

NATIONAL GALLERY OF ART
Repair, Restoration and Renovation Function
FY 2012 - FY 2013
(Dollars in Thousands)

	FY 2012 Enacted *	FY 2013 Request	FY 2013 Increase / (Decrease FY 2012
REPAIR, RESTORATION AND RENOVATION FUNCTION	\$ 14,493	\$ 23,000	\$ 8,507
FTE	2	2	-

Repair, Restoration & Renovation

Master Facilities Plan	13,493	22,000	8,507
Ongoing Renovation Function	1,000	1,000	-

Total Repair, Restoration & Renovation	\$ 14,493	\$ 23,000	\$ 8,507
---	------------------	------------------	-----------------

* The FY 2012 Enacted Budget reflects a 0.16% across-the-board rescission.

Repair, Restoration and Renovation Introduction

The National Gallery's Repair, Restoration, and Renovation function is comprised of East Building Stone Repairs, the Master Facilities Plan (MFP), and Ongoing Renovation projects. The function was developed as an integrated approach to reducing the growing backlog of deferred maintenance. These facilities improvements are essential to prevent the continued degradation of the physical plant and to ensure optimum operational effectiveness and efficiency of the Gallery's facilities. An update of the MFP is underway.

The Gallery is a highly complex facility with 1.4 million square feet of buildings, a 6.1 acre Sculpture Garden, 3 acres of skylights, and over 1,500 major pieces of equipment, all of which must be maintained under the strictest operational and environmental conditions for the preservation of the art.

The Repair, Restoration, and Renovation function is divided into the following three categories:

East Building Stone Repairs: In FY2010, an urgent new project was added to this function. Funding was requested to begin the repair of a systemic structural failure of the anchors that support the Gallery's East Building marble veneer. In total, 16,200 marble panels must be re-installed. The project began in FY 2010 and repair work will be nearing completion at the end of FY 2013. Substantial completion is expected in early FY 2014 with de-mobilization and site restoration continuing until the spring of 2014.

Master Facilities Plan: The MFP provides for major building and equipment infrastructure repair projects identified as priorities in the MFP. The projects are necessary to prevent the continued degradation of the physical plant and to ensure optimum operational effectiveness and efficiency.

Repair, Restoration and Renovation

In 1997, recognizing that the Gallery's buildings were reaching an age at which many components were in need of major repair or replacement, and that some infrastructure systems were reaching the end of their useful lives, the Gallery undertook the development of the MFP, with the following goals:

- Continue to safeguard the Gallery's art collection, the visiting public, and staff;
- Extend the useful life of the facilities;
- Limit the extent of gallery closings, maintain the schedule of special exhibitions, and minimize the impact of MFP work on public educational programs;
- Reduce the risks to the collection, staff, and visitors, and reduce the potential for emergencies;
- Provide a framework for effective implementation of infrastructure improvements and renovations; and
- Respond to new safety standards and building codes.

While the Gallery's buildings are not in imminent danger of multiple-system breakdowns, the Gallery's MFP is structured to keep the buildings from reaching such a state of disrepair by taking appropriate action in a timely manner.

An update of the original MFP is currently underway. The original plan and implementation strategy was prepared in 1998-1999, with a presumed completion of the major renovations on or about 2013. In anticipation of undertaking building systems renovations in the East Building and Connecting Link, an updated implementation plan is critical. The objectives for major capital renewal projects will continue to guide the updated MFP, but building systems are well beyond their useful lives and substantial renovation is needed. Deficiencies previously identified in the Gallery's Master Facilities Plan are being reviewed and a current assessment of the conditions of these aging systems was conducted. The final report will be completed in FY 2012, and a new implementation strategy will begin in FY 2014.

Ongoing Renovation: The Ongoing Renovation projects are grouped into the categories described below. Projects are reviewed annually. Based on urgency and availability of funds, they are authorized for design and construction.

- **Security:** Upgrade and enhancement of exterior security.
- **Environmental Compliance:** Improvement of the interior environment by continued removal and/or encapsulation of asbestos and lead paint, upgrading exhaust systems, and other measures to ensure adherence to indoor air quality standards.
- **Energy Management:** Continuation of a comprehensive energy management program to upgrade ventilation systems and climate controls to protect works of art and to reduce energy usage and costs.

Repair, Restoration and Renovation

- Access, Safety, and Building Repairs: Repair and replacement of equipment and building components and compliance with accessibility legislation and safety regulations.
- Alterations/Renovations: Reconfiguration to accommodate changing activities in order to better utilize existing space.

Repair, Restoration and Renovation

EAST BUILDING STONE REPAIRS

The Gallery requests no additional funding in FY 2013 for the East Building Stone Repair Project. The total cost for this project is \$82,165,500; of which \$40,000,000 was appropriated in FY 2010 and \$42,165,500 in FY 2011. The project will restore the exterior marble veneer to its original appearance while maintaining the design intent of a “floating” system, allowing the panels to expand and contract in response to fluctuating thermal conditions. The Gallery’s goal is to complete all repairs no later than December, 2013 to address a serious public safety hazard; to safeguard the Gallery’s renowned art collection and this architecturally significant building; and to protect the millions of visitors, staff, and volunteers who pass through its doors each year.

FY 2011 Accomplishments: The required funding to complete this project was appropriated by Congress in FY 2011 and the Gallery continued construction of this repair without interruption. The East Building site was enclosed with a perimeter construction barrier placed at the street curbs on Pennsylvania Avenue and Madison Drive. The 4th Street building entrance and sidewalk remains accessible to visitors and staff. Temporary site facilities, including trailers, a stone shop, and stone storage racks, as well as temporary utility connections and protection for existing sculpture was constructed. Scaffolding systems called “mast climbers” were erected and fastened to temporary concrete slabs at grade and to the roof of the building. The “mast climbers” and “swing stage” scaffolding will be relocated around the building as the work progresses. More conventional fixed scaffolding will also be employed in select areas including the walls that flank the front entrance. Two mock-ups were completed; one of the building to test the hardware and one on the building to remove and re-install a section of stone panels prior to beginning this major undertaking. As of the end of FY 2011, about 2,000 panels were removed.

FY 2012 Objectives: The Gallery continues construction of this repair project without interruption. Stone removal continues, and stone re-installation began at the northwest corner in November, 2011. The goal is to substantially complete the first phase of the work in 2012, which comprises the west façade that includes the main entrance and the adjacent north façade.

FY 2013 Request (None): Because the final installment of the project funding was appropriated in FY 2011, no additional funding is requested for the East Building Stone Repair project for FY 2013. The second and final phase of repairs includes the south and east façades of the East Building Study Center which will be underway during FY 2013. The entire project is currently scheduled for construction completion in late 2013. De-mobilization and site restoration will continue into the spring of 2014.

Repair, Restoration and Renovation

MASTER FACILITIES PLAN

The Gallery's FY 2013 request for the Master Facilities Plan (MFP) totals \$22,000,000, an increase of \$8,507,000 above the FY 2012 Enacted Budget.

The MFP accomplishments, objectives, and FY 2013 request are discussed below in the following components:

- Exterior, Structural, and Architectural Repairs
- Interior Mechanical, Electrical, and Plumbing Systems Replacements
- Life Safety and Security Renovations

Exterior, Structural, and Architectural Repairs

FY 2011 Accomplishments: Construction of Work Area #4, Phase 2 neared completion. Construction includes window replacement, fire barriers for smoke control, and repairs to finishes associated with the building systems on the ground and main floors. In addition, major architectural changes have been implemented to reconfigure the old "conservation corridor" on the ground floor in order to meet current functional requirements and improve safety for the Gallery's collections and staff.

Design documents were in process for Work Area #4, Phase 3, to convert West Building ground floor swing spaces to permanent use following completion of Work Area #4, Phase 2. Permanent locations for art conservation labs, offices and collections processing areas are part of Phase 3.

Design is nearly complete for renovations to the exterior of the West Building. Design was based on a study and recommendations for repairs to improve the structural integrity of the joint between the West Building and the underground Connecting Link. Design also includes repairs to the West Building's north and south exterior stonework including re-pointing and cleaning, repairs to the north and south porticos and parapet coping stones. The brick support behind the parapets and the stone walls at the roof levels also require re-pointing and repair. This work is critical for safety reasons and also because the preservation of the building and its contents depends upon the maintenance of a watertight building envelope and the integrity of the underlying substrate. Minor damage to the building's stone and expansion joints that was caused by the recent earthquake will also be incorporated into this project.

Pre-design for the East Building Exterior Renovations related to the Glass Curtain Walls was completed. A feasibility study was done to determine the scope and scheduling of the glass curtain walls replacement at the two atrium areas to coincide with the Exterior Stone Repairs construction project.

FY 2012 Objectives: Phase 3 of Work Area 4, the final phase of this project, will be under construction. Construction on the north portion of the West Building Exterior Repairs will begin in the spring, including repairs and restoration of the stone façade which have been deferred for over ten years. Repairs to the north portico are needed as stones have cracked and some column bases are temporarily pinned or banded awaiting permanent repairs.

East Building Exterior Renovations design has begun for this high-priority exterior glazing renovation project that will allow the work to be coordinated and synchronized with the

Repair, Restoration and Renovation

stone repair construction activities. The Glass Curtain Wall replacement is needed to improve the thermal performance of the glass and frame, to benefit from improved curtain wall technology, and to respond to increased security requirements. The glazing system is over 30 years old, insulated glass units have cracked, spacers are failing, and gaskets have deteriorated. As an interim measure, security blast film has been installed as a retrofit twice over the life of this system. To save an estimated \$5 million in construction costs associated with the Glass Curtain Walls, this high-priority renovation project is scheduled to overlap with the Exterior Stone Repairs construction. In FY 2012, the replacement of two large glass panels at the main atrium will be underway. The cost savings for the atrium sections are based on using the scaffolding and staging already in place and reinforcing the connections behind the adjacent stone walls, which will also minimize disruptions to staff and public space.

Work Area #9 design will start. This is the first East Building work area project and marks the beginning of systems renovation in the public spaces of the East Building. Systems are nearly 35 years old and require capital renewal. Upon completion in FY2012 of the updated MFP implementation plan, this project will begin design to integrate the Master Facilities Plan improvements with concept plans for improving emergency exits in the East Building Towers, known as 'pods'.

FY 2013 Budget Request (\$8,160,000) consists of:

- \$4,462,000 is requested for East Building Exterior Renovations design and construction costs associated with the Glass Curtain Walls at the Study Center atrium to ensure this high-priority renovation project continues to overlap with the Exterior Stone Repairs and with Work Area #9. Design for the north and west glass walls that run horizontally in the public areas are included in this portion of the request. The curtain wall replacement is needed to improve the thermal performance of the glass and frame, to benefit from improved curtain wall technology, and to respond to increased security requirements. The glazing system is almost 35 years old, insulated glass units have cracked, spacers are failing, and gaskets have deteriorated. Security blast film has been installed as a retrofit twice over the life of this system. The new system will have film laminated between the glass, as well as reinforced attachments to the building's structure, to improve blast resistance.
- \$2,183,000 is requested to continue the design and to initiate construction for Work Area #9. This is the first East Building work area project and marks the beginning of systems renovation in the public spaces of the East Building. Systems are nearly 35 years old and require capital renewal. Following the updated MFP implementation plan, this project will begin design to integrate the Master Facilities Plan improvements with concept plans for life safety improvements providing exits from the public areas of the East Building including the upper levels of the 'pods'.
- \$1,294,000 is requested for the continued implementation of the West Building Exterior Repairs including repairs and restoration of the south portion of the stone façade which has been deferred for over ten years. Repair to the south portico is needed as stones have cracked at the Mall entrance. Bird deterrent systems will also be installed.

Repair, Restoration and Renovation

- \$221,000 is requested to start the design for the West Building Exterior Site Renovations. This project will have a comprehensive plan for the West Building moats, more energy efficient greenhouses, re-pavement of the service entrance, improvement of exterior lighting, and repair of the landscape features visible to the public including paving, curbs, fountains, and moat walls. Site improvements will also include restoration of the lawn and plantings at 7th Street to coincide with completion of the West Building construction work and removal of the staging area which has been at the corner of 7th Street and Madison Drive since the mid-1990's.

Interior Mechanical, Electrical, and Plumbing Systems Replacements

FY 2011 Accomplishments: Work Area #4, Phase 2, renovation of major mechanical, electrical and plumbing, telephone, and data infrastructure systems continued. Three air handling units have been completely replaced, while two air handling units have been refurbished. Radiators and re-heat coils have been converted from steam to hot water. Service distribution ductwork and piping was replaced and associated hazardous materials were abated. Work Area #4 renovations will improve the conservation labs and other collections-related functions at the east end of the ground floor. Swing spaces will be converted to permanent use allowing conservation and art care staff to have lab facilities and a safe work environment.

An update to the original Master Facilities Plan (MFP) was underway. The original plan and implementation strategy were prepared in 1998-1999, with a presumed completion of the major renovations on or about 2013. In anticipation of undertaking building systems renovations in the East Building and Connecting Link, an updated implementation plan is needed. The objectives for major capital renewal projects will continue to guide the updated MFP, but building systems are well beyond their useful lives and substantial renovation is needed. Deficiencies previously identified in the Gallery's Master Facilities Plan were re-visited and a current assessment of the conditions of these aging systems was conducted.

FY 2012 Objectives: Work Area #9 design will start. This is the first East Building work area project and marks the beginning of systems renovation in the public spaces of the East Building. Upon completion in FY 2012 of the updated MFP implementation plan, this project will begin design to integrate the Master Facilities Plan improvements with concept plans for improving exits in the public gallery areas, known as 'pods'.

FY 2013 Budget Request (\$9,405,000) consists of:

- \$5,095,000 is requested to complete Work Area #9 design and begin construction. This is the first East Building work area project and marks the beginning of systems renovation in the public spaces of the East Building. Following the updated implementation plan, this project will integrate the Master Facilities Plan improvements with concept plans for renovation of major mechanical, electrical and plumbing, fire protection, and data infrastructure systems. Air handling units will be re-built, and the water heating systems will be updated. Critical systems in the East Building have not been replaced or substantially re-built since they were installed in the mid-1970's.
- \$266,000 is requested for the completion of the design of the East Building Electrical Service. The East Building main electrical service and distribution needs to be

Repair, Restoration and Renovation

renovated to allow for the replacement of old transformers and for the associated hazardous materials abatement. This will complete the improvements to the main electrical distribution system for the entire complex, which began with the West Building electrical upgrades over ten years ago.

- \$4,044,000 is for continued funding of off-site relocation costs. Existing leases will expire in December of 2012 and January of 2013, and negotiations are under way to extend them for one more year.

Life Safety and Security Renovations

FY 2011 Accomplishments: Construction was substantially completed on the main floor and is nearing completion on the ground floor for fire protection, life safety, and security improvements in Work Area #4, Phase 2. In addition to completely new systems installed on the ground floor, the existing fire alarm, speaker/strobe system, and exit signs in main floor gallery spaces were also improved. Smoke control systems have been installed, with both mechanical and passive venting through the main floor gallery laylights. Conservation labs and workshops will have code compliant exhaust systems and fire protection systems that make the areas safer for the Gallery's collections, staff, and visitors.

An update to the Master Facilities Plan (MFP) is underway incorporating results from the fire risk assessment completed for the East Building and Connecting Link. Fire-protection and life-safety system improvements, along with building security systems and exit improvements must be incorporated into the updated MFP. The results of the recent exiting improvement feasibility study and other code-compliance requirements were incorporated into the implementation strategy for all crucial repair, restoration, and renovation projects for the coming decade.

FY 2012 Objectives: Work Area #9 design will start. Work Area #9 is the first East Building work area project and marks the beginning of interior systems renovation in the public spaces of the East Building. Following the fire risk assessment, a feasibility study to improve exiting in East Building public spaces was completed. This project will integrate the Master Facilities Plan improvements with better fire separations, improved and extended exit stairs, increased exit capacity, and access improvements to adapt to current life safety codes and reduce risks to the collections, staff and visitors. Security system and smoke control improvements will be included in the design efforts for Work Area #9

FY 2013 Budget Request (\$4,435,000) consists of:

- \$2,973,000 is requested to complete the Work Area #9 design and initiate construction. Work Area #9 is the first East Building work area project and marks the beginning of interior systems renovation in the public spaces of the East Building. Following the fire risk assessment, a feasibility study to improve exiting in East Building public spaces was completed. This project will begin to integrate the Master Facilities Plan improvements with better fire separations, improved and extended exit stairs, increased exit capacity, and access improvements to adapt to current life safety codes and reduce risks to the collections, staff and visitors.

Repair, Restoration and Renovation

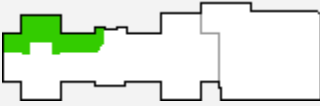
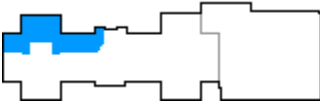
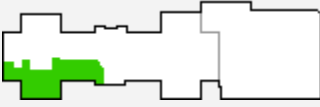











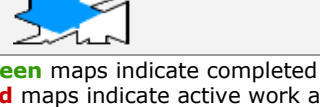
- \$603,000 is requested to support construction for East Building smoke control. The fire risk assessment allowed the Gallery to take a performance-based approach to fire protection for the unique buildings and the priceless art collection. Two types of smoke exhaust systems will be considered in Work Area #9: a mechanical system and a passive system using operable doors and windows on the ground level. These systems, in conjunction with better fire separations, fire suppression in some areas, and increased exit capacity, will limit the spread of fire, improve life safety and reduce risk to the collection. Improvements to Work Area #9 will also address fire/smoke barriers, and speaker/strobe fire alarms in public spaces.
- \$89,000 is requested for design of the East Building emergency generator. The replacement of the original East Building emergency generator is needed to support life safety, security, and essential building systems during a power outage. The updated implementation plan indicates that the East Building emergency power supply system needs to be expanded to meet building code and other building requirements and that a dedicated emergency generator is needed. This generator, in conjunction with improved distribution to emergency power panels, would service emergency lighting, security devices, elevators, smoke exhaust systems, fire alarm systems, pumps to prevent flooding, and other essential building systems to ensure adequate building operation until normal power is restored.
- \$770,000 is requested for security systems improvements which are needed in conjunction with the new exterior glazing and other security improvements in the East Building.

**NATIONAL GALLERY OF ART
REPAIR, RESTORATION AND RENOVATION BUDGET
FY 2011 - FY 2013**

<u>Description</u>	<u>FY 2011 Actual</u>	<u>FY 2012 Estimate</u>	<u>FY 2013 Estimate</u>
CARRY-FORWARD FUNDS, BEGINNING OF YEAR	\$ 3,666,506	\$ 13,693,334	\$ 6,054,334
<u>BUDGET *</u>			
I. <u>Major Critical Project</u> East Building Exterior Stone Repairs	42,165,500	-	-
II. <u>Master Facilities Plan</u> Exterior/Structural Repairs	847,302	8,544,937	8,160,000
Interior Systems Replacement	3,686,612	4,188,853	9,405,000
Life Safety & Security	427,144	759,210	4,435,000
Subtotal - Master Facilities Plan	<u>4,961,058</u>	<u>13,493,000</u>	<u>22,000,000</u>
III. <u>Ongoing Renovation</u>	<u>998,000</u>	<u>1,000,000</u>	<u>1,000,000</u>
TOTAL NEW FUNDING APPROPRIATED / REQUESTED	<u>48,124,558</u>	<u>14,493,000</u>	<u>23,000,000</u>
TOTAL FUNDS AVAILABLE	<u>51,791,064</u>	<u>28,186,334</u>	<u>29,054,334</u>
<u>OBLIGATIONS</u>			
I. <u>Major Critical Project</u> East Building Exterior Stone Repairs	29,744,295	7,999,000	3,011,000
II. <u>Master Facilities Plan</u> Exterior/Structural Repairs	991,936	2,711,000	4,884,000
Interior Systems Replacement	5,154,852	7,956,000	9,014,000
Life Safety & Security	1,249,420	2,466,000	2,482,000
Subtotal - Master Facilities Plan	<u>7,396,208</u>	<u>13,133,000</u>	<u>16,380,000</u>
III. <u>Ongoing Renovation</u>	<u>957,227</u>	<u>1,000,000</u>	<u>1,000,000</u>
TOTAL OBLIGATIONS	<u>38,097,730</u>	<u>22,132,000</u>	<u>20,391,000</u>
CARRY-FORWARD FUNDS, END OF YEAR	<u>\$ 13,693,334</u>	<u>\$ 6,054,334</u>	<u>\$ 8,663,334</u>

* FY 2011 and FY 2012 Enacted Budgets reflect rescissions of 0.2% and 0.16% respectively.

National Gallery of Art
Master Facilities Plan Work Area Diagrams

Work Area	Area Affected	Activities	Floor Levels Involved	Construction Start
1		Construction completed. Includes Sculpture Gallery renovation, repairs to plumbing and electrical distribution, HVAC, replacing steam with hot water.	West Building Ground and above	Complete
1		Includes additional improvements to building systems distribution and controls, fire suppression in some areas, smoke management, and associated abatement.	West Building Ground and above	TBD
2		Construction completed. Includes all building systems distribution, fire suppression in some areas, smoke management, replacing steam with hot water and associated abatement.	West Building Ground and above	Complete
3		Construction completed. Includes all building systems distribution, fire suppression in some areas, smoke management, replacing steam with hot water and associated abatement.	West Building Ground and above	Complete
4		Construction is complete for Phase 1, nearing completion for Phase 2, and Phase 3 will start late Spring 2012. Includes all building systems distribution, air handling unit upgrades, fire suppression, smoke management, replacing steam with hot water and associated abatement.	West Building Ground and above	2009
5		"Open" Work Area. Circulation will be maintained while building systems are renovated.	West Building Basement, Ground, Main	TBD
6		Building systems renovation.	Connecting Link, Basement, Concourse	TBD
7		Building systems renovation.	Connecting Link, Basement, Concourse	TBD
8		"Open" Work Area. Circulation will be maintained while building systems are renovated.	Basement, Concourse	TBD
9		Design to begin for the public space renovation in the East Building. Includes life safety upgrades, infrastructure system upgrades, fire suppression and smoke management.	East Building Upper Levels, Pod Stairs	TBD
10		Building systems renovation.	East Building, 5, 6, 7, 8	TBD
11		Building systems renovation.	East Building, 2, 3, 4	TBD
12		Building systems renovation.	East Building, Basement, IB, Concourse, 1	TBD
13		Building systems renovation.	East Building, 1-8	TBD
14		Building systems and Main Atrium Skylight renovation.	East Building, Concourse through 8	TBD

green maps indicate completed work areas
red maps indicate active work areas

purple maps indicate work areas in design
blue maps indicate future work areas

Master Facilities Plan Budget Formulation

Estimated Project Costs by Fiscal Year		Amt (\$000)	Prior Years	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016 - 2023
Preliminary design	Exterior Envelope Analyses	\$ 160	\$ 160	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Air Rebalancing Design / Implementation (all 3 buildings)	\$ 1,585	\$ 1,585	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	MEP Systems Analysis and Preliminary Design	\$ 730	\$ 730	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	MFP Update East Building and Connecting Link Building	\$ 855	\$ -	\$ -	\$ -	\$ -	\$ 855	\$ -	\$ -	\$ -	\$ -	\$ -
Exterior projects	West Building Mall Steps: design	\$ 260	\$ 260	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	West Building Mall Steps	\$ 2,270	\$ 2,270	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	West Building Exterior Stone Repairs: design	\$ 190	\$ 190	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	West Building Exterior Stone Repairs	\$ 1,570	\$ 1,570	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Connecting Link Structural and Expansion Joint Repairs: design	\$ 201	\$ 201	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Connecting Link Structural and Expansion Joint Repairs	\$ 1,940	\$ 1,940	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	East Building Re-Roofing: design	\$ 150	\$ 150	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	East Building Re-Roofing	\$ 2,520	\$ 2,520	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	West Building Exterior Renovations: design	\$ 1,851	\$ -	\$ -	\$ -	\$ -	\$ 837	\$ 500	\$ 514	\$ -	\$ -	\$ -
	West Building Exterior Renovations	\$ 4,968	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,198	\$ 780	\$ -	\$ -	\$ 1,990
	West Building Site Renovations: design	\$ 801	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 221	\$ -	\$ -	\$ 580
	West Building Site Renovations	\$ 6,030	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,030
	Connecting Link Plaza Renovations: design	\$ 1,100	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,100
	Connecting Link Plaza Renovations	\$ 11,161	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,161
	East Building Exterior Renovations: design (Glass Walls)	\$ 7,503	\$ 1,013	\$ 1,120	\$ -	\$ -	\$ -	\$ -	\$ 1,262	\$ 1,000	\$ -	\$ 3,108
	East Building Exterior Renovations (Glass Walls)	\$ 27,993	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,517	\$ 3,200	\$ 2,660	\$ -	\$ 16,616
East Building Site Renovations: design	\$ 310	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 310	
East Building Site Renovations	\$ 1,483	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,483	
Work Area projects, installing systems in interior spaces	Work Area 1, West Building: design	\$ 2,768	\$ 1,370	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,398
	Work Area 1, West Building	\$ 15,595	\$ 6,595	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,000
	Work Area 2, West Building: design	\$ 760	\$ 760	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Work Area 2, West Building	\$ 15,155	\$ 15,155	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Work Area 3, West Building: design	\$ 2,638	\$ 2,060	\$ 578	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Work Area 3, West Building	\$ 20,210	\$ 17,580	\$ 2,630	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Work Area 4, West Building: design	\$ 4,291	\$ 800	\$ 2,486	\$ 1,005	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Work Area 4, West Building	\$ 29,347	\$ -	\$ 5,853	\$ 11,667	\$ 11,827	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Work Area 5, West Building: design	\$ 7,411	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,411
	Work Area 5, West Building	\$ 47,400	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 47,400
	Work Area 6, Connecting Link: design	\$ 1,390	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,390
	Work Area 6, Connecting Link	\$ 14,425	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 14,425
	Work Area 7, Connecting Link: design	\$ 1,222	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,222
	Work Area 7, Connecting Link	\$ 15,102	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 15,102
	Work Area 8, Connecting Link: design	\$ 1,156	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,156
	Work Area 8, Connecting Link	\$ 8,083	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,083
	Work Area 9, East Building: design	\$ 4,757	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,549	\$ 3,208	\$ -	\$ -	\$ -
	Work Area 9, East Building	\$ 31,280	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,043	\$ 12,649	\$ 11,588	\$ -
	Work Area 10, East Building: design	\$ 1,275	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,275
	Work Area 10, East Building	\$ 12,358	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 12,358
Work Area 11, East Building: design	\$ 857	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 857	
Work Area 11, East Building	\$ 9,009	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,009	
Work Area 12, East Building: design	\$ 1,534	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,534	
Work Area 12, East Building	\$ 12,366	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 12,366	
Work Area 13, East Building: design	\$ 394	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 394	\$ -	
Work Area 13, East Building	\$ 5,329	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,329	
Work Area 14, East Building: design	\$ 4,073	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,954	\$ 2,119	
Work Area 14, East Building	\$ 41,152	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 41,152	

Master Facilities Plan Budget Formulation

Estimated Project Costs by Fiscal Year	Amt (\$000)	Prior Years	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016 - 2023
West Building GSA Pipe Connection: design	\$ 715	\$ 715	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
West Building GSA Pipe Connection	\$ 4,713	\$ 4,713	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
West Building Water Service, Distribution, and Treatment: design	\$ 200	\$ 200	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
West Building Water Service, Distribution, and Treatment	\$ 2,071	\$ 1,179	\$ 892	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
West Building Electrical Service Equipment and Transformers: design	\$ 190	\$ 190	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
West Building Electrical Service Equipment and Transformers	\$ 2,020	\$ 2,020	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
West Building Emergency Generator: design	\$ 40	\$ 40	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
West Building Emergency Generator	\$ 2,485	\$ 2,485	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
West Building Chiller Plant: design	\$ 797	\$ 797	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
West Building Chiller Plant	\$ 13,589	\$ 13,589	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
West Building Lightning Protection: design	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
West Building Lightning Protection	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
West Building Air Handling Unit Upgrades: design	\$ 153	\$ 120	\$ -	\$ 33	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
West Building Air Handling Unit Upgrades	\$ 1,102	\$ 808	\$ -	\$ 294	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Connecting Link / East Building Water Service and Treatment: design	\$ 201	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 201
Connecting Link / East Building Water Service and Treatment	\$ 2,715	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,715
Connecting Link Air Handling Unit Upgrades: design	\$ 126	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 126
Connecting Link Air Handling Unit Upgrades	\$ 1,339	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,339
East Building Smoke Control: design	\$ 310	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 310	\$ -	\$ -	\$ -	\$ -
East Building Smoke Control	\$ 2,949	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 603	\$ -	\$ 2,346	\$ -
East Building Emergency Generator: design	\$ 89	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 89	\$ -	\$ -	\$ -
East Building Emergency Generator	\$ 791	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 791	\$ -	\$ -
East Building Electrical Service Equipment: design	\$ 346	\$ 80	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 266	\$ -	\$ -	\$ -
East Building Electrical Service Equipment	\$ 3,627	\$ 860	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 379	\$ -	\$ 2,388
East Building Air Handling Unit Upgrades: design	\$ 458	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 458	\$ -	\$ -
East Building Air Handling Unit Upgrades	\$ 7,918	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,438	\$ 6,480
Conveying Systems Modernizations (elevators, etc.): design	\$ 231	\$ 40	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 191
Conveying Systems Modernizations (elevators, etc.)	\$ 2,677	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,677
Security Systems Improvements: design	\$ 864	\$ 245	\$ 619	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Security Systems Improvements	\$ 4,235	\$ 1,068	\$ 357	\$ 884	\$ 809	\$ -	\$ -	\$ 770	\$ -	\$ -	\$ 347
Off-Site Relocation Costs	\$ 26,326	\$ 9,510	\$ 2,702	\$ 2,985	\$ 3,123	\$ 3,267	\$ 3,419	\$ 1,320	\$ -	\$ -	\$ -
Off-Site Relocation Costs (Extended Plan)	\$ 49,292	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,724	\$ 4,063	\$ 4,280	\$ 38,225
Total (in \$000)	\$ 519,537	\$ 95,568	\$ 17,237	\$ 16,868	\$ 15,759	\$ 4,959	\$ 13,493	\$ 22,000	\$ 22,000	\$ 22,000	\$ 289,653

Coordinate "central plant" and stand-alone systems projects

**NATIONAL GALLERY OF ART
ONGOING RENOVATION
FY 2013**

The Gallery's FY 2013 request for Ongoing Renovations totals \$1,000,000, the same amount as the FY 2012 Enacted Budget.

Activities within each category of the Gallery's Ongoing Renovation budget are summarized below.

Security

There are no Security projects currently under consideration for FY 2013.

Environmental Compliance

- Asbestos Removal/Encapsulation: Remediation of asbestos will continue in the course of repair and renovation activities to ensure strict environmental conditions for the safety of staff and visitors, and the preservation of art.

Energy Management

- Energy Savings Study: A comprehensive energy management program to upgrade ventilation systems and climate controls to protect works of art and to reduce energy usage and costs will continue in FY 2013.

Access, Safety, and Building Repairs

- Staff Salaries: The FY 2013 budget request supports 2 FTE architect positions for the Gallery's Repair, Restoration and Renovation activities.
- Accessibility Improvements for East and West Building Public Elevators: Renovations to one of the two Ground Floor wheelchair lifts in the West Building were completed in FY 2010. At that time, an initial study for the second wheelchair lift recommended retrofitting the public elevator near 7th Street to provide wheelchair access to gallery spaces served by the existing, outdated wheelchair lift. Combining the two functions into a single elevator will provide access meeting ADA requirements. Design began in FY 2011 for the West Building elevator improvements and for a new elevator proposed for the East Building adjacent to the main entrance. Renovations will begin on the West Building elevator in FY 2012, and FY 2013 funding will be needed to complete the renovations. These modifications are required to comply with the current Americans with Disabilities Act (ADA).

Alterations/Renovations

- Collections Cool and Cold Storage and Office Modifications: Construction of new cool and cold storage spaces will be underway in FY 2012 and FY 2013. Cool and cold storage facilities are required to preserve original works of art such as photographs, negatives, and archival materials that are composed of chemically unstable materials. Some of these funds are also needed for office alterations to better use existing space.

**NATIONAL GALLERY OF ART
ONGOING RENOVATION BUDGET
FY 2011 - FY 2013**

<u>Description</u>	<u>FY 2011 Actual</u>	<u>FY 2012 Estimate</u>	<u>FY 2013 Estimate</u>
CARRY-FORWARD FUNDS, BEGINNING OF YEAR	\$ 170,308	\$ 211,081	\$ -
<u>BUDGET *</u>			
ONGOING RENOVATION PROJECTS			
<u>Security</u>	-	-	-
<u>Environmental Compliance</u>			
Asbestos Removal/Encapsulation	29,940	30,000	30,000
<u>Energy Management</u>	149,700	130,000	130,000
<u>Access, Safety, and Building Repairs</u>			
Staff Salaries	274,450	260,000	260,000
Accessibility Improvements	299,400	400,000	400,000
<u>Alterations/Renovations</u>			
CAD Services	19,960	20,000	20,000
Carpet Replacement	-	30,000	30,000
Telecommunications Renovations	164,670	-	-
Collections Cold Storage and Office Modifications	59,880	130,000	130,000
TOTAL NEW FUNDING APPROPRIATED / REQUESTED	<u>998,000</u>	<u>1,000,000</u>	<u>1,000,000</u>
TOTAL FUNDS AVAILABLE	<u>\$ 1,168,308</u>	<u>\$ 1,211,081</u>	<u>\$ 1,000,000</u>
<u>OBLIGATIONS</u>			
Environmental Compliance	-	30,000	30,000
Energy Management	433,626	341,081	130,000
Access, Safety, and Building Repairs	452,986	660,000	660,000
Alterations/Renovations	70,615	180,000	180,000
TOTAL OBLIGATIONS	<u>957,227</u>	<u>1,211,081</u>	<u>1,000,000</u>
CARRY-FORWARD FUNDS, END OF YEAR	<u>\$ 211,081</u>	<u>\$ -</u>	<u>\$ -</u>

* FY 2011 and FY 2012 Enacted Budgets reflect rescissions of 0.2% and 0.16% respectively.