous communities and address repatriation and decolonization issues.

#### ***Underserved and Underrepresented audiences***

Diversify our on-site and online audiences, using community partnerships to help support our effort to develop culturally relevant and accessible programs.



# Strategic Priorities and Goals continued

## PRIORITY 1: MISSION SUPPORT continued

### **Goal 1.4: Key Facilities and Sustainability**

Invest in our key facilities to maintain the long-term health of the infrastructure and put sustainability at the heart of the museum's activities.

#### ***Museum Sustainability and Capital Master Plan***

Work with the Smithsonian Institution to put sustainability at the heart of the museum's facilities and operations and deliver a campus-wide sustainability plan so that we can lead by example. Complete revisions to the NMNH and Museum Support Center (MSC) facility master plans to provide a roadmap for improvement and growth and support the development of the Suitland Collections Center Master Plan.

#### ***Research and collection spaces***

Improve research facilities and increase the quality of collection spaces in the long-term institutional master plan. Move the NMNH Greenhouse and complete the construction of Pod 6 at MSC.

#### ***Public spaces***

Begin to refurbish the infrastructure underlying the museum's 2nd floor halls and Baird Auditorium as part of the development of a new series of halls and facilities suited to convening scientific and public discussions.

### **Goal 1.5: Fundraising Capacity**

Increase our financial resilience and ability to pursue ambitious projects by diversifying our sources of revenue and strengthening our fundraising capacity.

#### ***Advisory Board and Development team***

Invest in the Development team and its work with the Advisory Board to increase our fundraising capacity to \$20 million per year to support a major fundraising campaign.

#### ***Foundations and corporations***

Establish new fundraising programs in collaboration with foundations and corporate supporters.

#### ***Commercial events and businesses***

Capitalize on the museum's position as a premier venue to grow our commercial events and other businesses to increase unrestricted funding.



# Strategic Priorities and Goals continued

## **PRIORITY 2: SCIENCE**

*Continue to expand the frontiers of our understanding of the natural world and take the lead in tackling the big questions of our time*

We are a scientific powerhouse and generator of knowledge about our natural world, people, and the planet. We comprise the largest concentration of collection-based expertise and the largest natural science collection in the world. This is complemented by our Smithsonian, Federal, national, and international partners and networks.

To achieve our full potential, we will balance the need to strengthen our core capacity in collection-based research and this plan's ambitious focus on new strategic initiatives with the commitment to work more effectively across our teams. A major focus will be implementing the recommendations of the 2020 Science Visiting Committee, which emphasized the importance of establishing a culture that promotes collaboration, building strong career tracks for students and staff from all backgrounds, and creating a sustainable leadership structure.

We will harness new technologies to strengthen our capacity in informatics and genomics, accelerate the digitization of the collection, and make more of our data available to the global research community. We will advance our knowledge, share its applications, and train the next generation of museum professionals.

Our science initiatives rely on the expertise and innovation of our staff, but many cannot be done alone. We will deepen and expand our existing partnerships and explore new ones that have a clear mutual benefit. We will deepen our relationships with other Smithsonian museums, units and research centers, with indigenous and underrepresented communities, our embedded Federal partners, colleges and universities, and other like-minded organizations.





# Strategic Priorities and Goals continued

## PRIORITY 2: SCIENCE continued

### **Goal 2.1: THE NMNH SCIENCE ENGINE**

Promote excellence by leveraging our combined expertise and resources; fostering collaboration across teams; facilitating effective use of resources and partnerships; and collaboratively pursuing external funding.

#### ***Transparency, communication, and teamwork***

Maximize the impact of NMNH science and collections through the creation of a more supportive culture through improved communication, transparency, and collaboration and the development of a shared vision for NMNH science. Advance global perspectives through collaborations with external parties.

#### ***External funding***

Leverage our position as the national museum and facilitate innovation workshops to develop collaborative research proposals in pursuit of major external financial support.

#### ***Strategic partnerships***

Deepen our partnerships with Federal agencies and Smithsonian colleagues and explore new strategic partnerships with external collaborators, including indigenous communities, universities, and other organizations that can help us realize our signature initiatives.

#### ***Communication of our science***

Highlight and share science stories that are accessible, raise awareness of our vast scientific enterprise, inspire our priority audiences, and foster partnerships with research and other communities.

### **Goal 2.2: Collection-Based Research**

Strengthen our core capacity and science leadership in collection-based research and develop innovative, high-impact, cross-disciplinary research projects.

#### ***Research capacity and leadership***

Strengthen research capacity in our core disciplines through targeted hiring, fellowships, training, and other academic appointments to increase and deepen NMNH scientific expertise.

#### ***Cross-disciplinary science incubators***

Maximize the impact of our research and strengthen collaborative work by supporting innovation-focused interdisciplinary teams and programs, including the established and new Signature Initiatives.

#### ***Core research infrastructure***

Align our investment in equipment and informatics and technology platforms with current and anticipated science priorities. Ensure that research stations can provide facilities and opportunities that respond to demands of ongoing programs and strategic initiatives.



# Strategic Priorities and Goals continued

## PRIORITY 2: SCIENCE continued

### **Goal 2.3: The National Collection**

Increase the relevance and use of the national collection with coordinated collection management and development programs, investments in future-facing collections, and improved digital access.

#### ***Coordinated curation and collection management, care and access***

Increase the coordination and efficiency of collection stewardship through investment in staff development, deepening collaborations with embedded federal agencies, and establishing common practices.

#### ***Collection development***

Grow and improve the national collection by implementing our Collection Stewardship Plan and building an archives and special collection function.

#### ***Digital, genomic, and environmental collections***

Accelerate the digitization and use of the collection with the development of high-throughput pipelines, the application of international data standards, and the acquisition of new genomic and environmental collections.

### **Goal 2.4: Information and Genomics**

Strengthen and further develop our informatics and genomics capacity so that the museum can better undertake the big-picture questions of our time while also making our data available to the global research community

#### ***Informatics***

Invest in informatics so that it spans collections, research, outreach, exhibits, and laboratories to integrate our natural history data with the global information community and to drive interdisciplinary research of the natural world.

#### ***Genomics***

Define museum genomics for NMNH and invest in major programs focused on question-driven biodiversity genomics, including developing associated bioinformatics capacity.

#### ***Data platform***

Make natural history collections and research data available to a global audience by creating a collaborative knowledge platform and linking them with other information sources.



# Strategic Priorities and Goals continued

## PRIORITY 2: SCIENCE continued

### **Goal 2.5: A Diverse and Inclusive Science Team**

Support the future of our core disciplines and increase participation by under-represented groups through internships and fellowships focused on career development for the next generation of museum scientific professionals

#### ***Scientific and professional training***

Develop and implement a plan for academic and professional training, including curricula for staff and volunteers that enriches their work experiences and outcomes.

#### ***Diversity among staff, fellows, students, and interns***

Increase diversity among staff, fellows, students, and interns through expanded recruitment and outreach through academic and community partnerships. Provide funding opportunities for each level of training.

#### ***University partnerships***

Strengthen and diversify postgraduate, graduate, and undergraduate internship and fellowship programs by forming strategic relationships with colleges and universities based on core disciplinary areas and strategic goals.



# Strategic Priorities and Goals continued

## PRIORITY 3: PUBLIC AUDIENCES

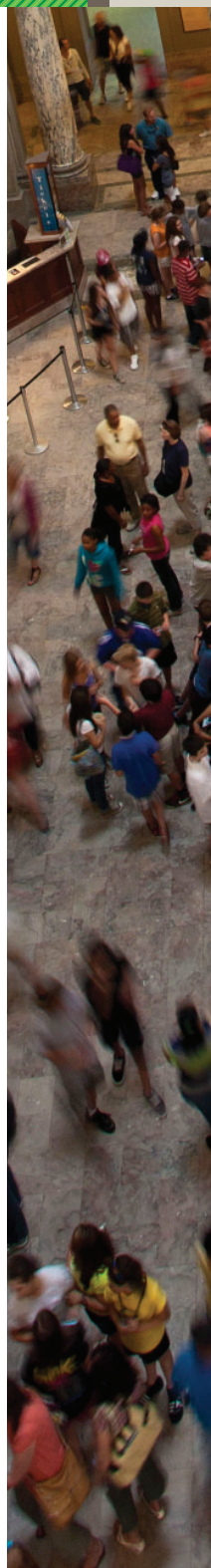
*Inspire people to appreciate their place in nature and empower them to engage on the pressing decisions that confront the global community and our planet.*

As the national museum we have a unique opportunity to engage vast public audiences throughout the nation and across the political spectrum about the big challenges impacting life on a sustainable planet such as climate change, biodiversity loss, and global pandemics.

Over the next five years we will combine our established strengths with innovative new approaches to meet this opportunity. We will deepen our understanding of our visitors and use new technologies and relationships to expand and diversify our audiences, reaching underserved communities and populations that are underrepresented in the sciences across the region and the nation. Our work during the COVID-19 pandemic has accelerated our use of digital platforms to engage broad audiences and we will now build on that approach, while also anticipating long-term changes in visitor behavior as a result of the pandemic and the need to create a safe 'New Normal' environment for our visitors.

Our priorities over the next five years will include new programs and products for pre-K-12 students and teachers in schools nationwide, participatory community science programs, and events to convene national conversations on the big decisions that lie ahead for society. Much of this work will be done in partnership with our Smithsonian colleagues via integrated pan-institutional programs, and with external technology and media partners.

Finally, in one of the most ambitious projects in this plan, we will create a new immersive experience at the heart of the museum that uses technology to engage and activate visitors on truly challenging topics like climate change, motivating them to think about the decisions that lie ahead for individuals and for society.





# Strategic Priorities and Goals continued

## PRIORITY 3: PUBLIC AUDIENCES continued

### **Goal 3.1: Audience Research and Visitor Experience**

Create a safe 'New Normal' environment for our visitors and deepen our engagement with our audiences, maximize our impact, and improve the experience of our visitors by using audience data and research to inform our public programs.

#### ***Audience data and research***

Deepen our relationships with our audiences by gathering and using data in a coordinated way to better understand their perspectives, values, and motivations and use this understanding to inform our public offerings and grow our audiences.

#### ***Visitor experience***

Create a 'New Normal' environment in which our visitors feel safe and deepen their experience by responding to visitor feedback, investing in core facilities, and activating our public spaces.

#### ***Long-term impact***

Measure the long-term impact of our exhibits, public and education programs, and maximize the benefit of our public engagement activities for our visitors.

### **Goal 3.2: Digital Outreach and Education**

Engage a global virtual community by making strategic use of digital technologies

#### ***Infrastructure***

Identify and invest in the technological and human resources necessary to deepen and expand the engagement of diverse virtual communities with our scientific and educational content.

#### ***Digital education***

Use digital technologies, including the Smithsonian Learning Lab platform, to provide enriching and culturally relevant learning experiences to pre-K-12 students and empower teachers across the nation through an emerging network of school districts working in partnership with the Smithsonian.

#### ***Science communications***

Amplify our reach via collaboration across departments to ensure that our science is shared in a relevant, accessible, and timely way across platforms, including the Smithsonian Channel.



# Strategic Priorities and Goals continued

## PRIORITY 3: PUBLIC AUDIENCES continued

### **Goal 3.3: Schools, Families and Communities**

Capitalize on the museum's unique resources to enrich the experience of pre-K-12 students through their families, teachers, and local communities.

#### ***Local schools, families, and communities***

Provide enriching and culturally relevant experiences to local school children and families that invite audience co-creation and include cross-disciplinary experiences, and engage with underserved communities through onsite, online, and community programs.

#### ***Teach the teachers***

Empower teachers to tackle contemporary topics in science by developing and delivering resources and training opportunities that reflect a breadth of perspectives and worldviews.

#### ***National leadership in science education***

Provide national leadership to advance the field of informal-science learning by convening learning researchers, evaluators, and practitioners to develop a cross-institutional framework for assessing and understanding program impacts.

### **Goal 3.4: A National Museum**

Deliver on our role as the nation's natural history museum and expand our reach by empowering communities across the nation to engage with the natural world.

#### ***Convening the conversation***

Use the Smithsonian's convening power and our improving understanding of our audiences to catalyze new conversations between scientists, educators, and the public on topics where we can take a national or global leadership role.

#### ***Community science***

Create programs and build national partnerships that empower people to understand and address community-driven questions about their natural environment.

#### ***Smithsonian Affiliates and Local Natural History Museums***

Expand our reach across the United States by co-developing educational products and programs that engage local communities with Smithsonian Affiliates, local natural history museums, and their community partners



# Strategic Priorities and Goals continued

## PRIORITY 3: PUBLIC AUDIENCES continued

### **Goal 3.5: Exhibitions and Experiences**

Make full use of our public spaces to inspire our visitors to think about their roles in addressing the big ideas in science, nature, and society through innovative exhibitions and experiences.

#### ***Exhibitions and existing halls***

Update and refresh our exhibition halls in light of developing knowledge of the natural world and present a series of temporary and DIY exhibitions to challenge the way our visitors think about the big question in science and society.

#### ***The People in Nature experience***

Create a new immersive experience to engage our visitors with the biggest challenge of our time: mapping a sustainable future for ourselves and other species in the face of rapid climate change and human population growth.

#### ***A Reimagined 2nd Floor***

Initiate the process to develop a new series of halls on the 2nd floor of the museum that focus on the changing relationship between people and nature globally.

# Implementation

*This strategic plan is intended to be a living document that the museum’s leadership and community will use to identify priorities, make decisions about resources, and organize how we work. We will use the objectives identified in this plan to guide our annual goals throughout the strategic planning period.*

We will ask all of our teams to create high-level departmental annual plans with annual goals that reflect their role in delivering the broader plan.

We will implement the plan using a phased approach, and the order of activities will reflect inter-dependencies between elements, as illustrated in the table below. The early phase (years 1 and 2) will focus on foundational projects and activities that are

closely linked with safe COVID-19 re-opening plans for our community and the public, and pan-Smithsonian initiatives. In the middle phase (years 2 to 4) we will begin those projects that require that sound foundations, such as a strengthened fundraising capacity. In the later phase (years 4 and 5) we will move into the delivery phase of our biggest projects, which includes planning the redevelopment of the public exhibit halls on our second floor.

## Implementation of the strategic plan with respect to timing, responsibilities, and resources

Elements	Timing			Responsibility	Resources and Fundraising			
	Early Phase	Middle Phase	Late Phase		Resources Required	Existing Resources	New Federal	New Trust
Mission Support	Museum Culture			Operations	\$\$			
	People and Careers			Operations	\$			
	Diversity and Inclusivity			Operations	\$\$			
	Fundraising Capacity			Development	\$\$			
	Key Facilities and Sustainability			Operations	\$\$\$\$			
Science	Science Culture			Science	\$\$			
	Collections-based Research			Science	\$\$\$			
	The National Collection			Science	\$\$\$\$			
	Informatics and Genomics			Science	\$\$			
	Advanced Training			Science	\$\$			
Public Audiences	Audience Research and Visitor Experience			Comms, E&O, Exhibits	\$			
	Digital Outreach and Education			Comms & E&O	\$\$			
	Schools and Communities			E&O	\$\$			
	National Museum			E&O	\$\$			
	Exhibits			Exhibits	\$\$\$\$			

Notes. Resources required: \$ = <\$2m; \$\$ = \$3-10m; \$\$\$ = \$11-25m



## Implementation continued

The table on the previous page also shows the departments with responsibility for leading the design and delivery of each major element of the plan, typically working with other departments, as well as the estimated scale of resources required to deliver the plan objectives. For clarity, we outlined anticipated resources using the following categories:

**Existing resources:** Long-term federal and trust resources including federal allocations and pay-outs from existing endowments.

**New federal resources:** Includes new capital and non-capital federal allocations to the Smithsonian, in addition to support secured from centrally-held Smithsonian federal funds, and partnerships with federal agencies or funding bodies.

**New trust resources:** Including commercial income and contracts, science and education grants, foundation awards, corporate sponsorships, membership and major gifts.

This high-level analysis of resource requirements will be used to guide the museum's next fundraising campaign and will be aligned with the pan-Smithsonian capital fundraising plan as well as pan-Smithsonian priorities and initiatives. We will also be developing a series of additional communications tools to coordinate our plans with our Smithsonian colleagues and to engage our external partners and supporters.



# Strategic Plan Milestones



## Mission Support

- Centralize the museum's administrative and financial structure and systems by the end of 2022.
- Develop a close relationship with central Human Resources and resolve the hiring and promotions backlog by the end of 2022.
- Put IDEA principles at the heart of the museum's culture and increase representation from BIPOC groups among interns, fellows, research associates, and new federal and trust hires year over year.
- Take a leadership position in Museum sustainability practice and revise NMNH and MSC Facilities Capital Master plans to provide roadmap for improvement in collections, research and public spaces by the end of 2023.
- Raise \$100 million through fundraising over the period of the plan and build an ongoing capacity to annually generate: \$20 million through fundraising, \$5 million through commercial activities, and \$10 million through scientific and education grants.

## Science

- Strengthen relationships with external partners and Smithsonian colleagues as evidenced by collaborative projects in research infrastructure, joint investigations, and funding proposals.
- Lead collection-based research scholarship both nationally and internationally by publishing 400 scientific papers/year, with at least 20% in high impact journals.
- Digitize 500,000 specimens/year focusing on collections that inform environmental change, planetary composition, marine biodiversity and cultural diversity.
- Develop new tools to deliver access to, and analysis of, our natural history data by making investments in genomics, informatics, expertise and partnerships.
- Expand and diversify our mentoring programs through partnerships with educational institutions and support at least 20 fully-funded college-level internships each year.

## Public Audiences

- Maximize the impact of all our public programs by conducting two major learning research projects to help understand how people learn science.
- Offer digital and onsite K-12 learning experiences five days a week during the school year to expand student understanding of science and the scientific process.
- Design five new K-12 STEM education programs and make at least 20 fully-funded internships available each year to high school students from underrepresented populations.
- Increase awareness of the global impact of human activities on nature by staging at least 2 special exhibitions/year (with associated digital and/or DIY content).
- Collaborate with technology and media partners to create and present The People in Nature Experience by 2025.

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