

Capital Budget

2005

Name of Project: **HVAC, Electrical & Plumbing Upgrades**

Agency: District of Columbia Courts

Account Title: Federal Payment to the District of Columbia Courts

Account Identification Code: 95-1712

Program Activity: Capital Improvements

New Project  Ongoing Project

Was the Project Reviewed by the Executive Review Committee or Investment Review Board?

Yes  No

Is this project Information Technology? Yes  No

**Part I: Summary of Spending for Project Stages (in millions)**

	2003 and earlier	2004	2005	2006	2007	2008	2009 and beyond	Total
<b>Planning</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<b>0.00</b>
Budget Authority	0.00	0.00	0.00	0.00	0.00	0.00	0.00	<b>0.00</b>
Outlays								
<b>Full Acquisition</b>								
Budget Authority	4.20	8.77	15.00	12.00	10.00	5.00	5.00	<b>59.97</b>
Outlays	4.20	8.77	12.00	12.00	7.00	8.00	8.00	<b>59.97</b>
<b>Total, sum of stages (excludes maintenance)</b>								
Budget Authority	4.20	8.77	15.00	12.00	10.00	5.00	5.00	<b>59.97</b>
Outlays	4.20	8.77	12.00	12.00	7.00	8.00	8.00	<b>59.97</b>
<b>Maintenance</b>								
Budget authority								
Outlays								

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**Part II: Justification and Other Information**

A. Project Description and Justification

*(1) How does this investment support the Courts' mission and strategic goals?*

The HVAC, electrical, and plumbing upgrade project will ensure that health and safety concerns for the public and the Courts' personnel are addressed in three of the Courts' buildings, and will allow the Courts to make much needed heating, ventilation, air conditioning, mechanical, plumbing and electrical improvements. Analysis of the condition of the Courts' HVAC, electrical and plumbing systems indicated that it was imperative that this project be undertaken to eliminate identified safety and health hazards and restore adequate lighting and ventilation in the Courts' buildings. Court staff and the public have already benefited from initial improvements and will continue to benefit from the substantial improvements projected to be made to the conditions of the facilities. This project began in FY 1999 with the replacement of 25-year-old HVAC equipment in the H. Carl Moultrie Courthouse. It continues to be an important and ongoing project for the Courts to update its inefficient, outdated infrastructure.

The Courts' FY 2005 request includes the following HVAC, electrical and plumbing upgrades:

- Replace electrical panel boards and switch boards;
- Replace major heating and cooling components such as air handling units, chillers, cooling towers, pumps, and duct work in Court buildings;
- Replace plumbing systems, steam leaks and drinking fountains in all court facilities;
- Install wiring for the Digital HVAC Control System to integrate all buildings into one system;
- Replace exterior windows and doors to conserve energy and reduce utilities cost;
- Replace water filtration and fountain systems in all court facilities;
- Continue HVAC upgrades of ancillary systems in all buildings;
- Upgrade to digital HVAC controls in Buildings "A" and "B";
- Replace parking level drain line in the Moultrie Building;
- Conduct a master clock system analysis and commence replacement; and
- Replace twenty-one (21) air handling units and load study corrective measures.

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- (2) *How does this investment support a core or priority function of the Courts?* This investment supports the vision and mission of the Courts' Strategic Plan. A goal of the Courts is to improve court facilities and technology by providing personnel and court participants with a safe, secure, functional and habitable physical environment.
- (3) *Are there any alternative sources, in the public or private sectors that could perform this function? If so, explain why the Courts did not select one of these alternatives?* There are no alternative entities in the public or private sectors that could perform this function.
- (4) *How will this investment reduce costs or improve efficiencies?* This investment will enhance efficiency by consolidating these needed improvements into a unified project, thereby reducing costs, delays, and inconvenience to the public and court staff associated with frequent small repairs.
- (5) *For acquisition of buildings, what is the cost per square foot estimates for comparable Federal and private sector facilities?*  
The project does not include the acquisition of buildings.

B. Program Management

- (1) *Have you assigned a project manager and contracting officer to this project? If so, what are their names?*  
The project manager for this project is Michael Stewart, Chief Building Engineer, and the Contracting Officer is Joseph E. Sanchez, Jr., Administrative Officer.
- (2) *How do you plan to use the Integrated Project Team to manage this project?*  
The Courts will use an Integrated Project Team including the Chief Capital Projects Manager, the Chief Building Engineer, the Building Operations Manager, and the Facility Supervisor to manage this project. Scheduled progress meetings will be conducted with each contractor to assist in completing the project on time and within budget.

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C. Acquisition Strategy

*(1) Will you use a single contract or several contracts to accomplish this project? If multiple contracts are planned, explain how they are related to each other, and how each supports the project performance goals?*

Several contracts will be used to accomplish this project in a timely manner, including multiple contractors and small, specialty vendors that provide services such as painting, and architectural finishing or specialized mechanical and plumbing work. These smaller contractors add flexibility and are able to respond to changes in schedules that could affect the completion dates for certain projects. They also provide continuing cost competition for non-routine tasks.

*(2) For each planned contract, describe:*

*a. What type of contract will you use? (e.g. cost reimbursement, fixed price, etc.)*

The Courts will primarily utilize a fixed price (or fixed unit price) type of contract with various contractors acquired through a competitive selection process.

*b. The financial incentives you plan to use to motivate contractor performance. (e.g. incentive fee, award fee, etc.)*

The contractor will be required and expected to meet the financial terms of the contract without any additional financial incentives.

*c. The measurable contract performance objectives.*

The measurable contract performance objectives are developed utilizing the specific tasks listed in Part II A. (1). The contractor will be required to submit a proposed construction timeline to the Courts so that progress can be tracked by the Project Management Team to ensure timely completion of all construction objectives.

*d. How will you use competition to select suppliers?*

The Courts will procure these services utilizing either (1) GSA contracts or Schedules, or (2) competitively bid solicitations issued by the Courts.

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*e. The results of your market research.*

Existing GSA contracts have been utilized to date under the Washington Gas Area-Wide Contract. Since a market survey is conducted in the process of awarding a GSA contract, utilizing this vehicle eliminates the need for an independent market survey by the Court.

*f. Whether you will use off-the-shelf or custom designed projects.* The nature of the Courthouse environment requires custom-designed projects; however, many of the renovations are based on construction standards or plans already in the Courts' possession.

D. Alternative Analysis and Risk Management

*(1) Did you perform a life cycle cost analysis for this investment? If so, what were the results?*

The Courts contracted with Washington Gas in 2003 to assess their existing HVAC system after the initial system modification. The study confirmed that the secondary portion of the overall system needs replacement.

*(2) Describe what alternatives you considered and the underlying assumptions of each.* The only alternative to this project was to refurbish/rebuild much of the aging equipment rather than replace it with new equipment.

*(3) Did you perform a benefits/costs analysis or return on investment analysis for each alternative considered? What were the results for each? (Describe any tangible returns that will benefit the Courts, even if they are difficult to quantify.)* The Courts found that the alternative of refurbishing and/or rebuilding equipment to be cost prohibitive because it would be a costly temporary measure to patch antiquated parts which would continue to require replacement. This alternative only delayed the inevitable replacement of equipment that had exceeded its useful life.

*(4) Describe your risk assessment and mitigation plan for this project.*

The Courts utilized the expertise of in-house staff and Washington Gas to analyze the condition of the Courts' HVAC, electrical and plumbing systems. Their findings indicated that it was imperative that this project be undertaken by the Courts to eliminate identified safety and health hazards and restore adequate lighting and ventilation in the Courts' buildings. Court staff and the public have benefited from initial improvements and will continue to benefit from the substantial improvements projected to be made to the conditions of the facilities.

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**Part III: Cost, Schedule, and Performance Goals**

A. Description of performance-based management system (PBMS):

(1) *Describe the performance based management system that you will use to monitor contract or project performance.* The Courts' performance-based management system will provide a tracking system that permits early and ongoing warnings to ensure that projects do not exceed either their budgeted cost and/or their time projections.

B. Original baseline (OMB approved at project outset):

(1) *What are the cost and schedule goals for this segment or phase of the project?*

The cost and schedule goals for this phase of the project are as follows:

- Install digital HVAC controls and electrical and lighting systems in Buildings A and B – 60% complete by 12/05
- Install water filtration and fountain systems in all Court buildings – 80% complete by 8/05
- Implement HVAC upgrades in all Court buildings – 45% complete by 9/05

(2) *What are the measurable performance benefits or goals for this segment or phase of this project?*

The project performance objectives are stated below:

- Establish an energy efficient HVAC system in all Court buildings to ensure a healthy and safe environment
- Restore all Court buildings to an environment with healthy drinking water, proper air ventilation, and adequate lighting.

C. Current baseline (applicable only if OMB approved the changes):

(1) *What are the cost and schedule goals for this segment or phase of the project?* Not applicable.

(2) *What are the measurable performance benefits or goals for this segment or phase of this project?* Not applicable.

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D. Actual Performance and Variance from OMB approved baseline (Original or Current): Not Applicable

E. Corrective Actions: Not Applicable