STATEMENT OF
THE HONORABLE STEPHEN T. AYERS, AIA, LEED AP
ARCHITECT OF THE CAPITOL

Regarding Fiscal Year 2012 Appropriations
For the Architect of the Capitol

Subcommittee on the Legislative Branch, Committee on Appropriations
United States Senate

March 3, 2011

Mr. Chairman, Senator Hoeven, and members of the Subcommittee, thank you for the opportunity to testify today regarding the Architect of the Capitol's (AOC's) Fiscal Year 2012 budget request.

I would like to begin by expressing my thanks to this Subcommittee and to the Congress for its support of the AOC over the past several years as we worked to fulfill our mission of serving the Congress and the American people by maintaining and preserving the wonderful historic treasures entrusted to our care.

We know first-hand the challenges of preserving historic buildings and planning for current and future requirements. It requires ingenuity, craftsmanship, perseverance, astute planning, diligence, and judicious management of resources. Our staff works around the clock to provide a safe and accessible environment for all who work and visit here.

With Congress's support, significant investments have been made in the buildings and infrastructure. Today, we face even greater challenges as the facilities continue to age and our mission continues to expand. In fact, we currently have a backlog of nearly $1.5 billion in Deferred

Maintenance and Capital Renewal projects that, if left unaddressed over a significant length of time, could greatly impact safety and security across the Capitol campus.

As steward of the Capitol campus, I know that investment in our aging and historic infrastructure is vital. However, we do realize that the current fiscal environment presents a very difficult challenge for Congress, the AOC, and the American public to do more with less funding. Our Fiscal Year 2012 budget request reflects this challenge. We have carefully and systematically prioritized projects and meticulously developed our operational funding.

To further ensure that we make the maximum use of every taxpayer dollar, we continue to identify additional cost savings and efficiencies, and to aggressively address the most effective way to use limited resources. We have implemented comprehensive performance measurements and metrics for nearly every aspect of our organization and these have led to significant agency improvements and cost savings. This data-driven management culture permeates our agency and gets results. For example, by improving our internal controls and requiring more extensive reporting, we have dramatically decreased leave errors in our time and attendance process. We also have established goals to improve efficiencies in our operations, such as our efforts to increase procurement opportunities for small businesses. In Fiscal Year 2010, we exceeded those goals by awarding over $20 million in contracts to small businesses.

Assisting me in these efforts is our Chief Operating Officer, Christine Merdon. Ms. Merdon joined the AOC in September 2010, and she brings a wealth of experience to our organization from both the public and private sectors, including small business acumen.

She began her Federal career in 1981 as a cooperative education engineering student for the Navy. After earning her Bachelor of Science degree in 1987, from the University of Maryland in Civil Engineering, she continued her career with the Navy as a project engineer and project manager. In 1998, she received a Master of Science degree in Civil Engineering.

In 1990, she joined the White House Military Office as a Project Manager responsible for managing classified design and construction projects at the White House, Camp David, and other Presidential Support Facilities. In 1998, Ms. Merdon was hired by Clark Construction, LLC, where she was

project manager and superintendent for numerous projects including the American Red Cross Headquarters, Bethesda Place II, and the renovation of Baltimore's historic Hippodrome Theater. Ms. Merdon joined McKissack & McKissack in 2000, where she ascended to the role of Senior Vice President of Program and Construction Management. Her responsibilities included operations and business development for program and construction management contracts in Washington, DC, Chicago, Illinois, and Los Angeles, California. There she was responsible for the successful management of more than $11 billion in major construction projects and programs including: Washington Nationals Major League Baseball Stadium, O'Hare Modernization Program, Eisenhower Executive Office Building life-safety upgrades, Martin Luther King, Jr. National Memorial, Smithsonian Institution's National Museum for African American History, and Lincoln and Thomas Jefferson Memorial Renovations.

Over the past several months, Ms. Merdon and I have been working to save the taxpayers time and money. For example, we reduced our inventory of supplies on hand from $56 million to $7.5 million. We are also consolidating Information Technology equipment agency-wide and have eliminated more than 150 printers and fax machines over the past 18 months. We have successfully leveraged the use of performance specifications to avoid unnecessary design fees for several Senate projects, and we are using in-house staff on many of our major construction projects, which has resulted in saving hundreds of thousands of taxpayer dollars.

We also modified how we staffed the post-election office moves, bringing on temporary staff versus contracting out for the services, which resulted in significant savings. During one of the hottest summers on record last year, we expanded our energy curtailment program from a few hours on "gold days" to 24 hours a day, 7 days a week during state work periods. In addition, we have utilized public-private partnerships to finance energy reduction projects, allowing us to invest appropriated funds in other priority projects. At the Capitol Power Plant, we utilized a "free cooling" initiative where we used cold, outside air to create chilled water without running the chillers, thereby conserving electricity and saving money. We also renegotiated several leases to get the best rates, and we have looked to reduce staff through attrition where we can without impacting our ability to achieve our mission.

Fiscal Year 2012 Capital Budget Request

In addition to implementing these operational and business process efficiencies, we have carefully and meticulously prioritized projects and operational funding.

For example, in Fiscal Year 2010, we examined all of our existing accounts, worked to identify available funds from projects that were nearly complete, and took on additional risk by decreasing construction contingency funding in some cases. Through this effort, we were able to fund nearly $15 million in new projects with existing resources, further decreasing our need for Fiscal Year 2011 funding. This, in turn, enabled us to further decrease our Fiscal Year 2012 request. Moving forward, we will continue to evaluate our ongoing projects, assess associated risks to Congressional operations, and continue to find ways to fund projects with existing funds.

However, we also identified projects or requirements that could be deferred, albeit not without significant risk. As funding is delayed, the requirements will worsen, the risk will escalate, and when funded, the projects will be more costly.

As a result of these exercises, we are requesting funding for only the most urgent projects and operational shortfalls. Our Fiscal Year 2012 request of $706 million is nearly $50 million lower than our Fiscal Year 2011 request, and represents a 6.5 percent decrease from our Fiscal Year 2011 request.

The Fiscal Year 2012 budget request reflects the highest requirements to prevent or delay further deterioration and system malfunctions and/or failures. We have included more than $7 million for projects to improve security on the Capitol campus, and $38.4 million for life-safety projects.

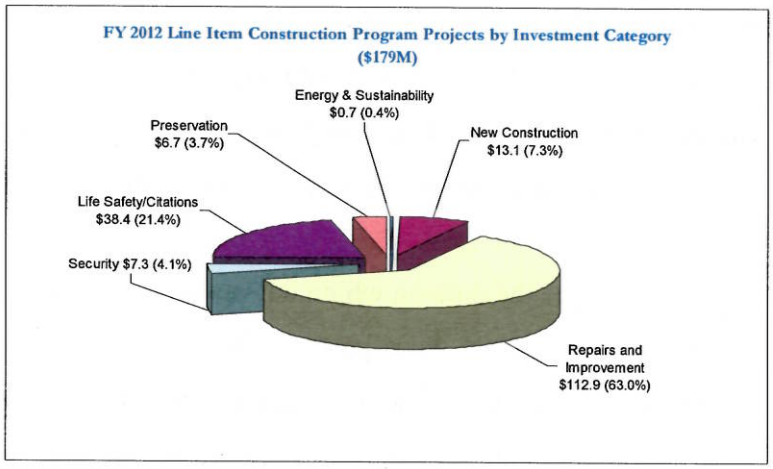
As I noted earlier, we have identified projects that might be deferred, but we have also assumed a level of risk in doing so. We will rely on our operating budgets to manage these risks. This will enable us to continue to maintain and sustain equipment, components, and systems; however, it

would not guarantee that we could provide the necessary replacements in the event of system failure.

Capital Budget Request and Project Prioritization

We currently have a backlog of nearly $1.5 billion in Deferred Maintenance and Capital Renewal projects. One of our greatest challenges is to prioritize our efforts to ensure every taxpayer dollar goes toward the most important work. We have developed a world-class project prioritization process that ranks these projects based on the condition of the facilities, and the level of maintenance required to ensure they remain functional and viable working environments.

This triage process for facilities attends to the most serious issues first, while addressing the necessary life-safety issues, security requirements, energy-savings projects, historic preservation measures, and the needs of our clients, while deferring the growing need for Capital Improvement and Capital Construction projects until later.



We believe we have built our Fiscal Year 2012 budget that best balances these needs and requirements in these fiscally-constrained times. We are requesting $179.2 million for capital projects, which is a $37 million or 17 percent decrease from the Fiscal Year 2011 capital projects request. We also are recommending that an additional $129 million in necessary work, which is ready to proceed, be deferred to a later fiscal year due to the austere budget environment.

We have several tools that we use to assess which facilities need emergency care versus those that can be nursed along until funding becomes available to address specific Deferred Maintenance and/or Capital Renewal projects in those particular buildings. These tools include Facility Condition Assessments, the Capitol Complex Master Plan, Jurisdiction Plans, and the Five-Year Capital Improvements Plan, which examines phasing opportunities, project sequencing, and other

factors to better facilitate the timing of the execution of major Deferred Maintenance and Capital Renewal projects.

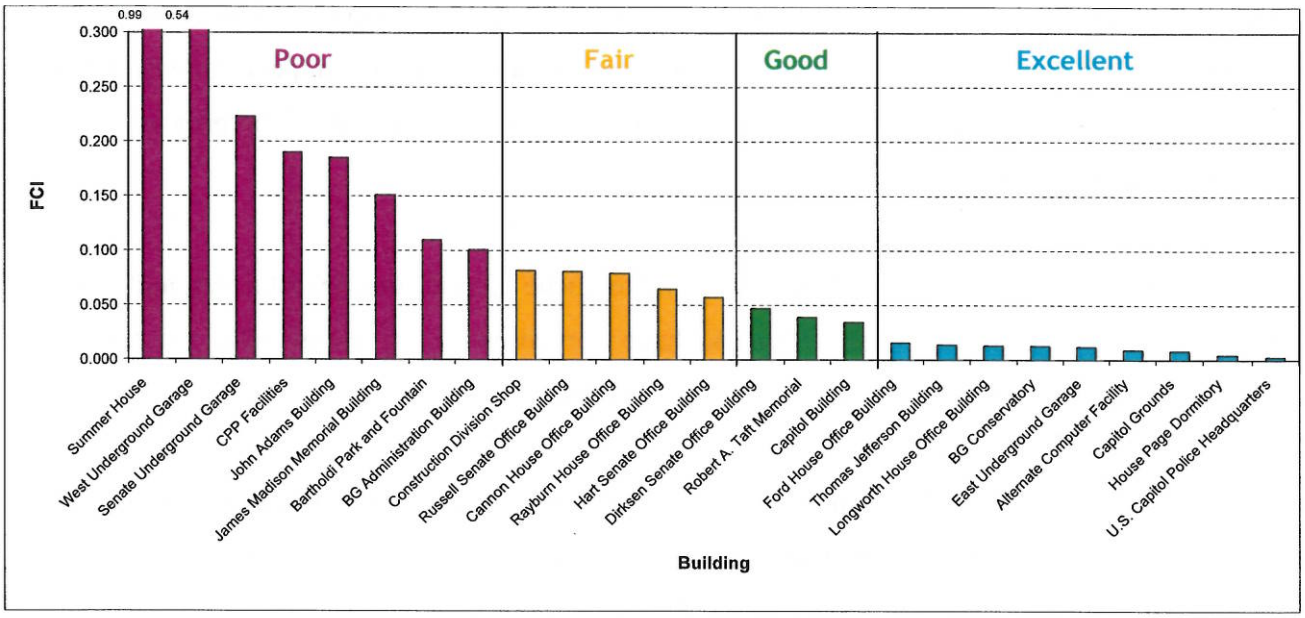
Our comprehensive prioritization process rates projects on a number of objective factors to produce an overall hierarchy of importance. During this process, projects are classified by type and urgency. The projects are then scored against six criteria: security; safety and regulatory compliance; historic preservation; mission; economics, and energy efficiency and environmental quality.

We rank projects based on a composite rating consisting of classification, urgency, and project importance. This year, we also applied a criticality and risk decision model to the overall prioritization list, and the resulting outcome was used as one filter to inform which projects should be included in the Fiscal Year 2012 budget request. We also recognize that our facilities need life-safety, security, and functional improvements to provide a safe working environment to support Congress's mission, and our request reflects improvements in those areas.

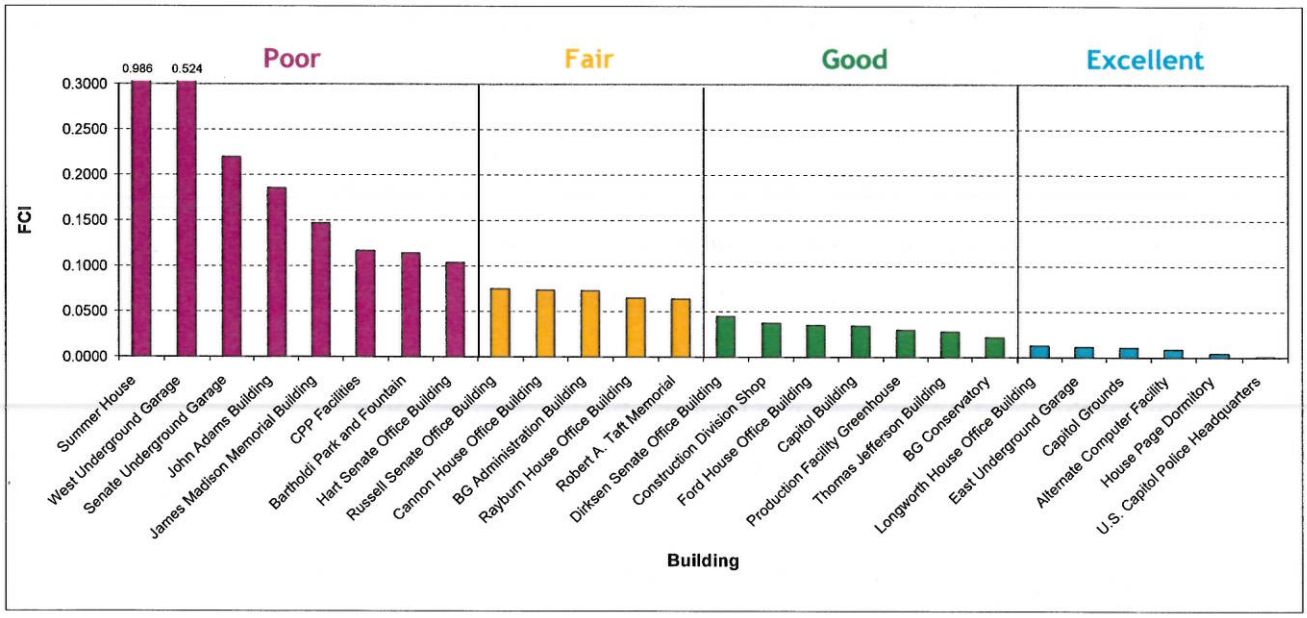
To further refine the data on which our planning is based, for the past several years we have conducted independent, third-party Facility Condition Assessments. These assessments identify the most critical issues in the facilities, and the objective data collected during this process helps us identify the urgent needs that must be addressed.

The charts on the next page compare the Facility Condition Index from Fiscal Year 2009 to Fiscal Year 2010. While the condition of the majority of Congressional facilities, which are rated poor or fair, have not changed significantly, facilities once rated as excellent are beginning to trend downward. In Fiscal Year 2009, nine buildings were rated in excellent condition. In Fiscal Year 2010, there were just six. In Fiscal Year 2009, three buildings were listed as good. Now there are seven.

Fiscal Year 2009 Facility Condition Index Chart



Fiscal Year 2010 Facility Condition Index Chart



FCI Legend

Over 0.10	=	Poor
0.05 – 0.10	=	Fair
0.02 – 0.05	=	Good
Less than 0.02	=	Excellent

Without regular and prudent investments made in these facilities, this unfortunate trend will continue, and the deterioration will continue, possibly to the point of impacting Congressional operations. We will work to reduce the deterioration to avoid operational impacts, however, in this fiscally-restrained climate; we will need to focus resources on those activities and projects that most directly support Congress.

To provide us with a 20-year, strategic look ahead to queue up priorities, investments, and projects, we use the Capitol Complex Master Plan. We have worked with Congress over the past several years to develop the Master Plan and its related Jurisdiction Plans.

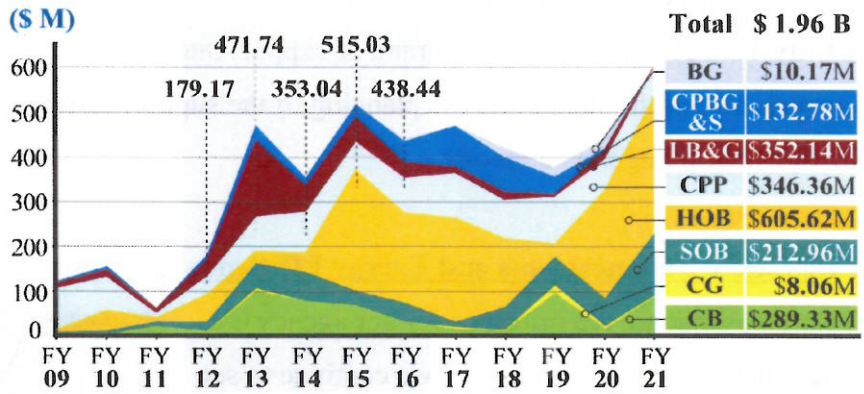
There are nine Jurisdiction Plans that describe the facilities that are maintained and improved by each jurisdiction, detail the current use of space, and identify long-term facility needs of each jurisdiction. These plans help us make future decisions about facility renewal requirements and new projects. For example, there may be instances where major, whole building renovations should be undertaken rather than a myriad of smaller projects.

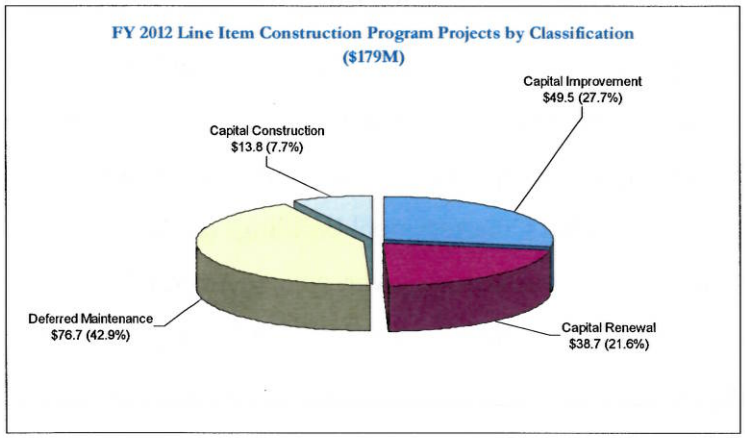
The Capitol Complex Master Plan assumes incremental decision making; providing the AOC and Congress with a blueprint for facility-related decision making and investment. It is an important tool because it:

- Establishes stakeholder goals and direction on key decision points.
- Assesses physical condition and capacities of buildings.
- Identifies short- and long-range facility requirements.
- Addresses sequencing issues.
- Guides the Capital Improvements Plan and funding requirements.
- Manages stakeholder and building occupants' expectations.

The Five-Year Capital Improvements Plan helps us meet several goals by analyzing all of the facility requirements, grouping them into logical and economical sequencing and phasing, prioritizing the resulting requirements using a set of objective criteria, and establishing measureable outcomes.

The chart on the right provides a snapshot of proposed funding requests in future years by appropriation. If investments are not made to address the backlog of Deferred Maintenance and Capital Renewal projects, the bow wave will continue to grow into a tidal wave of projects that could potentially lead to catastrophic results including system failures or building closures.





A large portion of our Capital Budget request is to address Deferred Maintenance -- $76.7 million or nearly 43 percent -- that is critical to prevent or delay further deterioration. Several of these Deferred Maintenance projects that we are requesting funding for in Fiscal Year 2012 also address life-safety and security issues.

These include:

- Utility Tunnel Improvement Program.
- Sprinkler system installation, Thomas Jefferson Building.
- Skylight replacement, Hart Senate Office Building.
- Structural repairs to underground garage, John Adams Building.
- West House Underground Garage rehabilitation.
- Modernize mechanical systems, Dirksen Senate Office Building.

Other capital projects will help improve energy efficiencies, and thereby help save money, such as the relocation and replacement of 35-year-old chillers at the Capitol Power Plant, and upgrading

utility distribution system components throughout the Capitol campus, including completing the Utility Tunnel Improvement Program, or support our government's time-honored traditions with the construction of the stands and the planning of the support activities associated with the 2013 Presidential Inaugural ceremony.

Life-Safety Enhancements and Energy Efficiency Improvements

Two areas that are top priorities for our agency are safety and energy reduction, and we continue to see dramatic results due to our efforts in identifying and managing risks, and increasing efficiencies and reducing energy consumption, which in turn, saves taxpayers money.

Just as we have a robust and successful project prioritization process, we have a focused and proactive process in place to abate hazards, and have made substantial improvements to the Capitol campus infrastructure to enhance safety. With Congress's support, we have made significant investments to improve fire and life-safety systems within Congressional buildings and on the Capitol Grounds. As a result, the Capitol campus is safer today than ever, as evidenced by a 59 percent reduction in hazards identified by the Office of Compliance since the 109th Congress. This is particularly significant because the amount of square footage of facilities that we maintain has dramatically increased over the same period of time. Between the 109th Congress and the 110th, the physical inventory that the AOC maintains was increased by 10 percent in additional square footage. During the 111th Congress, another three percent was added.

Moving forward, we will continue to partner with Congress to execute life-safety projects in a planned manner that is fiscally responsible, efficient, and effective in order to further protect those who work in and visit the Capitol campus.

Capitol-wide energy reduction efforts have yielded great results for the fifth year in a row. In Fiscal Year 2010, Congress met the Energy Independence and Security Act of 2007 (EISA 2007) requirement of reducing energy consumption by 15 percent.

To reduce reliance on direct appropriations, we are using privately-financed public-private partnerships, known as Energy Savings Performance Contracts, to fund the project work that needs to be completed to conserve resources and reduce energy consumption. For example, in the Senate, we have begun construction on the following energy conservation projects: installing 31,000 energy-efficient lighting fixtures in each of the Senate Office Buildings; upgrading existing pneumatic and electronic controls for heating, ventilating, and air-conditioning systems with direct digital controls; replacing existing transformers with high-efficiency transformers, and installing removable insulation covers for steam valves to reduce heat loss.

After implementation of all energy conservation measures over the 36-month construction period, the Senate Office Buildings are estimated to potentially realize a 36 percent reduction in total energy consumption, and approximately $3.9 million in annual energy savings. We anticipate that this investment will save approximately 7 percent annually toward the EISA 2007 goal.

In the House Office Buildings this past year, we installed 30,000 energy-efficient light fixtures, and converted 2,700 bathroom fixtures to automatic, low-flow units. We have achieved a 23.3 percent reduction in water consumption in the House Office Buildings from Fiscal Year 2009 to Fiscal Year 2010. In addition, approximately 1,250 bathroom fixtures were diverted from landfills and sent to a local asphalt plant for recycling. We also installed a new dimmable LED lighting technology in the Rayburn Cafeteria. In a matter of months, energy consumption for lighting in the cafeteria was reduced by more than 70 percent.

After implementation of all energy conservation measures over the 30-month construction period, the House Office Buildings are estimated to potentially realize a 23 percent reduction in total energy consumption, and approximately $3.3 million in annual energy savings. We anticipate this investment will save approximately 5.4 percent annually toward the EISA 2007 goal.

In the Capitol Building, the following projects are ongoing: upgrading existing light fixtures with high-efficiency lamps, ballasts, and reflectors; modernizing Building Automation Systems,

including existing pneumatic and electronic controls for heating, ventilating, and air-conditioning systems with direct digital controls, and replacing air-handling systems.

After implementation of all energy conservation measures over the 27-month construction period, the Capitol Building is estimated to potentially realize a 38 percent reduction in total energy consumption, and approximately $2.2 million in annual energy savings. This will contribute an anticipated 5 percent annually toward the EISA 2007 goal.

In addition, our employees are doing their part to help save energy by using the mass transit and Flexible Work Schedule programs. More than 35 percent of AOC employees use public transportation to commute to work. In addition, more than 930 AOC employees participate in the Flexible Work Schedule program, and over 125 are enrolled in the AOC's Telework Program.

Because the Capitol Power Plant (CPP) plays a critical role in our long-term energy conservation strategy, we are continually working to improve and upgrade operations there. In December 2010, the CPP marked its 100th anniversary of steady service of steam and chilled water to heat and cool Congressional buildings. In that century of service, the plant has undergone significant changes as new buildings were built, and modern equipment was installed. However, in order to continue to provide these services into the future, significant investment is needed to replace aging infrastructure and to install new, energy-efficient equipment.

Last year, with the assistance of the National Academy of Science, we completed our Strategic Long-Term Energy Plan, which we are using to guide our future energy program planning, and to identify and explore options that will help realize continued energy efficiencies and opportunities to save money.

After careful review of several technologies that can further improve efficiencies and help meet future energy requirements of the Capitol campus, we are planning to incorporate the use of cogeneration at the Capitol Power Plant to generate on-site power. Cogeneration is the use of a combustion turbine in order to generate both useful heat and electricity. It is anticipated that the equipment would generate enough electricity to operate the Capitol Power Plant, and the use of the heat generated from this operation would produce enough steam to reduce reliance on the existing

boilers. This would increase system reliability and the increased efficiency would help save money. The proposed cogeneration system also would significantly reduce emissions while providing a reliable source of electricity to the CPP and steam for heating Congressional facilities. We are proposing the use of a Utility Energy Services Contract to finance construction of the cogeneration plant. This public-private partnership leverages private funding allowing us to initiate design and execute construction in a timelier manner, and allows us to use limited appropriated funds for other priorities, such as Deferred Maintenance or life-safety projects.

Annual Operating Budget Request

Our Fiscal Year 2012 annual operating budget request for $436.4 million provides funding for continuing the critical activities of operating and maintaining the infrastructure which supports the Congress, other Legislative Branch agencies, and the public, as well as other AOC essential mission support services. This is a slight decrease from our Fiscal Year 2011 budget request. Some of these services include safety, human resources, financial management, project and construction management, planning and development, communications, information technology, and procurement. In our effort to further improve efficiencies and reduce costs, we are requesting funds to add internal controls software tools, and to update obsolete planning and project software.

Through the work of our in-house, professional staff, we are able to address client needs on a daily basis, maintain facilities, and mitigate the amount of project funds required at the present time. However, even at this level of funding, the Operating Budget alone will not enable us to defer projects indefinitely. The longer we delay in addressing these issues, the more conditions will continue to worsen. Ignoring these issues will not make them go away. In fact, the problems will only become more serious and, in the end, cost more.

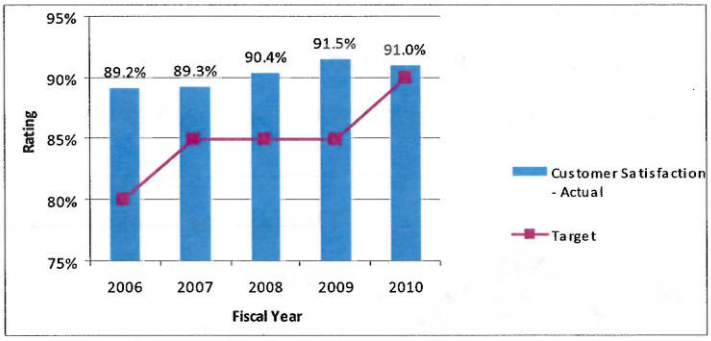
Mr. Chairman, one of the many areas in which our employees excel is in the preservation of our heritage assets. We take great pride in maintaining and conserving the national treasures entrusted to our care, and last year our efforts were recognized with the 2010 Award for Outstanding

Commitment to the Preservation and Care of Collections. Heritage Preservation and the American Institute for Conservation of Historic and Artistic Works presents the award to the organization that has been exemplary in the importance and priority it has given to conservation concerns, and in the sustained commitment it has shown to the preservation and care of cultural property. The AOC was recognized as "a model of exemplary stewardship of the historic collections in its care."

It was a great honor to receive this award because it recognized the efforts of our talented and dedicated staff that work to preserve these irreplaceable treasures, serve Congress, and welcome millions of visitors every year. They take great pride in what they do and they put their unique and special skills to work every day to ensure our U.S. Capitol continues to stand as a powerful and iconic symbol of our government.

AOC Accomplishments

Average Customer Satisfaction Ratings FY 2006 - 2010



Receiving this award was one of many significant achievements the AOC recorded this past year. As I mentioned earlier, we have implemented comprehensive measures and metrics across the agency that have led to significant improvements. For example, we continued to improve our cost accounting procedures and internal controls, and received our sixth consecutive clean audit opinion from independent auditors on all of our financial statements. In addition, our annual Building Services Customer Satisfaction Surveys for FY 2010 again showed that a large majority of our customers are satisfied or very satisfied with the level of service the AOC is providing them.

Not only do we take care of our customers, we take care of our people. We are committed to being the best in our industry, and we have implemented several programs to recruit and retain the best talent. To further this goal, worker safety remains one of our top priorities, and we have

successfully reduced our Injury and Illness Rate by 75 percent since Fiscal Year 2000. We reduced the claims rate of 17.9 injuries per 100 employees in Fiscal Year 2000, to fewer than four injuries per 100 employees in Fiscal Year 2010.

Our talented staff have completed a number of projects this past year in our efforts to maintain and preserve the historic assets entrusted to our care, including painting the Capitol Dome as an interim step to protect and weatherproof the cast-iron structure; repairing and replacing the Thomas Jefferson Building's lantern windows and frames, as well as conserving the Blashfield mural, "Human Understanding," and installing a lift system to provide access to the House rostrum, and allowing, for the first time in the Chamber's history, a Representative in a wheelchair to preside over a House session.

Our employees work tirelessly on the front lines to create a positive first impression of the Congress, the Capitol, and public stewardship. In 2010, the Capitol Visitor Center welcomed its four-millionth visitor. At the U.S. Botanic Garden, more than one million guests enjoyed its amenities and educational programs, including the annual orchid show.

Conclusion

Mr. Chairman, the Architect of the Capitol embodies a commitment to preserving and maintaining the historic fabric of our country, including the U.S. Capitol Building and its iconic Dome that serves as a symbol of our country and our government.

Our Fiscal Year 2012 budget request reflects the seriousness with which we take this commitment. We understand the challenges that an austere fiscal environment presents, and we have developed this budget request in an effort to balance our stewardship responsibilities with fiscal responsibility.

We have been successful in our mission due to the tireless work of our skilled craftsmen and professional staff who maintain and preserve our national treasures. Their efforts ensure that we continue to provide exceptional services to Congress, and they have prevented catastrophic system and facility failures to date. The full measure of the dedication they display in their jobs may be difficult to measure, but we continuously reap the benefits of their knowledge, skills, and experience. I am very proud to lead this wonderful and dedicated team.

We look forward to continuing to work with this Subcommittee, the Congressional leadership, and our Oversight Committees to address our mutual concerns for conserving the past while planning for the future of the Capitol and the facilities for the Congress and the American people.

I would be happy to answer any questions you might have.