Statement of Dr. David J. Skorton, Secretary of the Smithsonian Institution
On the National Air and Space Museum Revitalization and Collections Storage
Committee on Administration, U.S. House of Representatives
June 22, 2016

Thank you Chairman Miller for the opportunity to testify before your committee today. We all appreciate the continued generous support of the Congress and your confidence in the Smithsonian to understand, preserve and tell the story of America and inspire new generations to achieve the American Dream. Your investment in the Smithsonian is an investment in advancing the civic, educational, scientific, and artistic life of our nation.

Since the Smithsonian was established in 1846, we have benefited from a unique and enduring public-private partnership. From care and display of the Star-Spangled Banner to research on the Zika virus, we take our obligation to the American people seriously and leverage Federal appropriations with private support to expand and enhance our reach and capabilities.

Today, at the Committee's invitation, I will focus on our plans for a major revitalization of the National Air and Space Museum's building on the National Mall -- one of the world's most visited museums and a showcase for American achievement and ingenuity. In a single place, the public can view Orville and Wilbur Wright's original 1903 Flyer, the Apollo 11 capsule and a moon rock the mission's astronauts brought back, John Glenn's Mercury Friendship 7 capsule, Amelia Earhart's Lockheed Vega, Robert Goddard's rocket equipment, and the Air Force X-15 that bridged the gap between human flight within the earth's atmosphere and human flight into space.

Before discussing in more detail our plans, I would like to spend a few moments on some general background on the history of the museum beginning just after the close of World War II. In 1946, Congress passed, and President Harry Truman signed, a bill establishing the Smithsonian's National Air Museum to memorialize the development of civil and military aviation; collect, preserve, and display aeronautical equipment; and provide educational material for the study of aviation.

While searching for a permanent location, artifacts were displayed and stored at several locations, including the Smithsonian's Arts and Industries Building. With the advent of the Space Age, Congress expanded the scope of the museum's mission and, in 1966, the name was officially changed to the National Air and Space Museum.

As the nation's bicentennial approached, Congress determined that the museum's building should open in time for the celebration, and in 1971 passed a $41 million appropriation to construct a new building. Despite that tight deadline, the museum opened its doors on July 1, 1976. Now, four decades later, the National Air and Space Museum on the National Mall hosts over seven million visitors annually.

However, the passage of time and the many millions of visitors have taken their toll, and the museum is in dire need of revitalization. The building's mechanical systems—originally designed to

accommodate two million visitors annually-- are 40 years old and have exceeded their useful lives. New systems are now needed to accommodate continued visitor demands and maintain proper environmental conditions for collections. The need for these new systems was not unexpected and the Smithsonian had planned to request funding accordingly. However, in preparing for the systems replacement project, we discovered that many of the building's exterior stone panels were warped and/or cracked requiring the replacement of the entire stone façade.

We expect that the planning and design phase of the building revitalization project will be completed by July 2017 and we will be able to learn more about the scope of the project and refine the cost estimates as we progress through that. Originally, we anticipated that replacing the building systems would cost approximately $250 million and be spread over several years. As we've learned more about the condition of the building and the logistics of protecting the collections, our cost estimate has increased. Now, with the added complexity and cost of the exterior stone replacement, the current estimate for the construction portion is $676 million. This estimate reflects that additional life safety systems need replacement, rather than upgrades, to be code compliant; that the planned mechanical, electrical and plumbing upgrades are more invasive to the building's interior walls and ceiling than anticipated; and that more artifacts will require relocation during construction.

We expect the construction will take six to seven years.

Four key elements are driving our project budget:

Ensuring Continued Public Access. First, a major priority during revitalization is to allow public access to as many of the museum's iconic objects as possible. Americans, especially young Americans, come to Washington and expect to visit the National Air and Space Museum and we believe that we must not disappoint them. To achieve that, construction in the museum will be sequenced along seven zones beginning with the west side of the museum and moving east. This approach will allow for at least 50 percent of the museum to be open to the public while the work progresses, but will also add complexity and cost to the overall project.

Modernizing Failing Building Systems. Second, we have long recognized that the building's systems –air handling, humidification, plumbing, and electrical – were overtaxed and their useful lives exceeded. Almost 30 percent of the project's cost will support the installation of new energy efficient building systems which will enable the Smithsonian to meet today's sustainability goals.

Replacing Defective Exterior Cladding. Third, early in the design and planning phase, our engineers discovered that the building's marble cladding was warping and cupping. Because the stone is too thin, it cannot be reused. Replacing the stone with an identical or similar material and of an appropriate thickness adds an unanticipated $49 million to the construction cost.

Protecting the Collections. Finally, we must store and protect the museums' collection during construction. In FY 2017, we request additional funding to build the first storage module of a "Dulles Collections Center" adjacent to the museum's Udvar-Hazy Center in Chantilly, Virginia. The construction cost of this module is estimated at $50 million and is not included in the construction estimate for the Mall building revitalization. That said, the availability of quality collections storage space does positively

impact the construction budget by obviating the need to rent short-term collection storage space. And, at the conclusion of the project, the module will remain in use to house artifacts currently stored at aging "temporary" buildings at the Garber facility in Suitland, Maryland.

The National Air and Space Museum Revitalization Project is the Smithsonian's most costly to date. We recognize that Federal resources are scarce and in determining the best way forward, we considered many alternatives including simply demolishing the current building and erecting a new one. According to independent experts, however, doing so would both cost more and require the museum to be completely closed to the public for about nine years. It would also require that we conserve and move all the artifacts to alternative storage. The phased approach we selected, allows the museum to protect more than half of the artifacts "in-place," with only the remainder requiring temporary storage. Moreover, the Smithsonian would lose significant revenue from museum shop, restaurant, theater, planetarium and simulator operations if the museum were closed to the public.

We expect the project to be funded by Federal appropriations in the same manner as other Smithsonian revitalization projects. And, as with the public-private partnerships that made those projects successful, the Smithsonian is committing to raise an additional $250 million from private sources to support the complete redesign and fabrication of all 22 galleries to be more imaginative, stimulating and technologically capable settings for the world's foremost aviation and space collection. New exhibitions will have richer content, created to engage visitors of varying ages and backgrounds and to emphasize the importance and relevance of flight to their lives. Among those new exhibitions will be "Destination Moon," focusing on the Apollo program. The spacesuit of Neil Armstrong, the first human to walk on the Moon, will be encased in a state-of-the-art, environmentally controlled case, which will preserve the fragile artifact, even as millions view it.

I believe that our approach to revitalizing the National Air and Space Museum is further evidence that the Smithsonian is becoming more innovative, nimble, and responsive to the public. We face a future that holds both exciting opportunities and imposing challenges. I am confident that with the continued support of the Congress and the Administration, the Smithsonian will be an even more important, relevant, and unifying presence in an increasing diverse and vibrant America.

Thank you for the opportunity to testify today.