

Fiscal Policies

Project Eligibility for Inclusion in the Capital Improvements Plan (CIP)

Capital expenditures included as projects in the CIP must:

- Be carefully planned, generally as part of the District-wide Facility Condition Assessment Study in concert with the Comprehensive Plan. This planning provides decision-makers with the ability to evaluate projects based on a full disclosure of information.
- Have a useful life of at least five years or add to the physical infrastructure and capital fixed assets.
- Exceed a dollar threshold of \$250,000.
- Enhance the productivity or efficiency capacity of District services.
- Have a defined beginning and a defined ending.
- Be related to current or future projects. For example, feasibility studies and planning efforts not related to a specific project should be funded with current revenues rather than with capital funds.

Policy on Debt Financing

With a few exceptions (Highway Trust Fund projects), the CIP is primarily funded with general obligation bonds or equipment lease/purchase obligations. Capital Improvement Projects usually have a long useful life and will serve taxpayers in the future as well as those paying taxes currently. It would be an unreasonable burden on current taxpayers to pay for the entire project upfront. General obligation bonds, retired over a 20 to 30-year period, allow the cost of capital projects to be shared by current and future taxpayers, which is reasonable and fair. Capital improvement projects eligible for debt financing must:

- Have a combined average useful life at least as long as average life of the debt with which they are financed.
- Not be able to be funded entirely from other potential revenue sources, such as Federal aid or private contributions.

Policy on Capital Debt Issuance

In formalizing a financing strategy for the District's Capital Improvements Plan, the District adheres to the following guidelines in deciding how much additional debt, both general obligation and revenue bonds, may be issued during the six-year CIP planning period:

- **STATUTORY REQUIREMENTS:** The issuance of general obligation indebtedness cannot cause

maximum annual debt service to exceed 17 percent of general fund revenues as stipulated in the Home Rule Act.

- **AFFORDABILITY:** The level of annual operating budget resources used to pay debt service should not impair the District's ability to fund ongoing operating expenditures and maintain operating liquidity.
- **FINANCING SOURCES:** The District evaluates various financing sources and structures to maximize capital project financing capacity at the lowest cost available, while maintaining future financing flexibility.
- **CREDIT RATINGS:** Issuance of additional debt should not negatively impact the District's ability to maintain and strengthen current credit ratings, which involves the evaluation of the impact of additional debt on the District's debt burden. This includes having certain criteria and ceilings regarding the issuance of new debt and debt ratios such as debt per capita and debt service to general fund expenditures.

Policy on Terms for Long-Term Borrowing

To mitigate the interest costs associated with borrowing, the District seeks to identify sources other than bond proceeds to fund its CIP, such as grants, Highway Trust Fund money, and Paygo capital. Furthermore, the District issues its bonds annually based on anticipated spending for the fiscal year, not on a project-by-project basis. The District has issued only general obligation bonds to finance its CIP in the past, but will continue to analyze the potential benefits associated with the issuance of revenue bonds for general capital purposes in the future. The pledge of a specific revenue source for the issuance of revenue bonds must not have a negative impact on the District's general fund or general obligation bond ratings, and must provide favorable interest rates.

To match the debt obligations with the useful life of the projects being financed, the District issues short to intermediate-term financing for those projects that may not fit the criteria for long-term financing. The District amortizes bonds over a 25 to 30-year period for those projects with an average 30-year useful life.

Bonds may be issued by independent agencies or instrumentalities of the District as authorized by law. Payment of the debt service on these bonds is solely from the revenue of the independent entity or the project being financed.

Policy on Terms for Short-Term (Interim) Borrowings

The District may issue other forms of debt as appropriate and authorized by law, such as bond anticipation notes (BANs) and commercial paper. The use of BANs or commercial paper provides a means of interim financing for capital projects in anticipation of a future bond offering or other revenue takeout. Furthermore, use of these types of interim financing tools would allow the District to benefit from lower interest costs by including short-term financing of capital expenditures in the initial financing structure. The use of BANs and/or commercial paper is intended at such times that it is financially feasible.

Policy on the use of the Master Equipment Lease/Purchase Program

The purpose of the Master Equipment Lease/Purchase Program is to provide District agencies with access to low-cost tax-exempt financing for equipment purchases, as an alternative to outright purchases, which would have a higher cost in the current year's budget, or other more expensive leasing or financing arrangements. Furthermore, the program assists the District in its asset/liability management by matching the useful life of the asset being financed with the amortization of the liability.

The program terms and conditions are established under an umbrella contract. Since the terms and conditions are established upfront, there is no need to negotiate a new lease contract each time equipment is to be financed, as long as the master lease agreement is in effect.

For equipment to be eligible, it must have a useful life of at least five years. The repayment (amortization) will not exceed the useful life of the equipment being financed. The maximum financing term that may be requested is 10 years.

Rolling stock such as automobiles, trucks, and public safety vehicles are eligible, as are computer hardware and software, with certain limitations.

Policy on the Use of Paygo Financing

"Pay-as-you-go" (Paygo) financing is obtained from current revenues authorized by the annual operating budget and approved by the Council and the Congress in a public law to pay for certain projects. No debt is incurred with this financing mechanism. Once the public law becomes effective, the operating funds are transferred to the capital account and allocated to the appropriate project. Generally, paygo financing supports the

costs for minor repairs, equipment purchases, or other items that do not qualify for long-term general obligation bond financing. The District has the following policies on the use of paygo financing:

- Paygo must be used for any CIP project not eligible for debt financing by virtue of its limited useful life.
- Paygo should be used for CIP projects consisting of short-lived equipment replacement (not eligible for the Master Equipment Lease/Purchase Program), and for limited renovations of facilities.
- Paygo may be used when the requirements for capital expenditures press the limits of bonding capacity.

Congressional Appropriations

Notwithstanding any other provisions in the law, the Mayor of the District of Columbia is bound by the following sections of the 2000 D.C. Appropriations Act, included in P.L. 105-277 of the Omnibus Consolidated and Emergency Supplemental Appropriations for Fiscal Year 2000. These sections were mandated by the 105th Congress to be enacted for the fiscal year beginning October 1, 2000.

- 113 - At the start of the fiscal year, the Mayor shall develop an annual plan, by quarter and by project, for capital outlay borrowings: Provided, that within a reasonable time after the close of each quarter, the Mayor shall report to the Council of the District of Columbia and to the Congress the actual borrowings and spending progress compared with projections.
- 114 - The Mayor shall not borrow any funds for capital projects unless the Mayor has obtained prior approval from the Council of the District of Columbia, by resolution, identifying the projects and amounts to be financed with such borrowings.
- 115 - The Mayor shall not expend any monies borrowed for capital projects for the operating expenses of the District of Columbia government.

Trends Affecting Fiscal Planning

Several different kinds of trends and economic indicators are reviewed, projected, and analyzed each year for their impact on the operating budget and for their impact on fiscal policy as applied to the Capital Improvements Plan. These trends and indicators include:

- INFLATION: Important as an indicator of future project costs or the costs of delaying capital expenditures.

- **POPULATION GROWTH/DECLINE:** Provides the main indicator of the size or scale of required future facilities and services, as well as the timing of population-driven project requirements.
- **DEMOGRAPHIC CHANGES:** Changes in the number and/or locations within the District of specific age groups or other special groups, which provides an indication of requirements and costs of specific public facilities (e.g., senior wellness and recreation centers).
- **PERSONAL INCOME:** The principal basis for projecting income tax revenues as one of the District's major revenue sources.
- **IMPLEMENTATION RATES:** Measured through the actual expenditures within programmed and authorized levels. Implementation rates are important in establishing actual annual cash requirements to fund projects in the CIP. As a result, implementation rates are a primary determinant of required annual bond issuance.

Spending Affordability

One of the most important factors in the CIP development process is determining spending affordability. Spending affordability is determined by the amount of debt service and Paygo capital funds that can be reasonably afforded by the operating budget, given the District's revenue levels, operating/service needs, and capital/infrastructure needs. The size and financial health of the capital program is therefore somewhat constrained by the ability of the operating budget to absorb increased debt service amounts and/or operating requirements for capital expenditures. Realizing that maintenance and improvement in the infrastructure is important to the overall health and revitalization of the District, policymakers have worked diligently over the past several years to increase the levels of capital funding and expenditures. Debt and debt service reduction efforts on the part of District policymakers and financial leadership have served to increase the affordability of such additional capital spending. There is the on-going need, however, to balance the infrastructure needs with spending affordability constraints.

Master Facilities and Program Coordination Plan

The fiscal realities that continue to face the District of Columbia require a new level of scrutiny of all government costs. The capital budget, a critical area of the annual budget, is now in need of intensive review and further rationalization. Prompting this deeper analysis

and decision-making is the reality that the borrowing capacity for capital projects has become severely constrained. To ensure continued good standing on Wall Street, the District must limit its annual capital borrowing to approximately \$400 million. With this amount of funding, the District must not only cover its baseline capital costs (maintenance of existing facilities), it must provide funding for whatever new construction of schools, libraries, wellness centers, transportation systems, and other facilities.

Making tough decisions on what facilities to fund also requires a deeper understanding of the opportunities to coordinate and possibly merge community services. Strategically planning for programmatic ventures will be a critical factor in driving what facilities are truly needed and where.

For these reasons the District developed a Master Facilities and Program Coordination Plan, which provides an updated facility inventory and conditions assessment, and reflects detailed analysis on community and program needs. With this information, future capital fund allocations will be more effectively targeted to meet community and governmental priorities with the most efficient use of resources. This planning effort requires intensive data collection, analysis and strategic planning on both public facility and programmatic components. This initial work, therefore, incorporates establishing interim protocols for making informed decisions during the larger planning effort. The three primary challenges that must be addressed as part of this undertaking are:

Data limitations: Although the District currently maintains a facility inventory for approximately 2,400 properties under its control, the database still lacks specific details and updated information on the condition and needs of each facility. Understanding these details is now even more critical as it will determine the baseline capital costs (which consist of the asset and the basis of its value as well as the maintenance and renovation of the current inventory of property).

This plan will begin with a preliminary assessment of the existing facility inventory, identification of agencies' current facility plans, understanding the capacity of agencies to plan for future needs, and evaluation of all these items within the context of the District's comprehensive planning policies. This is a prerequisite for preparation of a workable scope of work for the Public Facilities Master Plan.

Borrowing constraints: The District's capital budget and Master Lease Program faces a widening gap between the District's constrained capital resources and the cost of maintaining its current inventory -- let alone the funds needed to support new projects.

Program coordination: Over the past few years, District agencies have stepped up efforts to coordinate and consolidate programs to save resources and create "synergy" in neighborhoods. Current examples include the "wrap-around services" provided at some schools. Recognizing the critical shortage in capital funding, fostering creative cooperation among and between service providers will be even more fundamental. To that end, strategic planning on public programs and operations will be necessary to determine where there are gaps in service, overlaps in service, and opportunities to leverage multiple services into one facility. These initial discoveries will help drive whether existing facilities need to be upgraded (and where) and whether new facilities are in fact necessary.

The City Administrator leads this planning effort, and the Office of Planning will provide a coordinating role to ensure that this shorter-term planning process remains consistent and integrated with the development of the Comprehensive Plan. The Office of Property Management, Office of Budget and Planning, and other offices will lead specific tasks as appropriate. All staff work will be performed by District employees, except for areas where specific expertise must be contracted due to the unique nature of the work or to maximize efficiency in the use of time.

Financial Management Targets

The District has established certain financial management targets that are consistent with maintaining a healthy debt management program to finance its capital needs. Key targets include the following:

- 1) Reduction or containment of increase of outstanding debt and debt service.
- 2) Debt ratios comparable with industry standards.
- 3) Achieving further increases in bond ratings from all three major rating agencies (to the AA level).

Financial Management Target: Reduction or Containment of Increase of Outstanding Debt and Debt Service

Historically, the District amortized most of its bond issues over 20 years. In addition to this amortization structure, the District financed an operating deficit in

1991 with an intermediate term (12-year) repayment structure. Only within the last several fiscal years has the District amortized its bonds over 25 to 30 years to better match the useful life of the assets being financed. The former amortization structures caused the District's debt service to be heavily front-loaded, creating a strain on the District's operating budget.

In FY 1999, the District restructured its debt to adjust this heavily front-loaded debt amortization. This restructuring, which moved some of the near-term debt service out to future years, produced debt service and operating budget relief through FY 2006.

From FY 2000 through FY 2005, the District issued a total of \$626 million of unhedged variable-rate bonds to fund approved capital projects. Variable-rate bonds typically provide a lower cost of capital than fixed-rate bonds. For this reason, despite the inherent fluctuation in the debt service on them, it is desirable to have some portion of the District's debt portfolio as variable-rate. The District's target percentage range for variable-rate debt is 15 to 20 percent of the total debt portfolio. The current amount of variable-rate debt outstanding equals approximately 16 percent of the total.

In FY 2001, the District significantly reduced its outstanding general obligation debt by securitizing the revenues that it is due to receive over the next 30 years the national settlement with the manufacturers of tobacco products (the Master Settlement Agreement). The District established a separate instrumentality, the Tobacco Settlement Financing Corporation (the corporation), which issued bonds backed by the District's future tobacco settlement revenues (TSRs). This transaction represents the District selling its rights to these TSRs (to the corporation) in exchange for an upfront lump-sum payment (represented by the proceeds of the bond sale). These bonds are revenue bonds payable solely from TSRs to be received by the corporation. The bonds represent a debt of the corporation and not a debt of the District. Through this transaction, the District transferred the risk associated with non-receipt of TSRs in the future. The bond proceeds from transaction were used to pay off outstanding debt of the District. Specifically, the District reduced its outstanding debt by \$482 million by applying these bond proceeds to pay off outstanding general obligation bonds. This resulted in debt service savings totaling approximately \$684 million over 14 years, for an average of roughly \$50 million of debt service savings per year.

In addition, in accordance with a Congressional

requirement, the District used \$35 million of its fund balance in FY 2000 to pay off outstanding general obligation bonds.

Through the transactions described above, the District significantly reduced and restructured its outstanding debt and the associated debt service payments to be made from the District's operating budget. Additional borrowing to fund on-going capital improvements over the past few years have naturally increased the outstanding debt and debt service, and the current CIP will result in further increases. However, these increasing levels will be continually monitored and contained within certain policy limits in the process of managing the debt burden and the debt service affordability.

Financial Management Target: Debt Ratios Comparable with Industry Standards and Within Debt Management Policy Parameters

Three debt ratios that are typically used as measures of a jurisdiction's debt burden are Debt-to-Full Value (property value), Debt Service-to-General Fund Expenditures, and Debt-Per-Capita. As the preceding table CA-8 indicates, the District's debt ratios are generally comparable with those of other major municipalities, and in some cases substantially better. However, the District's debt-per-capita is quite high compared to most other jurisdiction. One of the reasons for this high debt-per-capita is that for years the District has funded capital projects that are typically funded by states. Notwithstanding this fact, the District intends to continually monitor its debt ratios with the goal of having them be comparable or favorable in relation to other major municipalities and rating agency benchmarks. Moreover, the District has established certain debt management policy parameters for its debt ratios to effectively manage its debt burden over the long term. These parameters provide that the District should not exceed a debt-service-to-general fund expenditures ratio of 10 percent, a debt-per-capita of \$8,000 and a debt-to-full value ratio of 10 percent. In addition, the amount of debt issued in any given fiscal year should not exceed 15 percent of the total current outstanding debt as of the end of the previous fiscal year. There is sufficient capacity within these policy parameters to issue the additional debt necessary to fund the Mayor's proposed FY 2007 CIP.

Financial Management Target: Improving Bond Ratings from All Three Major Rating Agencies

Credit ratings evaluate the credit worthiness of a juris-

diction and the credit quality of the notes and bonds that the jurisdiction issues. Specifically, credit ratings are intended to measure the probability of the timely repayment of principal and interest on notes and bonds issued. Potential investors utilize credit ratings to assess their repayment risk in loaning the District funds for capital and short-term operating needs.

There are three major agencies that rate the District's debt: Fitch Ratings, Moody's Investors Service, and Standard & Poor's Ratings Services. A summary of agency credit ratings categories for long-term debt is provided in the preceding table CA-9.

During FY 1995, the District's general obligation debt was downgraded by all three rating agencies to below-investment-grade or junk bond levels. Since 1998, each rating agency has issued a series of upgrades to the District's bond rating. The District's current ratings are A2, A+, and A by Moody's, Standard & Poor's and Fitch Ratings, respectively. The upgrades that occurred in 1999 raised the District's ratings back to investment-grade levels, and the upgrades to the A+ category in 2004 and 2005 represented a significant milestone in the District's financial recovery. The upgrades in the bond ratings by these agencies made the District's bonds more marketable, hence resulting in a lower cost of capital to the District. One of the District's intermediate-to-long-term targets is to have its general obligation bond ratings raised to the AA level by these rating agencies.

The rating agencies currently rate the District's long-term general obligation bonds, and other major cities' bonds, (see table CA-10 for rates of other major cities) by the following information:

- Economic base
- Financial performance
- Management structure and performance
- Demographics
- Debt burden

Credit ratings are very important to the Capital Program. They affect the District's cost of capital as well as represent an assessment of the District's financial condition. The cost of capital also plays a role in determining spending affordability. Higher costs for capital financing diminish the ability of the Capital Program to proceed with programmatic objectives. In short, higher costs for capital results in fewer bridges rehabilitated, roofs repaired and facilities renovated. On the other hand, lower costs of capital increase the affordability of such projects.

FY 2007 Capital Budget Planning

Capital budgeting is closely connected to the facility conditions assessments. The data collected from these assessments will enable agency directors to better estimate capital needs over multiple years. The administration has taken some important steps to improve the overall processes. First, we have begun estimating the projected capital needs over longer time periods for key agencies. Second, we are working with the major consumers of capital (WMATA, DCPS, and DCPL) to restructure their capital financing plans to comply with existing capital borrowing constraints. Third, we are better coordinating and standardizing capital expenditures across agencies such as elevator repair, asbestos removal and ADA compliance under one agency - Office of Property Management. Because of this preliminary work, the District's proposed capital budget will show spending within pools of available resources while addressing the most critical needs.

Major Assumptions

A number of assumptions must be established to develop a comprehensive Capital Improvement Plan budget. Due to the unique and changing nature of the District's organizational structure and financial position, it is difficult to precisely forecast revenues, expenditure patterns, costs, and other key financial indicators. Nonetheless, the following primary assumptions were used to develop this CIP:

- The capital expenditure target for the FY 2007 to FY 2012 CIP is based on the assumption that the District can meet its FY 2007 budget's current and future expenditure targets as established by the CIP.
- The FY 2007 operating budget will be sufficient to provide for:
 - Lease payments for the District's Master Lease Program used to finance certain equipment projects.
 - Debt service on long-term bond financings.

Capital Improvements Plan Development Process

The Capital Program, as mandated by Public Law 93-198 - the Home Rule Act, has the annual responsibility of formulating the District's Six-Year Capital Improvements Plan. Each District agency is responsible for the initial preparation and presentation of an agency specific plan. Under the program, projects should com-

plement the planning of other District agencies and must constitute a coordinated, long-term program to improve and effectively use the capital facilities and agency infrastructure. Specifically, the CIP should substantially conform to the Office of Planning's Comprehensive Plan, the District of Columbia Municipal Regulations Title 10 Planning and Development (Chapters 1 to 11).

Program Participants

The development and implementation of the CIP is a coordinated effort among the District's programmatic, executive, and legislative/oversight bodies.

Implementing Agencies (Programmatic)

Implementing agencies manage actual construction and installation of a capital facility or supporting infrastructure. The implementing agencies are responsible for the execution of projects. This task includes the appointment of a Capital Financial Officer, who monitors the progress of the projects, and ensures:

The original intent of the project is fulfilled as Congressionally approved.

- The highest priority projects established by the user agency are implemented first.
- Financing is scheduled for required expenditures.

While many District agencies implement their own capital projects, several central agencies, such as the Office of Property Management and the Office of the Chief Technology Officer, implement projects on behalf of many other agencies.

Office of Budget and Planning (Executive)

The Office of Budget and Planning (OBP) is responsible for issuing budget call instructions to District agencies. OBP provides technical direction to agencies for preparing expenditures plans, project/subproject justifications, priority ranking factors, operating budget impacts, cost estimates, milestone data and performance measures. The budget call allows for updates to ongoing projects and requests for additional financing and appropriated budget authority for ongoing and new projects. OBP coordinates project evaluations to determine agency needs through careful analysis of budget request data, review of current available and future financing requirements, and comparison of project financial needs with the current bond sales and general fund subsidies anticipated to be available for CIP purposes.

Technical Review Team (Executive)

The Technical Review Team (TRT) is led by the Office of the City Administrator and includes representatives from the offices of the Deputy Mayors, the Office of Property Management, the Office of Planning, and the Office of Budget and Planning. The TRT employs outside consultants as needed to analyze the feasibility and reasonableness of specific capital projects. The TRT reports its findings to the Budget Review Team (BRT) and makes recommendations regarding which non-IT projects should be included in the CIP.

Budget Review Team (Executive)

The City Administrator chairs the Budget Review Team (BRT) with representatives from the Office of the City Administrator, Chief Financial Officer, Deputy CFO for Budget and Planning, Deputy CFO for Finance and Treasury, Deputy Mayors and Mayor's Chief of Staff. The advisors to the team are the Directors of the Office of Property Management, Office of Planning, and the Office of the Chief Technology Officer. OBP provides analysis and all staff support to the BRT. The BRT evaluates agency requests using criteria developed by the Office of Budget and Planning.

Mayor (Executive)

The BRT recommendation is then submitted to the Mayor for review, approval and transmittal to the Council. There are two levels of legislative/oversight review. They are as follows:

- The Council of the District of Columbia
- The U.S. Congress

Each body reviews and approves the capital budget and the six-year plan.

Authorizing Projects in the CIP

The OBP reviews and analyzes the CIP with the assistance of the BRT. The CIP is developed in the four-step process described below :

Step 1: Budget Call

In the fall of the current fiscal year, District agencies are requested to provide OBP with updated information regarding ongoing projects (increases or decreases in funding or planned expenditures), as well as requests for new projects. The instructions call for agencies to provide detailed information on a project's expenditure requirements, physical attributes, implementation time-frame, feasibility, and community impact. In addition, agencies provide project milestones, estimated costs,

expenditure plans, operating budget impacts and a prioritized list of potential capital projects. The agency requests are disseminated to all members of the TRT and BRT for review.

Step 2: Budget Analysis

Project requests submitted in Step 1 undergo a thorough analysis to determine if an agency requests merits inclusion in the CIP. This analysis is divided into the following three primary functions:

Function 1 - Project Justification: Each project request is evaluated by the BRT to determine its relationship with the agency's overall mission, whether the project is duplicative of efforts of another agency's ongoing project, whether the project is in concurrence with the District's Comprehensive Plan, and whether the planned expenditure is an operating rather than capital expense.

In addition, project requests are reviewed based on priority criteria and must meet one or more of the factors below :

- Health/Safety
- Legal Compliance
- Efficiency Improvement
- Facility Improvement
- Revenue Initiative
- Economic Development
- Project Close-out

Function 2 - Cost Analysis: An important factor in the evaluation of a project request is the overall cost. Cost estimates are developed in conjunction with the Department of Public Works and the Office of Property Management to validate the project costs proposed in the agency submissions. Furthermore, future operating costs are estimated to provide supplementary information regarding out-year liabilities once the project is implemented (Operating Budget Impacts).

Function 3 - Financing Analysis: The Office of the Chief Financial Officer is committed to finance capital projects in a manner in which:

- Funding is committed for the entire CIP
- The District receives the lowest cost of funding available
- The useful life of capital projects matches and does not exceed the average maturity of the liability used to finance the assets

As such, OBP reviews the useful life of each project and presents this information to the Office of Finance

and Treasury (OFT). OFT develops a strategy to match the underlying assets with an appropriate means of financing.

Step 3: TRT and BRT Recommendations

The TRT conducts a two-step review of all non-IT capital projects. The first step is a purely technical review of the project scope, budget, and schedule. Based on this review, the TRT may recommend changes to a project to increase its viability. The second step is an assessment of the programmatic goals of a project and relevance to administration policy. The TRT reports its findings to the BRT and makes recommendations regarding which non-IT projects should be included in the CIP. The BRT reviews the recommendations of the TRT and formulates the draft CIP. The BRT's recommendation is then submitted to the Mayor for review, approval and transmittal to the Council.

Step 4: Approval

After reviewing all capital project requests with regard to scope of work, projected cost, and financing alternatives, the BRT evaluates the projects based on their physical attributes, implementing feasibility, and physical/economic impact on the community. The BRT then formulates a recommendation in the form of a CIP. The proposed Capital Improvements Plan is then submitted to the Mayor for approval and inclusion in the proposed budget with subsequent submission to the Council.

The Council may make changes, and after Council approval and the Mayor's signature, the CIP is transmitted to Congress for final approval.

Phases of a Capital Project

Capital projects are actually the sum of a series of phases, each of which groups types of tasks necessary to accomplish the project's goal. Other than Information Technology (IT) projects, each project in the CIP is approved and budgeted for five phases. However, in some instances, projects need funding for planned expenditures only in one particular phase, such as major equipment acquisition. The phases are:

- Design (01)
- Site (02)
- Project Management (03)
- Construction (04)
- Equipment (05)
- IT Requirement Development (06)
- IT Development and Testing (07)
- IT Development and Turnout (08)

Phase 1, Design includes all work completed to define the scope and content of the project. Architects and engineers that agencies employ to analyze the planning for a project would be funded from the design phase. Costs associated with solicitations and proposals also fall within this phase. This phase also would be used to fund any processes necessary for selection of contracts.

Phase 2, Site Acquisition covers costs for site preparation expenses, legal work or probable demolition and hauling expenses. Site appraisal and survey also would be funded through this phase.

Phase 3, Project Management pays all internal agency management and support costs from design to construction. Activities within this phase include any work of the project manager and other staff.

Phase 4, Construction includes any construction contract work done by other District agencies. This phase funds work on a particular construction contract.

Phase 5, Equipment funds disbursements for specialized equipment. Equipment funded through capital has to be permanently connected to the physical plant designed as an integral part of the facility. Equipment defined for funding by this phase includes such items as the purchase and installation of elevators, boilers, generators, and HVAC systems. The Capital Program will not fund office equipment or personal computers. These are funded by the operating budget.

Phase 6, IT Requirements Development Phase encompasses both the definition of requirements and design of the system to be implemented. This phase defines requirements and design elements to a level of detail that allows technicians to decide upon development and configuration choices.

Phase 7, IT Development and Testing is the phase in which project requirements and systems design are translated into a working version of the system. This

phase also includes all testing stages from unit/component testing through complete systems testing to user acceptance testing.

Phase 8, IT Development and Testing includes all activities to make the system available to all users. During this stage all functions necessary to make the system part of normal user activities is done. For technology systems, turnover means documenting processes and activities necessary to put the system into production.

Project Milestones

Each phase of a project is monitored and tracked using milestone data. This lets the Capital Program determine if projects are being completed on time and within budget. Milestone data is provided by agencies in the annual budget submissions as justification for additional funding.

Milestone data includes such items as project authorization dates, original project cost estimates, contract award dates, revised completion dates, construction start dates and others. In an attempt to summarize the various elements of milestone data, the Capital Program includes status codes in the project description forms.

District of Columbia Water and Sewer Authority - FY 2005 -FY 2014 Capital Improvement Program

Overview

The District of Columbia Water and Sewer Authority (WASA) is an independent agency that provides essential retail water and wastewater services to 570,000 residents and to businesses in the District of Columbia, and also provides wholesale wastewater conveyance and treatment services to more than 1.6 million residents in Prince George's and Montgomery Counties in Maryland and Fairfax and Loudoun Counties in Virginia. WASA is governed by an eleven member, regional Board of Directors, and is responsible for maintaining and operating the water distribution system, sanitary and combined sewage systems, and Blue Plains, the world's largest advanced wastewater treatment plant.

Since WASA's formation in 1996, it has successfully undertaken significant efforts to improve its financial position and operations, a critical part of which has been the development and implementation of a ten-year capital improvement program. The capital program will enable WASA to meet its key goals of providing the best service possible to its retail and wholesale customers, reducing long-term operating costs, and meeting all regulatory requirements.

The Board-adopted ten-year capital improvement program (CIP) totals \$2.2 billion (cash disbursements basis), approximately \$100 million more than last year's plan, due primarily to the extension of the lead service line replacement program through 2014.

Ten-Year Capital Improvement Program and Financial Plan

Traditionally, the District's Capital Improvement Plan is developed for a six-year period. WASA operates under a regulatory and capital project-driven environment that requires a minimum ten-year planning horizon for capital improvement projects. In addition, WASA annually develops a ten-year financial plan that integrates the impact of the capital improvement program with WASA's board policy goals of maintaining strong bond ratings, implementing rate increases on a gradual and predictable basis, streamlining operations in order to lower operating costs over the next several years, and providing better service to customers.

The development and adherence to a ten-year capital improvement program and ten-year financial plan

have been critical factors in the strong bond ratings WASA has received. WASA has also been commended for its strong financing and rate-setting policies, its policy of gradual and predictable rate increases, and its emphasis on long-term financial planning. WASA's bond ratings remain at the "AA" level, the second highest rating category available to state and local issuers, helping reduce the interest rates we pay on our debt borrowings, resulting in lower customers' bills.

Capital Financing and Reserve Policies

WASA's solid financial performance has been in large part due to the Board's strong financing and reserves policies. WASA's financing policies are as follows:

1. WASA will maintain financial practices and policies that result in high quality investment grade bond ratings so as to ensure the lowest practical cost of debt necessary to finance WASA's long-term capital program.

2. WASA will maintain strong levels of operating cash reserves, equivalent to approximately six months of budgeted operations and maintenance costs, calculated on an average daily balance basis. The annual reserve amount will be formally approved by the Board as part of its annual approval of the operating and capital budgets and ten-year plan. The operating reserve will, at a minimum, include any reserve requirements contained in WASA's master trust indenture as follows, excluding any debt service reserve funds and the rate stabilization fund:

- Operating Reserve – equivalent to sixty days' operating costs.
- Renewal & Replacement Reserve - \$35 million. This reserve requirement will be evaluated every five years by WASA's independent rate consultant in conjunction with the indenture-required system assessment.
- District of Columbia General Obligation Debt Reserve – equivalent to ten percent of WASA's share of subsequent year's District general obligation bond debt service.

3. WASA will maintain senior debt service coverage of 140 percent, in excess of WASA's indenture requirement of 120 percent. Senior debt service coverage will be calculated in accordance with WASA's indenture.

4. In general, WASA will utilize operating cash in excess of the Board's reserve requirement and any other

significant one-time cash infusions for capital financing or for repayment of higher cost debt.

5. WASA will whenever possible use the least costly type of financing for capital projects based on a careful evaluation of WASA's capital and operating requirements and financial position for each year.

6. WASA will attempt to match the period of debt repayment, in total, with the lives of the assets financed by any such debt.

WASA's capital improvement program is financed from the following sources:

- Revenue Bonds/Commercial Paper – 63 percent
- Payments from Wholesale Customers – 19 percent
- Pay-Go Financing (Transfer from Operations) – 5 percent
- EPA Grants – 12 percent
- Interest Income on Bond Proceeds - 1percent

WASA successfully issued \$295 million of subordinate lien revenue bonds in August 2004. These bonds were issued as auction rate securities, which carry short-term variable rates. Through September 2005, the simple average interest rate was 1.97 percent, significantly less than fixed rate debt. As noted above, based on current capital spending projections, WASA projects that Series 2004 proceeds will last through the fourth quarter of FY 2006, after which the commercial paper program will be utilized. We expect that the next permanent financing, which we anticipate issuing as senior lien, fixed rate revenue bonds, will be issued in early calendar year 2007.

WASA's capital improvement program totals \$2.2 billion over FY 2005 -FY 2014, as described in more detail below.

Wastewater Treatment Program

WASA operates the Blue Plains Advanced Wastewater Treatment Plant, the world's largest advanced wastewater treatment facility. At Blue Plains, WASA provides wastewater treatment services to more than two million people in our service area, including residents of the District of Columbia and significant portions of Montgomery and Prince George's Counties in Maryland and Fairfax and Loudoun Counties in Virginia. Wastewater treatment includes liquids processing facilities that provide treatment for both sanitary wastewater flows and peak storm flows, along with solids processing facilities that treat the residual solids removed

by the liquids processing facilities. Blue Plains is rated for an average flow of 370 million gallons per day (MGD), and is required by its National Pollutant Discharge Elimination System (NPDES) permit to treat a peak flow rate of 740 MGD through the complete treatment process for up to four hours, and continuous peak complete treatment flows of 511 MGD thereafter. The plant treats these flows to a level that meets one of the most stringent NPDES discharge permits in the United States. Additionally, up to 336 MGD storm water flow must receive partial treatment, resulting in a total plant capacity of 1,076 MGD.

Liquids Processing Projects

WASA's ten-year capital improvement plan includes projects to upgrade and rehabilitate facilities involved in handling flows from the sanitary and combined sewer systems. These flows progress sequentially through the plant processes to ultimate discharge of the treated effluent into the Potomac River. Liquid treatment systems include headworks facilities that screen and pump the wastewater flows, grit facilities that remove sand and grit particles, primary treatment facilities that remove solids by sedimentation, secondary treatment facilities that remove organic pollutants using a biological process, nitrification/denitrification facilities that remove nitrogen using a biological process, and effluent filtration, disinfection, and dechlorination facilities.

Solids Processing Projects

Biosolids processing involves reductions in volume along with treatment to meet federal or state and local requirements, as applicable, for the ultimate disposal method. Treatment is provided by a system of processing facilities that include gravity thickening of primary sludge, flotation thickening of the biological waste sludges produced by the secondary and nitrification/denitrification processes, planned digestion of all biosolids streams, dewatering by centrifuge or belt press and lime stabilization. Dewatered biosolids are conveyed to the Dewatered Sludge Loading Facility for outloading to tractor-trailers for hauling to offsite land application sites, silviculture, and land reclamation sites. Solids processing facilities are required to produce a biosolids product that can be reused or disposed of in an economical and environmentally acceptable manner.

WASA continues implementation of a Biosolids Management program, originally adopted by the board in 1999. This plan, which included input from our

neighbors, environmental groups, and other stakeholders, evaluated a number of options for long-term biosolids processing and disposal, and identified full biosolids digestion as a common element of all long-term approaches and continuing land application as long as financially advantageous. The total cost of this plan is close to \$540 million, including the new egg-shaped digesters as well as a variety of ancillary projects, including portions of the process computer control system, and additional dewatering facilities. The digesters project alone is budgeted at \$354 million, and the initial construction contract is currently under procurement.

Plant-Wide Projects

Several significant plant-wide projects are included in WASA's capital plan. Two projects address chemical handling and feed systems, which have presented operating and safety concerns to WASA for a number of years.

Another project involves a new process control and computer system which allows for automation of a significant number of plant processes at Blue Plains, and better management of processes that are currently manually monitored. Operating savings are anticipated from lowered chemical usage and electricity consumption, due to minimizing peak demand, as well as lower staffing levels. This project is critical to achieving the goals presented in the Blue Plains Internal Improvement Plan. The new system is being implemented in three phases, and will include various facilities and processing such as the grit chambers, primary and secondary treatment facilities, dewatering processes, nitrification, filtration, disinfection facilities, and solids processing. Construction began in August 2002 and will continue through 2009. The new system is being constructed in conjunction with the major upgrade projects and is placed in service with the new treatment systems.

Sanitary Sewer Program

WASA is responsible for wastewater collection and transmission in the District of Columbia, including operation and maintenance of the sanitary sewer system. WASA's sanitary sewer system includes approximately 600 miles of large interceptor sewers and smaller gravity collection sewers. WASA is also responsible for sewer lateral connections from mains to the property lines of residential, government, and commercial properties. In addition, WASA is responsible for the 50 mile long Potomac Interceptor System, which provides con-

veyance of wastewater from areas in Virginia and Maryland to Blue Plains. The existing sanitary sewer system in the District of Columbia dates back to 1810. In FY 2004, WASA began a comprehensive evaluation of this system to determine its condition, verify adequate capacity, and to develop new capital projects, as appropriate. This assessment is scheduled for completion in FY 2007. In general, projects in the existing sanitary sewer service area program provide for replacement or rehabilitation of the system.

Combined Sewer Program

Similar to many older communities in the Mid-Atlantic, Northeast, and Midwest portions of the country, approximately one-third of the District of Columbia, mostly in the downtown and older parts of the city, is served by a combined sewer system. A combined sewer system merges the transportation of both stormwater and wastewater within one system. In dry weather, the system delivers wastewater to the Blue Plains Wastewater Treatment Plant. In wet weather, storm water also enters the system, and if the conveyance capacity of the system is exceeded, the excess flow spills into the waterways of the District of Columbia. This discharge is called Combined Sewer Overflow (CSO).

In December 2004, WASA reached agreement with the environmental plaintiffs, the U.S. Environmental Protection Agency, and the U.S. Department of Justice on the CSO Long-Term Control Plan, a major milestone in WASA and the District's history. Specifically, the Board entered into a consent decree that outlines a twenty-year, \$1.9 billion implementation plan and schedule, making this one of the largest infrastructure projects ever in the Washington metropolitan area.

The benefits of our twenty-year plan are significant - when fully implemented, combined sewer overflows will be reduced by a projected 96 percent (98 percent on the Anacostia River), resulting in improved water quality and a significant reduction in debris on our national capital's waterways. In addition, WASA's clean-up efforts on the Anacostia River are a key cornerstone of the District's plan to redevelop both sides of the river, including the new baseball stadium, retail development and affordable housing among other projects.

The plan, described in more detail on WASA's web site at www.dcwasa.com, includes a variety of improvements planned throughout the District to improve the quality of the Anacostia and Potomac Rivers and Rock Creek:

- Three large storage tunnels, which will allow the storage of flows from storm events until they can be gradually sent to Blue Plains for advanced treatment
- Pumping station improvements
- Targeted separation of combined sewers in several sections of the District to include Anacostia
- Consolidation and elimination of outfalls, where needed
- Funds for low impact development (LID) at WASA facilities and to encourage LID across the District

WASA has made great progress on the plan over the last two years including completion of projects associated with the federal CSO Nine Minimum Controls program that are projected to reduce combined sewer overflows by 40 percent. The completion in 2004 of twelve inflatable dams resulted in a 24 percent reduction in overflows. Engineering planning is now underway to separate additional combined sewer areas in Anacostia and Rock Creek.

Additionally, we are completing studies to add LID at several WASA facilities. We are in design or construction on the rehabilitation of our major pumping stations to increase their capacity, with work scheduled to be complete in 2008.

Stormwater Program

WASA is responsible for the design, construction and maintenance of certain public facilities that convey stormwater runoff to the Anacostia and Potomac Rivers, Rock Creek, and other receiving streams. The stormwater system includes approximately 600 miles of storm sewer pipes, catch basins, inlets, special structures and related facilities. Some components of the existing storm sewer system are over 100 years old. The system is constructed of a variety of materials such as ductile iron, plastic, steel, brick, cast iron, cast-in place concrete, brick and concrete, vitrified clay, and concrete. Projects include extensions to the system, relief of certain storm sewers, as well as projects to rehabilitate or replace storm sewer systems that have experienced structural deterioration.

Discussions over the last two years have centered around how responsibilities for a variety of stormwater-related functions are divided among District agencies, including responsibility for stormwater pumping stations, and all work had been deferred pending resolution of this issue.

Another significant project to highlight is the sewer lining at 22nd & P Streets, NW, which will correct a

drainage and flooding problems. The design will be completed during FY 2006, and construction is scheduled to begin later this year.

Water System Program

Projects in the Water Service Area are designed to maintain an adequate and reliable potable water supply to customers, and fire protection. Categories of projects include the rehabilitation and replacement of water mains, storage facilities, and pumping stations. This area also includes water service line and meter replacement.

The water distribution system operated and maintained by WASA includes almost 1,300 miles of water mains (ranging in size from four to 78 inches in diameter), three elevated water storage tanks, five underground water storage reservoirs, and four water-pumping stations. The water distribution system also includes appurtenances necessary for proper system operation, inspection, and repair, such as main line valves at regular intervals to allow flow control; air release valves to prevent air entrapment; blowoff valves for draining water mains; check valves to permit flow in one direction only; division valves to allow transfer of water between service areas during emergencies; fire hydrants; and meters.

The single largest program in the water area continues to be WASA's \$438 million lead service line replacement program. This program will replace the publicly-owned portion of all lead service lines in the District. The WASA Board continues its commitment to lead service line replacement efforts. In February 2006, the board endorsed implementation of a more comprehensive program that combines replacement of lead service lines in the public space with other water supply system repairs and replacements to deteriorated mains, valves, and fire hydrants. This will continue to ensure improving service while minimizing costs to ratepayers and disruptions to neighborhoods.

Other projects include rehabilitation/replacement of water pumping stations, and several water quality projects, including dead end elimination, water main rehab and replacement, and valve replacement.

Metering Improvements

WASA continues its automated meter reading and meter change-out program, which entails the replacement of the approximately 124,000 meters currently in the system. This program has been critical to achieving IIP goals in the Customer Service Department and reducing meter reading costs while improving the array

of services now available to customers. The meter installation / Automated Meter Reading program is 95 percent complete and WASA recently hired a new contractor to complete this project in 2007.

Washington Aqueduct

WASA's share of improvements to the Washington Aqueduct facilities reflected in the CIP totals \$180.7 million. As the largest of the three wholesale customers of the Aqueduct, WASA purchases approximately 75 percent of the water produced by the Aqueduct's two treatment facilities, the Dalecarlia and McMillan treatment plants, and thus is responsible for 75 percent of the Aqueduct's operating and capital costs. This percentage is based on WASA's percentage of the Aqueduct's total water sales. During the past three years, the Aqueduct has completed a variety of capital projects and various improvements to the McMillan and Dalecarlia Treatment Plants.

Near-term projects include Residuals, Georgetown Reservoir improvements and renovation of the laboratory and chemical buildings, which will renovate the four existing, forty-year old labs.

The single largest project in the Aqueduct's CIP is the Residuals project. Currently, solids that settle out from water at the Dalecarlia Treatment Plant and Georgetown Reservoir are periodically discharged to the Potomac River during high river flow conditions. Under the Aqueduct's NPDES permit and a related Federal Facilities Compliance Agreement (the federal agency equivalent of an administrative order), the Aqueduct is required to remove 85 percent of incoming sediments and not return them to the Potomac River. Further, the Federal Facilities Compliance Agreement also requires the Aqueduct to have a new process in

operation by December 31, 2009, and to develop a proposed construction schedule to meet this deadline. The Aqueduct has developed a proposed plan to build new dewatering facilities on site at its Dalecarlia treatment plant, and truck the dewatered sediments to land application sites. This proposed plan has gone through the environmental impact statement process, which found no scientific environmental problems, and culminated in a 'Record of Decision' to that effect, in November 2005. The Agency is now scheduling public meetings on the selected residuals-handling alternatives, and negotiating the A&E design contract. Construction is scheduled to start in late FY 2007, with completion in 2009.

Capital Equipment

WASA's ten-year capital equipment budget totals \$90 million. More than 50 percent of spending in the capital equipment area continues to be on major information technology projects, including the new document management system and the asset management system. WASA continues its commitment to vehicle fleet replacements, and approximately 12 percent of the budget is for ongoing fleet upgrades. Other projects include maintenance of large equipment at Blue Plains and in the major water and sewer pumping stations totaling \$13 million, or approximately 15 percent of disbursements over the next ten years.

FY 2007 Congressional Capital Authority Request

As part of WASA's enabling legislation, Congressional appropriations authority is required before any capital design or construction contract can be entered into. WASA's FY 2007 request totals \$286 million, and reflects the following:

**Fiscal Year 2007 Capital Authority Request
(\$000's)**

<u>Program Areas</u>	<u>Fiscal Year 2007 Capital Authority Request</u>
Blue Plains Wastewater Treatment	136,424
Sanitary Sewer System	18,834
Combined Sewer Projects	50,000
Stormwater ¹	0
Water System	37,524
Washington Aqueduct (WASA share)	41,252
Capital Equipment	<u>1,757</u>
Total	<u>285,791</u>

¹ The Stormwater projects' authority request is zero, as, existing (currently available) capital authority in this service area is in excess of projected commitments in FY 2006, FY 2007, FY 2008 and FY 2009.