

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

**Regarding Fiscal Year 2011 Appropriations
For the Office of the Architect of the Capitol**

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

March 18, 2010

Mr. Chairman, Senator Murkowski, and members of the Subcommittee, thank you for the opportunity to testify today regarding the Office of the Architect of the Capitol's (AOC's) Fiscal Year 2011 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 U.S. Capitol complex. I also very much appreciate, and I'm honored by, the trust the President and the Congress have placed in me to lead this dedicated group as the nominee to serve as the 11th Architect of the Capitol as we continue to address the challenges ahead. We are very aware of the need to preserve the historic infrastructure on Capitol Hill while, at the same time, recognize the need for fiscal responsibility. It is a tremendous honor to have the opportunity to continue to work with this very talented team of professionals.

Twenty-four hours a day, seven days a week, 365 days a year, the AOC team serves Congress as proud stewards of the most iconic buildings and grounds in the world. Through our work, we protect the past by preserving the historic integrity of the U.S. Capitol complex, we are boldly working today to promote a safe and sustainable workplace, and we continue to build a legacy of professionalism for generations to come.

Nothing demonstrated our commitment to our mission more than our team’s remarkable response to the back-to-back blizzards that hit the Washington, D.C., metro area in early February – otherwise known as “Snowmageddon.”

Throughout both of these snow emergencies, AOC employees successfully cleared the streets, sidewalks, entryways, and parking lots across the Capitol complex in order to support the Congress as it conducted its business on the weekend and during the following week, keeping the complex cleared of snow and ice for Members, staff, and the public. At the same time, we continued to operate and maintain all our facilities, and the Capitol Power Plant’s service continued uninterrupted.



AOC crews logged in nearly 35,000 man hours to remove more than 11,000 tons of snow. Once the snow had ended, our work did not. Our crews continued to remove piles of snow from across the complex, treat the sidewalks, streets, and parking lots as the snow melted and re-froze overnight, and attended to hundreds of trees that were damaged in the storms.

This pride in our work extends throughout the organization. Stewardship of the Capitol complex is a unique challenge. The challenge is amplified by the historic significance of our buildings and landscape, aging physical infrastructure, and day-to-day operational requirements. We strive every day to improve the conditions of our facilities using innovative technologies and sustainable practices to ensure the U.S. Capitol remains the nation’s most visible and treasured icon of our government for centuries to come.

Our FY 2011 budget request details a number of projects necessary to ensure we address the critical needs of the Capitol complex as quickly and effectively as possible. Specifically, this entails a significant backlog of deferred maintenance and capital renewal projects, as well as security, life-safety and accessibility, and environmental requirements. Although every project that we have listed in our budget request is necessary, we realize that not all can be funded in these fiscally-challenging times.

However, we take our responsibility to identify, quantify, and report to Congress the state of our facilities and the extent of the deferred maintenance backlog very seriously. The prioritization tools we have developed and refined over the past several years provide Congress with concrete and practical assessments of our infrastructure. By using these tools, Congress can choose where best to make investments in the Capitol complex.

Capital Budget Request and Project Planning Process



*Exterior Masonry
Russell SOB*

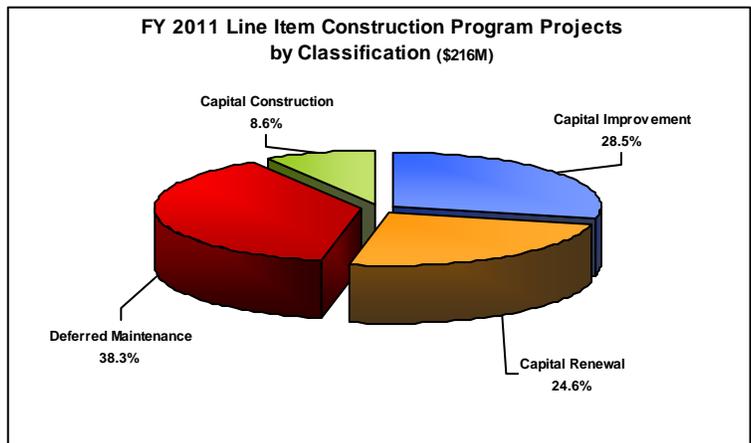
We are requesting \$755 million for FY 2011. The majority of our capital budget request is devoted to addressing the critical projects we've identified as needing urgent attention, which are primarily classified as deferred maintenance. This portion of our budget is the most volatile. It fluctuates greatly from year to year based on the size and complexity of the projects that have been prioritized as having immediate urgency.

Only a small percentage of our requested increase is non-discretionary for mandatory cost-of-living increases, and other operating expenses or contract price increases. We deliberately worked to keep the growth of this segment of our budget to a minimum in order to maximize the capital budget. This will enable the greatest investment as possible in our infrastructure and to allow us to "buy down" the deferred maintenance backlog.

As I have discussed at previous hearings, we have successfully developed and implemented a robust and balanced process to prioritize projects based on the facilities' conditions and the level of maintenance required to ensure they remain functional and viable working environments.

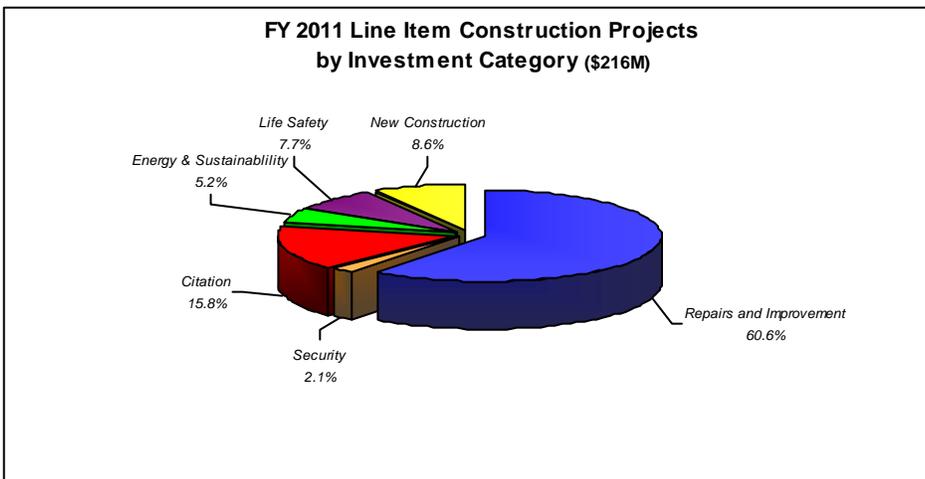
This process uses several tools in the formulation of the project prioritization list including Facility Condition Assessments, the Capitol Complex Master Plan, and Jurisdiction Plans. Over the past year, this process has matured to include a Five-Year Capital Improvements Plan, which examines phasing opportunities, project sequencing, and other factors to better facilitate the timing of the execution of major deferred maintenance and capital renewal projects. As I discussed earlier, these tools assist us and the Congress in looking ahead and enable us to plan when and where to make future investments in our facilities and infrastructure. We also took into consideration the challenge of executing required programs efficiently throughout this process.

As this chart (*at right*) demonstrates, we continue to invest most of our resources in infrastructure projects that are designed to address the backlog of deferred maintenance.



Tied into the overall planning process is the Line Item Construction Program. During this process,

projects are scored against six criteria: preservation; regulatory compliance; mission; economics; security, and energy efficiency and environmental quality.



As we developed our FY 2011 budget, we considered \$373 million worth of capital projects, and are requesting \$216 million for Line Item Construction Program projects. The remaining \$157 million in projects were considered, but were not submitted in this budget request, and therefore remain on the deferred project list.

As I mentioned earlier, our Capital Budget request is quite volatile from year to year based on the projects that rise to the top of the priority list. The AOC's FY 2011 Capital Budget request includes nine projects that each requires an investment of \$10 million or more. They are:

- Utility Tunnel Improvement Program;
- Egress Projects in the Thomas Jefferson Building;
- Capitol Building Dome Skirt Rehabilitation;
- Capitol Building Exterior Stone and Metal Preservation;
- Copper Roof Replacement and Fall Protection System for John Adams Building;
- Roof and Skylight Replacement for Hart Senate Office Building;
- Refurbishment of Federal Office Building 8;
- Task 9, Phase II Infrastructure Improvements in Dirksen Senate Office Building; and
- Collection Storage Module V for Library of Congress.

Mr. Chairman, I'm pleased to report that our Utility Tunnel Improvement Program is on schedule to meet the June 2012 completion date. In addition, by utilizing our comprehensive planning process, we have been able to further reduce the program's cost.

This was accomplished by collecting new information from engineering studies, visual examination of the exterior of the tunnels, and additional structural testing. Funds were also saved through an efficient procurement process and execution plans that consolidated work elements, thereby saving contract overhead costs. These actions enabled the AOC to reduce our FY 2010 request



and re-phase some work, thereby reducing the total projected cost of the program from \$186.4 million to \$176.13 million. We continue to seek additional ways to further reduce the program's total cost.

[Energy Conservation and Sustainability Programs](#)

The AOC is committed to making the right choices and doing our part to save energy on Capitol Hill. With Congress's support, we have implemented a number of programs and completed a variety of projects designed to produce significant results in saving taxpayer dollars and conserving our natural resources. One of our biggest challenges is ensuring that we preserve the historic elements of our buildings, while at the same time making them as energy efficient as possible. That's why the Architect of the Capitol is committed to using sustainable design practices whether we're building a new facility or maintaining one that's 100 years old, like the Russell Building.

For FY 2009, the Congress met its energy reduction goals for the fourth year in a row, and reduced energy consumption by 15.3 percent across the Capitol complex. This exceeded the FY 2009 requirement of a 12 percent reduction (as compared to the FY 2003 baseline). For Fiscal Year 2010, a 15 percent reduction is required under the Energy Independence and Security Act of 2007, (three percent reduction per year for a 30 percent reduction by 2015), and in FY 2011, an 18 percent reduction is required.

To meet these requirements to further reduce energy consumption, we have requested \$11.2 million



in FY 2011 for energy and sustainability projects. In addition, we're asking for an increase of nearly \$10 million in operations funding for energy and sustainability purposes. These sustainable practices include using low-impact materials, installing energy efficient equipment, incorporating durable and high-performance systems and materials, investing in renewable energy, and encouraging and supporting a

culture that promotes reuse and recycling. This includes using food waste, garden clippings, and other green waste, and repurposing it as compost for flower beds, and sustaining other plantings throughout the Capitol complex.

To better identify and evaluate energy savings opportunities in Capitol complex facilities, we have been using energy audits since FY 2007. The data collected help us realize better cost-benefit results, and determine where best to invest our resources.

In December, the AOC entered into an Energy Savings Performance Contract (ESPC) in the Senate Office Buildings. The project includes nearly \$42 million in facility infrastructure upgrades in the Hart, Dirksen, and Russell Senate Office Buildings, as well as the Senate Underground Garage, and Senate Employees' Child Care Facility.

Highlights of this project include:

- Energy-efficient lighting upgrades of nearly 31,000 fixtures in all buildings, with state-of-the-art lighting controls, expanding AOC/Senate's centralized dimming system, integrating occupancy and daylight sensors;
- Upgrading of existing pneumatic and electric controls for heating, ventilating, and air-conditioning (HVAC) systems with direct digital controls (DDC) and providing an ongoing program to train building automation system operators specifically in the monitoring and diagnosis of energy-related controls deficiencies;
- HVAC Testing, Adjusting, and Balancing to trim excessive outdoor-air ventilation, provide for high-efficiency cog belts (for fan drives), and add weather stripping to exterior doors to minimize infiltration;
- Replacement of existing transformers with high-efficiency transformers; and
- Installation of removable insulation covers for steam valves to reduce heat loss, improve comfort, and reduce the safety risks associated with the hot surfaces.

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 appreciate the support of the Senate Leadership, Chairman Schumer, and all of our Oversight Committees in our ongoing efforts to improve energy efficiency and reduce the carbon footprint of the Capitol complex. They have made clear their commitment to reduce energy consumption, conserve natural resources, protect the environment, and in the long term, save taxpayer dollars.

Last year, the AOC also entered into an ESPC to implement energy savings projects in the House Office Buildings. The contract includes nearly \$34 million in facility infrastructure upgrades in the

Rayburn, Longworth, Cannon, and Ford House Office Buildings, as well as the House Page Dormitory.

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;
- A 32 percent reduction in total water consumption; and
- Approximately \$3.3 million in annual energy savings.

In our Energy Savings Performance Contract for the U.S. Capitol Building, nearly \$17 million in facility infrastructure upgrades are planned for the Capitol Building. They include:

- Upgrading existing light fixtures with high-efficiency lamps, ballasts and reflectors as well as new replacement fixtures;
- A comprehensive Building Automation System modernization, including the upgrade of existing pneumatic and electric controls for heating, ventilating and air-conditioning (HVAC) systems with direct digital controls. These improvements will reduce energy consumption and improve temperature and humidity control;
- Replacement of the air-handling systems with variable air volume (VAV) systems to reduce energy consumption while augmenting capacity and improving temperature and humidity control;
- Replacement of existing electrical transformers with high-efficiency transformers; and
- A comprehensive audit and repair effort to restore steam trap performance.

After implementation of all energy conservation measures over the 27-month construction period, the Capitol Building is estimated to realize:

- A 38 percent reduction in total energy consumption; and
- Approximately \$2.2 million in annual energy savings.

In addition, we are continuing our efforts to complete the program to install steam, electricity, natural gas, chilled water, potable water, and condensate meters across the Capitol complex. This is a key effort in terms of being able to measure current consumption, look for improvement opportunities, and measure energy savings results. To date, approximately one-third of the meters have been installed. The remaining meters for facilities located outside the Capitol complex, as

well as the rest of the Capitol complex, are included in our FY 2011 budget request, with a final initial installation funding request projected for FY 2012.

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. The CPP has served the Capitol complex very well since 1910, but in order to continue to provide these services into the future, it is time to transform the CPP and its operations. We started this transformation last February when we began using natural gas as the primary fuel source. We are now studying and evaluating potential new technologies to implement at the CPP. We recently completed our Strategic Long-Term Energy Plan, which will help to determine our future Energy Program planning, and explore various options for continued energy efficiencies.

Over the past several years we have been working to create a healthy and productive workplace where environmental awareness and sustainability are the normal ways of doing business in the Capitol complex. There are a number of initiatives that the AOC has been engaged in, and we continue to see results in our efforts to improve energy efficiency.

Here are just a few of our ongoing sustainability initiatives and projects:

- We recently renovated room G-50 in the Dirksen Building, to install new LED light bulbs that use over 80 percent less electricity, give off less heat, and have a life expectancy of 30 years. In addition, the carpet and paint used in the room has low or no volatile organic compounds (VOCs). We also use low-VOC and other green cleaning products throughout the complex to ensure we maintain excellent indoor air quality.
- We installed nine solar panels in a Senate parking lot to power new lights which make the parking lot safer.
- We have installed daylight harvesting systems in Member and Committee Offices that use electronic sensors to lower artificial lighting levels when enough natural light is available.
- Nearly 35 percent of AOC employees use public transportation to get to work.



- We are updating our 2006 Alternative Fuel Policy so, in addition to providing E-85 fuel to official government vehicles across the Capitol complex, we require the purchase or leasing of alternate fuel vehicles when replacing aging vehicles. To date, there are 40 flexfuel, hybrid, and electric vehicles in the AOC's fleet.
- In September 2009, the American Lung Association of the District of Columbia (ALADC) commended the AOC for its use of B20 blend biodiesel fuel in its shuttle buses that service Capitol Hill. The ALADC's Chief Executive Officer thanked the AOC for its leadership in switching to biodiesel noting, "The ALADC has long called for greater use of biodiesel to improve the air quality in our city, so it is particularly noteworthy that a highly visible location like the Capitol uses biodiesel to reduce emissions, including carbon monoxide, particulate matter and unburned hydrocarbons."
- The AOC recycles 100 percent of its e-waste in three basic ways. Computer equipment is donated by the Agency. If it's not donated, it is reused or resold. Any equipment that is not donated or reused is recycled by a commercial recycling company. Typically the equipment is either reused or broken down and its components are repurposed.
- As part of Committee office renovations, the AOC has incorporated sustainable design features. The AOC installed lighting control systems where the electricity is metered, used rapidly renewable materials and certified wood, and recycled more than 12 tons of construction waste in this Committee suite.
- For construction projects, we regularly purchase materials containing recycled content such as acoustical ceiling tiles, resilient flooring, sheet rock, doors, low volatile organic compound materials, and medium density fiberboard. Whenever possible, construction materials are purchased locally.
- We continue to install low-flow fixtures and automatic faucets in restrooms, convert from pneumatic to direct digital controls to maximize energy usage efficiency, and replace incandescent light bulbs with Compact Fluorescent light bulbs throughout the Capitol campus.

U.S. Botanic Garden/Sustainable Sites Initiative

Because sustainable design, construction, and landscape management can have a significant and positive impact on our environment, in November 2009, the U.S. Botanic Garden launched the Sustainable Sites Initiative, in partnership with the Lady Bird Johnson Wildflower Center and the American Society of Landscape Architects.

The goals of the Sustainable Sites Initiative encourage the sustainable design, construction, and maintenance of landscapes. These are the first national guidelines for building landscapes that will

help to clean the air and water; mitigate temperatures; reduce flooding; provide more natural habitat for birds, insects, and animals, and help support our health and well-being.

The effort to transform the way built landscapes are designed, constructed, and maintained for generations to come is a very important one, and the AOC is proud to be among those leading this national effort.

Annual Operating Budget Request

Our FY 2011 annual operating budget request for \$443 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. Some of these services include financial management, safety, human resources, project and construction management, planning and development, communications, information technology, procurement, and central administration.

As I mentioned earlier, this non-discretionary spending has remained fairly constant over the past several years, and significant reductions in this portion of our budget would greatly impact our ability to provide day-to-day services and maintain our facilities at expected and acceptable levels.

Other operating cost increases lie outside our control, including additional price increases that exceed inflation and are imposed by vendors as the cost of doing business. In addition, the cost of leases has increased, new technologies require investment in new networks, as well as hardware and software upgrades, and mandatory pay raises combined with the increase in costs for goods and services have added to the cost of our daily operations.

Capitol Visitor Center Operating Budget Request

At the opening ceremony for the Capitol Visitor Center (CVC) in December 2008, I noted that, “Visitors now have a respectful and dignified way to come to the People’s House, and I invite everyone to come and explore all that the Capitol Visitor Center and the U.S. Capitol have to offer.” Little did I realize that 2.3 million people would take me up on my offer in just the first year.



We are requesting \$23.9 million for CVC operations and administration, and four FTEs to support operations including an interpretive curator.

The CVC's first year of operation has been extremely successful. Average wait times continue to be six minutes versus the three or four hours in line in years past. More than 1,100 events have been held in the CVC's meeting spaces in the past year, and we're looking forward to large crowds again as Cherry Blossom season approaches.

We continue to make improvements and adjustments to our policies and tour procedures including modifying the Advanced Reservation System to give Congressional offices more flexibility to modify, cancel, or reschedule tour reservations. We've also added a Congressional staff line at the South Information Desk, brought on more operators to ensure prompt responses to phone calls, and will be assigning staff to strategic locations in Emancipation Hall to help facilitate visitor traffic flow of staff- and guide-led tours.

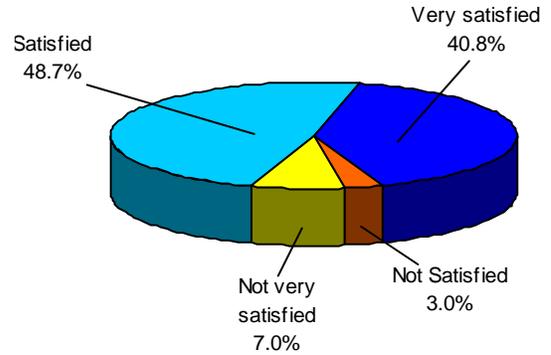
We continue to hold monthly listening sessions with Congressional staff to receive feedback and answer questions, and to date, more than 5,100 staffers have participated in the CVC's training program.

As a point of interest, I would like to note that in April we will install new documents into the CVC's Exhibition Hall. The new items, which include a map used by the National American Woman Suffrage Association showing their successful campaign for voting rights, the proclamation to residents of the Louisiana Territory that the United States had purchased the area from France, and the map showing the route of the Wilkes Expedition (the U.S. Exploring Expedition to the South Seas that brought to Washington a collection of living plants from around the globe) will be on display through early October.

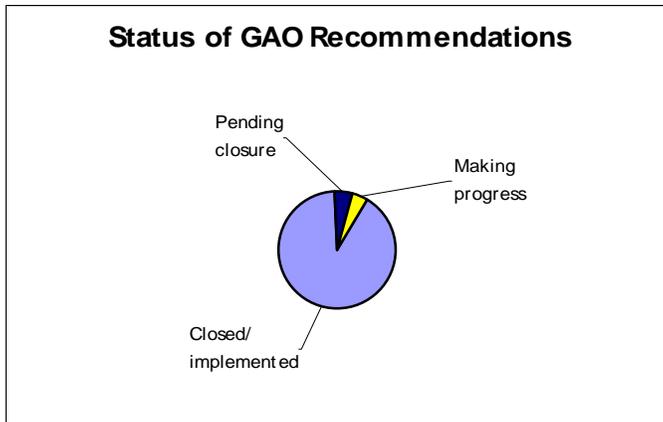
AOC Accomplishments

Mr. Chairman, this past year we have recorded a number of significant achievements. The following is a list of just a few of our many accomplishments.

- Our annual Building Services Customer Satisfaction Surveys for FY 2009 again showed that a large majority of our customers are **satisfied** or **very satisfied** with the level of service the AOC is providing them.
- We continued to improve our cost accounting procedures and internal controls, and received our fifth consecutive clean audit opinion from independent auditors on all of our financial statements. The Capitol Visitor Center construction project received a clean audit opinion; the third in three years. We submitted the first set of semi-annual financial statements for CVC operations in 2009, and received a clean audit opinion on those as well.

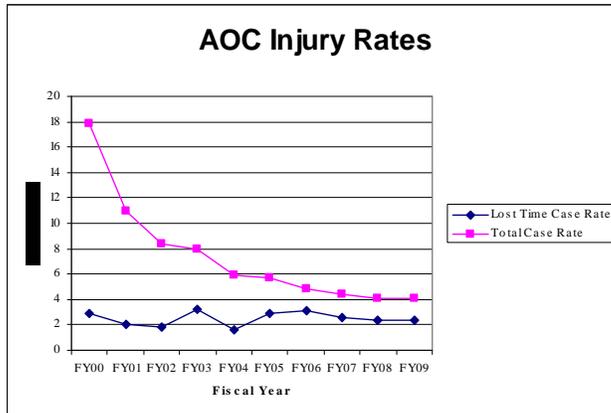


- We made tremendous progress to close out the recommendations from the Government Accountability Office’s (GAO’s) General Management Review (GMR) of the Agency.



Ninety-one percent of the recommendations are now closed (61 out of 67). Three of the items from the original GMR are pending closure, and expected to be completed in summer 2010. The remaining open items focus on long-term recommendations (not part of the original GMR). We are closely monitoring those activities and reporting status to GAO.

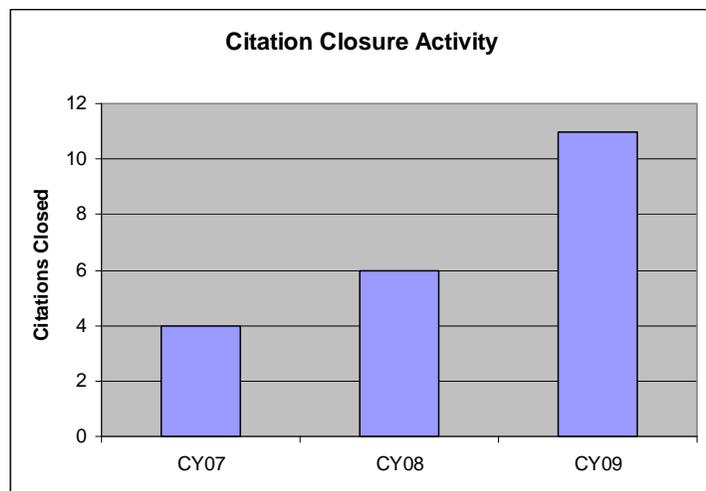
- We activated our pandemic flu plan in response to the H1N1 Flu threat, including implementing action plans to address continuity of operations; educating staff on how to prevent getting sick; providing hand sanitizing stations across the Capitol complex, and doing regular cleaning with a focus on cleaning hard surfaces, such as desks and tables.



- Worker safety remains one of our top priorities and our focus remains on decreasing our Injury and Illness Rate each year, as we have done since 2000. Safety training and education are keys to our success, with a particular emphasis on injury prevention through hazard recognition and elimination.

• We will complete the initial phase of our preventative maintenance standardization program this month. Included in this effort is the identification of common preventative maintenance issues across jurisdictions, minimum corrective procedures to follow, and timelines for completion. This information will be automated in our facilities management information system and allow us to track metrics in the future to identify opportunities for improvement.

- Since 2007, the Office of Compliance (OOC) has issued one citation to the AOC. AOC has worked collaboratively with the Office of Compliance to close older citations and has successfully closed 21 citations since 2007. Eighteen Citations remain open today; four are scheduled for closure in 2010. The remaining address longer term utility tunnel (6) and fire and life-safety (8) matters.



- During the 111th Congress, the AOC increased its emphasis on facility safety inspection, to include pre-inspections of Members' offices prior to the OOC's biennial inspections. As a result of the combined efforts of AOC and other employing offices, the OOC is reporting a decrease of 41 percent in the number of findings from FY 2010 in the nine facilities in which the OOC has completed inspections to date.
- The U.S. Botanic Garden (USBG) was recognized as one of Washington's best tourist spots in August 2009, by Nickelodeon Television. The USBG won its "Parents' Picks Award," garnering more votes than several other area attractions. In December, the USBG was voted one of the nation's best spots to "catch the holiday spirit" by the American Automobile Association (AAA).

- The AOC team that managed construction of Modules 3 and 4 and four Cold Storage Rooms at the Library of Congress Ft. Meade High-Density Storage Facility were honored with a national award in October from the Construction Management Association of America (CMAA), in the category of new construction for a project under \$50 million. The new storage units will house 33 million items from the Library's special-format collections.
- Later this month the AOC will be recognized by the Washington Building Congress with two awards that recognized special building skills. The House Office Buildings Sprinkler Installation Project will receive one award under the category of "Decorative Plaster" and the second under "Plumbing," which has also been nominated for a Star Award. The awards will be presented on March 26, 2010.

Conclusion

Mr. Chairman, as "Snowmageddon" has shown, the AOC is ready to step up and do what is necessary to keep the Capitol complex open and operating every day of the year – under any circumstances.

Today, we face a blizzard of deferred maintenance projects, and the forecast is not sunny. We do appreciate the investment Congress has made in our facilities over the past several years as we work to buy down the deferred maintenance backlog. The AOC has been successful in our work to be good stewards of the Capitol complex due to your support.

We also have been able to accomplish much and experience numerous successes because of the dedicated, professional men and women who make up the AOC team. I have been honored and privileged to work along side them. Because of their efforts and commitment to excellence, we continue to provide exceptional service to Congress, and have been able prevent system and facility failure due to their skills and ingenuity.

Once again, thank you for this opportunity to testify today. Mr. Chairman, we look forward to working with this Subcommittee, the House Subcommittee on Legislative Branch, and our Oversight Committees to address the backlog of maintenance and repair projects, and continue to protect and preserve the U.S. Capitol for generations to come.

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