
Capital Improvements Plan

FY 2007 - FY 2012

Introduction

The District of Columbia continues to make progress in implementing its Capital Improvements Plan (CIP). The proposed FY 2007-FY 2012 capital budget includes major investments in schools and libraries as well as continuing investments in affordable housing, economic development, parks and recreation centers, mass transit, and a variety of other areas. The District faces two challenges that limit its ability to expand its CIP as much as might be desired: it must work within a constrained borrowing environment, because its debt per capita and other measures of debt burden are high, and it must continue reducing the deficit in its General Capital Improvements fund.

The District's proposed FY 2007-FY 2012 capital budget calls for financing \$662.5 million of general capital expenditures in FY 2007, from the following sources:

- \$399.7 million of General Obligation (G.O.) bonds,
- \$188.0 million of pay-as-you-go (Paygo) capital financing--a transfer of funds from the General Fund to the General Capital Improvements Fund--and
- \$74.8 million through the master equipment lease program.

Several other sources are proposed to finance several large-scale capital projects as well.

Of the FY 2007 Paygo total, \$100 million is the first year's installment of a newly enacted \$1 billion plan for schools modernization for the D.C. Public Schools (DCPS). The plan calls for \$100 million of operating budget revenue to be transferred each year to DCPS. This financing will supplement G.O. bond-financed capital projects, for which DCPS is already scheduled to receive budget authority.

This overview chapter summarizes

- The proposed FY 2007-FY 2012 capital budget and planned expenditures;
- Details on the District's sources of funds for capital expenditures;

- The shortfall in the capital fund, and steps the District will take to reduce the shortfall;
- An outline of this capital budget document;
- The District's policies and procedures on its capital budget and debt; and
- A summary of the Water and Sewer Authority's capital program.

The Proposed FY 2007-FY 2012 Capital Budget and Planned Expenditures

The District budgets for capital using a six-year CIP, which is updated annually. The CIP consists of the appropriated budget authority request for the upcoming fiscal year and projected funding as well as expenditure plans for the next 5 years. The proposed FY 2007-FY 2012 CIP includes many of the projects from last year's CIP, but some projects are proposed to receive different levels of funding, and new projects have been added as well.

Table CA-1

Overview

(Dollars in thousands)*

Total number of projects receiving funding	196
Number of ongoing projects receiving funding	114
Number of new projects receiving funding	82
FY 2007 new budget allotments	\$513,555
FY 2007 expenditures planned from prior allotments	\$148,929
Total FY 2007 planned expenditures	\$662,484
Total FY 2007 to FY 2012 planned funding	\$3,192,797
Total FY 2007 to FY 2012 planned expenditures	\$3,192,797
FY 2007 Appropriated Budget Authority Request**	\$2,341,175
FY 2007 Planned Debt Service (G.O. Bond)	\$405,114
FY 2007-FY 2010 Planned Debt Service (G.O. Bond)	\$1,948,206

* Local funds only; excludes projects financed through Local Streets Maintenance Fund, Highway Trust Fund, revenue bonds, Certificates of Participation, financing for baseball, or other one-time borrowing, except where noted.

** From all funds.

The CIP is used as the basis for formulating the District's annual capital budget. The Council and the Congress adopt the budget as part of the District's overall six-year CIP. Following approval of the capital budget, bond acts and bond resolutions are adopted to finance the majority of projects identified in the capital budget. Inclusion of a project in a congressionally adopted capital budget and approval of requisite financing gives the District the authority to spend funds for each project. The remaining five years of the program show the official plan for making improvements to District-owned facilities in future years.

The District uses two terms in describing budgets for capital projects:

- *Budget authority* is given to a project at its outset in the amount of its planned lifetime budget; it can later be increased or decreased during the course of implementing the project. The District's appropriation request consists of changes to budget authority for all projects in the CIP.
- *Allotments* are planned expenditure amounts on an annual basis. A multi-year project receives full budget authority in its first year but only receives an allotment in the amount that is projected to be spent in that first year. In later years, additional allotments are given annually. If a year's allotment would increase the total allotments above the lifetime budget amount, an increase in budget authority is required to cover the difference.

Agencies may obligate funds up to the limit of (lifetime) budget authority for a project but cannot spend more than the total of allotments the project has received to date.

The FY 2007 - FY 2012 local funds CIP proposes a net increase in budget authority of \$1.641 billion during the next six fiscal years (an increase of \$1.759 billion of new budget authority offset by \$118 million of rescissions).

Planned capital expenditures from local sources in FY 2007 total \$662.5 million, of which \$587.7 million is to be funded by G.O. bonds and Paygo financing (transfers from the District's General Fund). To finance this \$587.7 million of expenditures, the District plans to borrow \$399.7 million in new G.O. bonds and fund the remaining \$188.0 million using Paygo financing.

Two features of the proposed FY 2007-2012 capital budget will help reduce the deficit in the District's capital fund. First, new allotments from all financing sources will be limited to \$513.6 million. The other

\$148.9 million of planned FY 2007 expenditures will be against allotments that agencies have received in prior years for their capital projects. By providing more financing than the new allotments awarded, the District will finance expenditures against previously awarded budget allotments. Second, actual G.O. bond borrowing will be \$449.7 million, although only \$399.7 million will be made available for FY 2007 capital expenditures. The other \$50.0 million will go toward deficit reduction for the capital fund.

After several years of underfunding, the District has significantly increased its expenditures to reinvest in its infrastructure. However, even today, it is not able to fund all its identified capital needs, as competing needs pull in opposite directions. The District is limited by funding as well as competing demands on capital. As a result of these demands, the District has taken action to meet its priorities while also maintaining a fiscally sound CIP. First, it has prioritized its capital projects and rescinded budget authority from those it deemed less important. Second, it has reallocated funding to high priority projects - both existing and new - so that it can meet its most pressing infrastructural needs.

Figure CA-1 illustrates the planned expenditures from new FY 2007 allotments by major agency. Funding for D.C. Public Schools (DCPS), including schools modernization funding, constitutes the largest share of the planned expenditures. DCPS will have a total of \$223.3 million available from three sources of capital project financing in FY 2007:

- New G.O. bond allotments (\$63.3 million)
- Paygo transfer from sales tax revenue (\$100.0 million)
- First portion of Schools Modernization fund (\$60 million, estimated; not included in figure CA-1)

A significant portion of funding also goes toward the Office of the Chief Technology Officer and the Washington Metropolitan Area Transit Authority.

Table CA-2 summarizes planned expenditure amounts for FY 2007 and budget authority requests for FY 2007-FY 2012. It includes both local funds (G.O. bond, Paygo, and master equipment lease) and special financings that are discussed in greater detail below.

The capital fund pro forma, table CA-3, summarizes the sources and uses for local funds in the District's CIP. The Project Description Forms that constitute the detail of this capital budget document include all projects receiving new allotments in FY 2007 through FY 2012 from local sources, totaling \$513.6 million in FY 2007.

Figure CA-1
FY 2007 Capital Allotments, by Major Agency

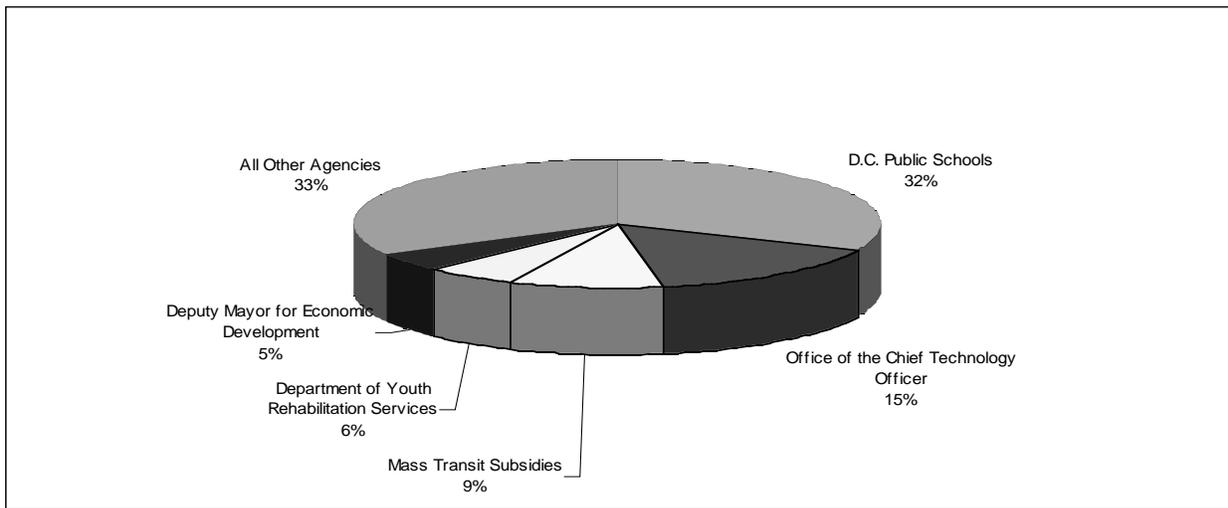


Table CA-2
Proposed FY 2007 Expenditures and FY 2007-FY 2012 Capital Budget Authority
(Dollars in thousands)

Source	Proposed FY 2007 Expenditures	Proposed FY 2007-FY 2012 Budget Authority
G.O. Bonds	399,684	
PAYGO capital funding (transfer from the General Fund)	187,987	
Master Equipment Lease financing	74,813	
Subtotal, Local Funds	662,484	1,641,359
Additional G.O. bond borrowing:		
Capital fund deficit reduction	50,000	50,000
Schools Modernization Fund	60,000	0
Government Center buildings	200,000	18,200
Great Streets initiative (bus shelter revenue)	64,000	0
Revenue bonds:		
New Communities (HPTF revenue)	75,000	15,000
Financing for baseball stadium	267,400 (est.)	63,000
Financing for National Capital Medical Center or other health facility	TBD	212,000
Subtotal, Local Funds and Additional Borrowing	1,378,884	1,998,747
Local Street Maintenance Fund:		
Rights-of-way funds	37,000	37,000
50 percent of parking tax revenue	15,000	15,000
Highway Trust Fund:		
Federal Highway Administration grants	237,749	239,749
Local match (from motor fuel tax and other sources)	49,867	49,867
Total	1,720,500	2,341,175

Table CA-3

Capital Fund Pro Forma

(Dollars in thousands; excludes Highway Trust and Local Streets Maintenance Funds and special financings)

	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	Total, FY 2007- FY 2012	Percent of of FY 2007
Sources:								
G.O. Bonds	399,684	411,008	411,222	350,592	338,313	309,931	2,220,750	60.3%
Pay-As-You-Go (PAYGO)	187,987	106,000	112,360	119,102	126,248	133,823	779,019	28.4%
Master Equipment Lease	74,813	22,345	22,570	22,865	23,285	20,650	186,528	11.3%
Total, Sources	662,484	539,353	546,152	492,559	487,846	464,403	3,192,797	100.0%
Uses: New Allotments								
District of Columbia Public Schools	163,299	217,197	229,809	243,177	257,348	272,369	1,383,199	31.8%
Office of Chief Technology Officer	79,336	21,546	16,884	17,549	14,839	8,900	159,054	15.5%
Mass Transit Subsidies	48,700	55,900	60,900	68,400	76,200	80,000	390,100	9.5%
Department of Youth Rehabilitation Services	28,500	3,000	0	0	0	0	31,500	5.6%
Deputy Mayor for Economic Development	23,500	15,800	8,500	0	0	0	47,800	4.6%
Department of Public Works	18,428	11,195	6,420	6,275	7,635	7,800	57,753	3.6%
Anacostia Waterfront Corporation	16,000	15,000	0	0	0	0	31,000	3.1%
DC Public Library	15,750	39,552	26,603	26,788	38,108	22,168	168,969	3.1%
Department of Health	15,200	0	2,800	0	0	0	18,000	3.0%
Office of Property Management	14,760	43,660	35,520	21,820	19,920	18,820	154,500	2.9%
Department of Transportation	14,405	11,500	10,400	6,100	1,500	1,500	45,405	2.8%
Department of Parks and Recreation	13,492	34,045	51,175	33,575	14,557	12,520	159,364	2.6%
Department of Motor Vehicles	13,404	7,600	0	0	0	0	21,004	2.6%
Fire and Emergency Medical Services	11,519	11,852	31,066	24,368	17,850	17,200	113,855	2.2%
Dept. of Consumer and Regulatory Affairs	9,195	7,750	7,750	7,750	7,750	7,750	47,945	1.8%
Metropolitan Police Department	5,900	7,450	10,800	5,200	5,200	5,200	39,750	1.1%
Dept. of Housing and Comm. Development	3,875	8,750	7,450	1,000	3,850	2,350	27,275	0.8%
University of the District of Columbia	3,300	5,800	13,370	8,800	0	0	31,270	0.6%
Department of Corrections	3,090	2,300	5,299	5,150	7,482	220	23,541	0.6%
Department of Human Services	3,000	5,849	5,500	0	0	0	14,349	0.6%
Commission on Arts & Humanities	2,500	2,500	2,500	2,700	2,700	2,700	15,600	0.5%
Office of Chief Financial Officer	2,100	5,200	10,200	11,200	11,200	3,200	43,100	0.4%
Department of Mental Health	2,000	2,500	500	0	0	0	5,000	0.4%
Office of Municipal Planning	1,706	1,706	1,706	1,706	1,706	1,706	10,239	0.3%
Office of the City Administrator	497	0	1,000	1,000	0	0	2,497	0.1%
Office of Zoning	100	0	0	0	0	0	100	0.0%
Office of the Chief Medical Examiner	0	1,700	0	0	0	0	1,700	0.0%
Subtotal, New Allotments	513,555	539,353	546,152	492,559	487,846	464,403	3,043,868	100.0%
Uses: Planned Spending from Prior-Year Allotments	148,929	0	0	0	0	0	148,929	
Total, Uses	662,484	539,353	546,152	492,559	487,846	464,403	3,192,797	

FY 2007 Operating Budget Impact

Each \$15 million in borrowing has approximately a \$1 million impact on the operating budget for debt service. The capital budget's impact on the operating budget is the debt service cost, paid from local revenue in the operating budget, associated with issuing G.O. bonds to finance the CIP. Table CA-4 shows the overall debt service funded in the FY 2007 operating budget, while table CA-5 shows the total outstanding G.O. bonds debt service.

Capital Funded Positions

Designing and implementing capital projects can require specialized labor. In most instances, the personal services costs associated with these positions are charged to the General Fund. However, there are certain circumstances that allow agencies to charge positions against capital projects. For example, the Department of Transportation may hire specific types of construction engineers and project managers to work on a Highway Trust Fund road project and charge them against a capital project. Funding for these types of positions is permissible, as long as the position is contributing to completing the project.

Table CA-4

FY 2007-FY 2010 Debt Service Expenditure Estimates

	FY 2007	FY 2008	FY 2009	FY 2010
Existing General Obligation (G.O.) Bonds Debt Service (Agency DS0)	\$384,947,766	\$388,438,571	\$385,852,579	\$389,779,902
Prospective G.O. Bonds Debt Service				
- FY 2007 Bonds (\$649.7 M)	\$17,875,000	\$49,425,000	\$49,422,875	\$49,424,500
- FY 2008 Bonds (\$532.5 M)		\$15,975,000	\$43,280,000	\$43,280,000
- FY 2009 Bonds (\$526.1 M)			\$15,783,000	\$42,761,000
- FY 2010 Bonds (\$375.7 M)				\$11,271,000
- Other borrowing	\$2,291,000	\$17,959,859	\$19,205,673	\$21,233,148
Total G.O. Bonds Debt Service *	\$405,113,766	\$471,798,430	\$513,544,126	\$557,749,550
Schools Modernization G.O. Bond Debt Service (Agency SM0):				
* FY 2007 Issuance (assumed \$60 M)	\$1,650,000	\$4,560,000	\$4,560,700	\$4,562,550
* FY 2008 Issuance (assumed \$90 M)		\$2,700,000	\$7,315,000	\$7,315,000
School Modernization Fund Subtotal	\$1,650,000	\$7,260,000	\$11,875,700	\$11,877,550
Payments on Certificates of Participation (Agency CP0)**	\$33,224,900	\$33,468,706	\$33,723,838	\$33,972,319
Payments on Revenue Bonds for Housing Production Trust Fund (Agency DT0)	\$6,000,000	\$12,000,000	\$12,000,000	\$12,000,000
Total Long-term Debt Service	\$450,488,666	\$525,554,878	\$572,199,125	\$616,682,604
Interest on Short-term Borrowing (Agency ZA0)	\$8,000,000	\$8,000,000	\$8,000,000	\$8,000,000
Total Debt Service	\$458,488,666	\$533,554,878	\$580,199,125	\$624,682,604

* Does not include debt service on G.O. bonds issued to finance water and sewer-related projects, which is paid by the D.C. Water and Sewer Authority (WASA). "Other borrowing" items include bonds backed by revenue from bus shelter advertising revenue and parking tax revenue.

** Includes debt service on the One Judiciary Square and Unified Communications Center (UCC)/D.C. Net Certificates of Participation financings. Each year's figure for CP0 includes \$1.3 million for property taxes on these 2 properties payable by the District (as Lessee) to the Trustee (as Owner and Lessor), and by the Trustee to the District (as taxing jurisdiction). In effect, the District is paying itself, so there will be tax revenue to offset this \$1.3 million of this expenditure line item. In addition, in FY 2007, \$2 million of the total will be funded via Intra-District funding for the UCC/D.C. Net debt service.

Table CA-5
Outstanding GO Bonds Debt Service

Fiscal Year	Date	Principal	Interest	Total Debt Service	Fiscal Year Debt Service
	12/1/2006		\$87,150,254	\$87,150,254	
FY Ending 9/30/2007	6/1/2007	\$202,805,000	\$87,145,219	\$289,950,219	\$377,100,473
	12/1/2007		\$81,720,077	\$81,720,077	
FY Ending 9/30/2008	6/1/2008	\$213,640,000	\$81,717,559	\$295,357,559	\$377,077,636
	12/1/2008		\$76,172,986	\$76,172,986	
FY Ending 9/30/2009	6/1/2009	\$221,255,000	\$76,170,469	\$297,425,469	\$373,598,455
	12/1/2009		\$70,303,341	\$70,303,341	
FY Ending 9/30/2010	6/1/2010	\$237,005,000	\$70,298,306	\$307,303,306	\$377,606,647
	12/1/2010		\$63,994,939	\$63,994,939	
FY Ending 9/30/2011	6/1/2011	\$191,055,000	\$63,989,903	\$255,044,903	\$319,039,842
	12/1/2011		\$58,913,623	\$58,913,623	
FY Ending 9/30/2012	6/1/2012	\$174,283,004	\$78,633,102	\$252,916,106	\$311,829,729
	12/1/2012		\$54,776,959	\$54,776,959	
FY Ending 9/30/2013	6/1/2013	\$174,389,885	\$76,794,556	\$251,184,441	\$305,961,400
	12/1/2013		\$50,814,190	\$50,814,190	
FY Ending 9/30/2014	6/1/2014	\$170,834,845	\$66,289,310	\$237,124,155	\$287,938,346
	12/1/2014		\$46,875,096	\$46,875,096	
FY Ending 9/30/2015	6/1/2015	\$119,365,000	\$46,871,212	\$166,236,212	\$213,111,308
	12/1/2015		\$44,253,585	\$44,253,585	
FY Ending 9/30/2016	6/1/2016	\$113,980,000	\$44,252,260	\$158,232,260	\$202,485,844
	12/1/2016		\$41,668,136	\$41,668,136	
FY Ending 9/30/2017	6/1/2017	\$119,880,000	\$41,667,473	\$161,547,473	\$203,215,609
	12/1/2017		\$38,936,214	\$38,936,214	
FY Ending 9/30/2018	6/1/2018	\$125,985,000	\$38,934,887	\$164,919,887	\$203,856,102
	12/1/2018		\$36,134,455	\$36,134,455	
FY Ending 9/30/2019	6/1/2019	\$132,320,000	\$36,133,127	\$168,453,127	\$204,587,582
	12/1/2019		\$33,231,417	\$33,231,417	
FY Ending 9/30/2020	6/1/2020	\$137,150,000	\$33,230,754	\$170,380,754	\$203,612,171
	12/1/2020		\$30,082,216	\$30,082,216	
FY Ending 9/30/2021	6/1/2021	\$143,495,000	\$30,082,216	\$173,577,216	\$203,659,432
	12/1/2021		\$26,876,489	\$26,876,489	
FY Ending 9/30/2022	6/1/2022	\$150,575,000	\$26,876,489	\$177,451,489	\$204,327,977
	12/1/2022		\$23,620,157	\$23,620,157	
FY Ending 9/30/2023	6/1/2023	\$157,695,000	\$23,620,157	\$181,315,157	\$204,935,313
	12/1/2023		\$20,230,783	\$20,230,783	
FY Ending 9/30/2024	6/1/2024	\$164,840,000	\$20,230,783	\$185,070,783	\$205,301,566

Table CA-5, continued

Outstanding GO Bonds Debt Service

	12/1/2024		\$16,687,331	\$16,687,331	
FY Ending 9/30/2025	6/1/2025	\$172,625,000	\$16,687,331	\$189,312,331	\$205,999,663
	12/1/2025		\$13,013,069	\$13,013,069	
FY Ending 9/30/2026	6/1/2026	\$180,625,000	\$13,013,069	\$193,638,069	\$206,651,138
	12/1/2026		\$9,179,724	\$9,179,724	
FY Ending 9/30/2027	6/1/2027	\$148,460,000	\$9,179,724	\$157,639,724	\$166,819,448
	12/1/2027		\$6,065,964	\$6,065,964	
FY Ending 9/30/2028	6/1/2028	\$108,400,000	\$6,065,964	\$114,465,964	\$120,531,928
	12/1/2028		\$3,829,080	\$3,829,080	
FY Ending 9/30/2029	6/1/2029	\$67,310,000	\$3,829,080	\$71,139,080	\$74,968,160
	12/1/2029		\$2,441,568	\$2,441,568	
FY Ending 9/30/2030	6/1/2030	\$55,475,000	\$2,441,568	\$57,916,568	\$60,358,137
	12/1/2030		\$1,368,765	\$1,368,766	
FY Ending 9/30/2031	6/1/2031	\$24,390,000	\$1,368,765	\$25,758,766	\$27,127,531
	12/1/2031		\$990,375	\$990,375	
FY Ending 9/30/2032	6/1/2032	\$21,150,000	\$990,375	\$22,140,375	\$23,130,750
	12/1/2032		\$673,125	\$673,125	
FY Ending 9/30/2033	6/1/2033	\$22,000,000	\$673,125	\$22,673,125	\$23,346,250
	12/1/2033		\$343,125	\$343,125	
FY Ending 9/30/2034	6/1/2034	\$22,875,000	\$343,125	\$23,218,125	\$23,561,250
Total Outstanding GO Bonds Debt Service		\$3,773,862,735	\$1,937,876,953	\$5,711,739,688	\$5,711,739,688

Figure CA-3 shows that the District reduced the total number of capital funded positions between 1993 and 1999. Capital funded FTEs have increased since then but have not reached the level of the early 1990s. The District is still more than 200 positions below its level in FY 1993.

Details on the District's Sources of Funds for Capital Expenditures

The District's proposed FY 2007-2012 capital budget includes a number of funding sources. The District uses the following sources to fund capital budget authority across a large number of agencies that have capital programs:

- G.O. bonds;
- Paygo capital funding; and
- Master Equipment Lease financing.

Projects funded by these sources are detailed in the Project Description Forms (PDFs) in this budget document.

Additional G.O. Bond borrowing of \$50 million annually is proposed for deficit reduction in the capital fund.

The District also proposes to use additional G.O. bond borrowing, revenue bonds, and a one-time borrowing to finance specific projects:

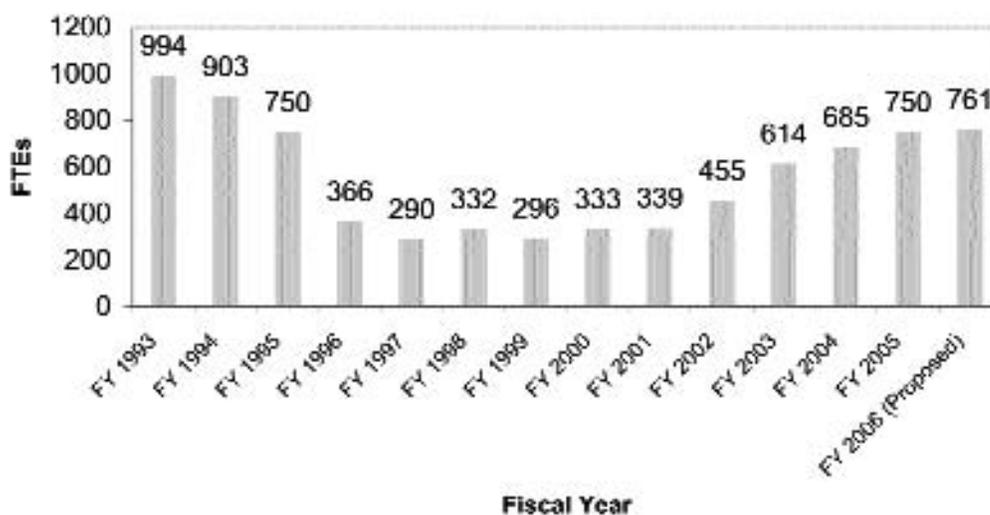
Schools Modernization Fund: The District proposes to borrow \$60 million in FY 2007 for the Schools

Modernization Fund by issuing G.O. bonds. This fund received \$150 million of budget authority in the FY 2006 budget. Because D.C. Public Schools is revising its Master Facilities Plan, DCPS has not started spending against this authority, and the District has not yet borrowed any of the funds. In FY 2007, borrowing is anticipated to be \$60 million, with the remainder of the borrowing to occur in later years as DCPS finalizes its plans for these funds.

Government Center Buildings: The District proposes to borrow \$200 million for two Government Center buildings, the Anacostia Gateway Building and the Minnesota/Benning Center. These centers will house the District's Departments of Transportation, Employment Services, and Human Services. In the FY 2006 budget, the District received \$200 million of budget authority to complete these projects by issuing Certificates of Participation (COPs). Rather than issue COPs, the District proposes to finance these projects using more cost-effective G.O. bonds. During FY 2006, the District reprogrammed \$18.2 million of the \$200 million of budget authority to enable it to purchase a building at 95 M St. SW for the Department of Motor Vehicles (DMV). In FY 2007, the District is requesting an additional \$18.2 million of budget authority to restore the Government Centers total to \$200 million.

Great Streets: The District proposes to borrow \$64

Figure CA-3
Number of Capital-Funded FTE Positions From FY 1993 to FY 2006 (Proposed)



million in FY 2007 for the Great Streets initiative. In the FY 2006 budget, the District received \$88 million of budget authority to complete this project through a securitization of revenues from a new bus shelter contract. Rather than securitizing these revenues, the District proposes to finance this project using more cost-effective G.O. bonds. Revenues from the bus shelter contract will be dedicated to pay the debt service on this additional G.O. debt. The current plan is to use a lump sum payment of \$24 million that the District receives in the first year of the contract and to borrow \$64 million against the revenue stream for FY 2007 and beyond.

New Communities: The District plans to issue \$75 million of revenue bonds in FY 2006 for a major investment in the Northwest One community, which includes the Sursum Corda public housing development and surrounding areas, as part of the New Communities initiative. To pay the debt service on these bonds, funds will be transferred from the Housing Production Trust Fund (HPTF), which is funded by dedicated revenue (from deed recordation and deed transfer taxes). The District received \$60 million of budget authority in the FY 2006 budget for this project through securitization of the HPTF revenues, but the securitization has not yet taken place. The District is requesting an additional \$15 million of budget authority in FY 2007 to bring the total to \$75 million, the amount estimated to be financed by \$6 million of transfers annually from the HPTF for debt service. Use of \$6 million of HPTF revenue annually for debt service is currently authorized, and this is the anticipated debt service level for FY 2007. Depending on the timing of the project, the District will seek authority to use another \$6 million annually, which will allow a total of \$12 million to be paid starting in FY 2008.

Baseball Stadium: The District received \$534.8 million of budget authority in the FY 2006 budget to build the baseball stadium, and in an FY 2005 supplemental appropriation, it also received \$33.0 million of authority to spend revenues collected that year. Thus, total current budget authority for the project is \$567.8 million. The total cost is now projected to be \$630.8 million (of which the District will contribute \$610.8 million and Major League Baseball will contribute \$20.0 million.) The District is requesting \$63.0 million of budget authority in FY 2007 to bring the total project budget authority to \$630.8 million. See the Special Study chapter on Baseball in the District of Columbia, published with the Mayor's proposed budget on March 20, 2006,

for more information on the project and its financing.

New Mental Health Hospital and DMV Building: The District borrowed \$200 million in FY 2006 for a new mental health hospital and a new DMV building (as described earlier) by issuing COPs. Authority for this \$200 million was provided by Congress in the FY 2006 appropriation. It does not appear in the FY 2006 capital budget book, but Congress added to the requested capital appropriation amount when it passed the District's budget.

National Capital Medical Center: The District is requesting budget authority to use revenues from the District's settlement with major tobacco companies to back debt service on borrowing in FY 2006 for the National Capital Medical Center (NCMC) or other health care facility. The proposed NCMC would be a new hospital built by the District and Howard University and operated by Howard. A final decision on the NCMC has not been reached.

Finally, the District's Department of Transportation uses the following sources to fund its capital projects:

- Rights-of-way funds, for Local Street Maintenance Fund projects;
- Parking tax revenue (50 percent), for Local Street Maintenance Fund projects;
- Federal Highway Administration grants, for Highway Trust Fund projects; and
- Dedicated motor fuel tax revenues, and several new sources, for Highway Trust Fund projects (these provide the local match for the Federal Highway Administration grants).

Projects in the Local Street Maintenance Fund and the Highway Trust Fund are detailed in the separate Highway Trust Fund budget document.

Future Projects

Borrowing for the following projects is planned for FY 2008 or later years:

East Washington traffic initiative: In the FY 2006 budget, the District received \$230 million of budget authority for this project, the major components of which are the rebuilding of the 11th Street and Sousa (Pennsylvania Avenue) bridges. Parking tax revenue (50 percent of the revenue) supports this project, and federal funds are also anticipated to support this project. A large borrowing is anticipated in FY 2008, with debt service to be paid by the parking tax revenue stream.

Consolidated Laboratory Facility: The District is building a new consolidated laboratory that will be used

Table CA-6

Proposed Borrowing, FY 2007 Through FY 2009

(Dollars in thousands)

Source	FY 2007	FY 2008	FY 2009
G.O. bonds, general, including deficit reduction	449,684	461,008	461,222
G.O. bonds for Schools Modernization	60,000	90,000	0
G.O. bonds for Government Center buildings	200,000	0	0
G.O. bonds for Great Streets (debt service backed by bus shelter revenue)	64,000	0	0
G.O. bonds for East Washington traffic initiative (debt service backed by parking tax revenue)	0	230,000	0
G.O. bonds for Consolidated Laboratory Facility (1)	0	75,000	75,000
New Central Library (debt service backed by funds from lease or sale)	0	TBD	TBD

(1) \$5 million of FY 2007 borrowing for Consolidated Laboratory Facility is included in G.O. bond total on first row.

General notes:

All amounts and methods of borrowing are subject to change depending on status of projects and market conditions.

Borrowing for 95 M St. SW, baseball stadium, new mental health hospital, New Communities, and National Capital Medical Center or other health facility has taken place, or is proposed to take place, during FY 2006.

by the Metropolitan Police Department, the Department of Health, and the Office of the Chief Medical Examiner. Both the District and the federal government have begun financing this project, and planning is well under way. In FY 2008, the District proposes undertaking a large G.O. bond issuance for this project, and the District will also seek additional federal funding.

New Central Library: The District proposes a new central library to be built on the site of the old convention center. The proposal is to borrow using tax increment financing and a bond backed by a payment-in-lieu of taxes, and also to use revenues from a long-term lease payment for the site of the current central library.

Table CA-6 shows expected borrowing amounts for FYs 2007 through 2009 for these projects.

Shortfall in the General Capital Improvements Fund

For the past five fiscal years, the District's Comprehensive Annual Financial Report (CAFR) has shown a shortfall in the General Capital Improvements fund (the "capital fund") (see table CA-7). The shortfall was about \$246 million at the end of FY 2005. This means that capital expenditures have exceeded financing sources by that amount on a cumulative basis, and the District's General Fund has advanced funds to the capital fund to cover the expenditures.

Until a few years ago, agencies had been slow to spend capital dollars, resulting in the District's paying interest on borrowed funds that then sat idle earning

lower interest rates in District bank accounts. The District instituted a policy to delay borrowing until funds were needed for expenditures, and borrowing less than the full amount budgeted and/or allotted. At the same time, agencies were pushed to begin spending budgeted capital dollars. Eventually, this resulted in a situation in which total agency spending (of existing capital budget authority and prior allotments) exceeded the amount of funds borrowed, producing a deficit in the Capital Fund. The General Fund paid for these capital expenditures, essentially as a loan to the Capital Fund. This shortfall needs to be cured in order to bring the Capital Fund and General Fund back into balance and also to prevent cash flow problems in the General Fund.

The capital fund commingles a wide variety of expenditures and financing sources. All District capital expenditures other than those in the local Highway Trust Fund and the Ballpark Revenue Fund (for the baseball stadium) are recorded in the capital fund. Financing sources for the capital fund are primarily G.O. bonds but also include other types of borrowings, federal grants, and other sources. The District is taking steps to isolate the G.O. bond financed portion of the capital fund from the other funding sources, to determine the portion of the fund's shortfall that is attributable to G.O. bond financed projects.

To manage and reduce the fund's shortfall, the District is taking several steps:

- In FY 2006, \$54 million was appropriated to transfer resources from the General Fund to the capital fund, to directly reduce the shortfall.

Table CA-7

Fund Balance in the General Capital Improvements Fund, FY 1998-FY 2005

(Dollars in millions)

Fiscal Year	Positive / (Negative) Fund Balance
1998	224.0
1999	387.5
2000	458.4
2001	(57.9)
2002	(389.5)
2003	(141.8)
2004	(250.2)
2005	(246.4)

- In addition, the District will manage capital expenditures so that they remain below financing sources in each year. This can be difficult, because while agencies receive new spendable budgets (allotments) each year, they may also spend against prior-year allotments that have not yet been exhausted. Thus, agencies must manage against a spending target that is usually lower than the budget authority that they currently have.
- Finally, the District's proposed FY 2007-2012 capital budget proposes borrowing \$450 million in FY 2007 but applying only \$400 million to new capital expenditures, so that \$50 million can be used for deficit reduction. The capital plan calls for additional borrowing of \$50 million annually for the next several years to be applied to deficit reduction in this same manner.

For this reason, while financing sources in FY 2007 total \$662.5 million, the District's proposed capital budget includes new allotments of only \$513.6 million. This will allow \$148.9 million of expenditures against unspent prior-year allotments. The Mayor, the Council, and the Chief Financial Officer will continue to work to reduce the shortfall in the capital fund over the next four years.

Outline of this Capital Budget Document

The remainder of this overview chapter includes the District's policies on capital budget and debt and a summary of the capital program of the Water and Sewer Authority. The following sections then make up the rest of this capital budget document. Projects in all of these sections are grouped by the owner (rather than the implementing) agency,¹ except where noted.

- *Project Description Forms (PDFs)*: Provide details on capital projects funded by G.O. bonds, Paygo capital, and Master Equipment Lease arrangements. They do not include details on the special one-time G.O. bond borrowings or the revenue bonds or COPs that have been described above. The expenditure schedules shown in these pages display the planned allotments (1-year spending authority) by year for FYs 2007 through 2012. Ongoing projects with no new allotments scheduled are not included in these pages.
- *Appendix A, FY 2007 Appropriated Budget Authority Request*: Summarizes the new budget authority the District proposes. Budget authority is established as the budget for a project's lifetime, so these requests are only for new projects or for changes in lifetime budgets for ongoing projects. Because budget

¹ A capital project has both an owner and an implementing agency. The implementing agency performs the work on the project, while the owner agency eventually benefits from the completed project. Although 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.

authority is given to the implementing agency, projects are grouped by implementing agency in this appendix.

- *Appendix B, FY 2007-FY 2012 Planned Expenditures From New Allotments*: Shows new allotments for ongoing and new projects for all six years of the CIP.
- *Appendix C, FY 2007-FY 2012 Planned Funding Sources*: Shows the source of financing for the projects displayed in appendix B.
- *Appendix D, Balance of Capital Budget Authority, All Projects*: Shows expenditures, obligations, and remaining budget authority for all ongoing capital projects. Because this report comes from budgets in the financial system, projects are grouped by implementing rather than owner agency.

District of Columbia Policies and Procedures: Capital Budget and Debt

The District of Columbia's Capital Improvements Program (the "Capital Program") comprises the finance, acquisition, development, and implementation of permanent improvement projects for the District's fixed assets. Such assets generally have a useful life of more than three years and cost more than \$250,000.

The text of the CIP is an important planning and management resource. It analyzes the relationship of projects in the capital budget to other developments in the District. It also describes the programmatic goals of the various District agencies and how those goals impact the need for new, rehabilitated, or modernized facilities. Finally, it details the financial impact and requirements of the all the District's capital expenditures.

The CIP is flexible, allowing project expenditure plans to be amended from one year to the next to reflect actual expenditures and revised expenditure plans. However, consistent with rigorous strategic planning, substantial changes in the program are discouraged. The CIP is updated each year by adding a planning year, reflecting any necessary changes in projected expenditure schedules, proposed projects and District priorities.

The District's legal authority to initiate capital improvements began in 1790 when Congress enacted a law establishing the District of Columbia as the permanent seat of the federal government and authorized the design of the District and appropriate local facilities. The initial roads, bridges, sewers and water systems in the District were installed to serve the needs of the federal government and were designed, paid for, and built by Congress. During the 1800s, the population and private economy of the federal District expanded sharply, and

the local territorial government undertook a vigorous campaign to meet new demands for basic transportation, water, and sewer systems.

From 1874 to 1968, commissioners appointed by the President and confirmed by Congress managed the District. One commissioner, from the Corps of Engineers, was responsible for coordinating the maintenance and construction of all local public works, in accordance with annual budgets approved by the President and the Congress.

Legislation passed in the 1950s gave the District broader powers to incur debt and borrow from the United States Treasury. However, this authority was principally used for bridges, freeways, and water and sewer improvements. In 1967, the need for significant improvements in District public facilities was acknowledged. This awareness led to the adoption of a \$1.5 billion capital improvement program to build new schools, libraries, recreation facilities, and police and fire stations.

A 1984 amendment to the Home Rule Act gave the District the authority to sell general obligation bonds to finance improvements to its physical infrastructure. The District has more than \$3.5 billion of general obligation bonds outstanding, which were issued to finance capital infrastructure improvements.

In September 1997, the President signed the National Capital Revitalization Act (the "Revitalization Act"). The act relieved the District of its operations at Lorton Correctional Facility. It also transferred responsibility for funding the maintenance and operation of the D.C. Courts system to the Office of Management and Budget (OMB). The District will therefore not incur the significant capital expenditures required at these facilities. In return, the District will no longer receive a federal payment in lieu of taxes for these functions.

In addition, the Revitalization Act raised the allowable percent of annual debt service payable from 14 percent to 17 percent of anticipated revenues to compensate the District for the loss of the federal payment and broadened the District's debt financing authority. The primary impact of this aspect of the Revitalization Act was to increase the District's flexibility to finance capital requirements.

Legal Authority and Statutory Basis

The legal authority for the District's Capital Program comes from the District of Columbia Home Rule Act, P.L. 93-198, §444, 87 Stat. 800. The Mayor is directed to prepare a multi-year Capital Improvements Plan (CIP) for the District. This plan shall be based upon the approved current fiscal year budget. It shall include the

Table CA-8

Debt Ratios

Debt Measures	District of Columbia	Baltimore MD	Boston MA	Chicago IL	Memphis TN	New York NY	San Antonio TX
Net Overall Debt to Full Value	4.2%	2.5%	1.2%	1.9%	2.8%	8.7%	1.8%
Net Overall Debt per Capita	\$6,598	\$822	\$1,469	\$1,766	\$1,556	\$5,785	\$634
Debt Service as % of General Fund Expenditures	7.8%	7.4%	6.1%	14.2%	18.5%	8.4%	23.7%

Sources: Most recently published CAFRs (FY 2005 CAFRs for DC, Baltimore, Boston, Memphis, and New York; FY 2004 CAFRs for Chicago and San Antonio).

Table CA-9

Summary of Rating Agency Credit Ratings for Long-Term Debt

Investment Attributes	Fitch	Moody's	Standard & Poor's
Highest Quality	AAA	Aaa	AAA
High Quality	AA	Aa	AA
Favorable Attributes	A	A	A
Medium Quality/Adequate	BBB	Baa	BBB
Speculative Elements	BB	Ba	BB
Predominantly Speculative	B	B	B
Poor Standing	CCC	Caa	CCC
Highly Speculative	CC	Ca	CC
Lowest Rating	C	C	C

Source: Public Finance Criteria for Fitch, Moody's, and Standard & Poor's.

Table CA-10

Rating Agency Credit Ratings for Long-Term Debt, Various Cities

Municipalities	Fitch Ratings	Moody's	Standard & Poor's
District of Columbia	A	A2	A+
Baltimore	A+	A1	A+
New York	A+	A1	A+
Philadelphia	BBB+	Baa1	BBB
Detroit	BBB	Baa2	BBB
San Antonio	AA+	Aa2	AA+
Chicago	AA	Aa3	AA-

Source: Public Finance Criteria for Fitch, Moody's, and Standard & Poor's.

status, estimated period of usefulness, and total cost of each capital project on a full funding basis for which any appropriation is requested or any expenditure will be made in the forthcoming fiscal year and at least four fiscal years thereafter.

Along with this statutory requirement, Mayor's Order 84-87 supplements the legal authority and assigns additional responsibility for the District's Capital Program. This Order creates within the Office of Budget and Planning a Capital Program coordinating office to provide central oversight, direction, and coordination of the District's capital improvements program, planning, budgeting, and monitoring. The administrative order requires the Office of Budget and Planning to develop a CIP that identifies the current fiscal year budget and includes status, estimated period of usefulness, and total cost of each capital project on a fully funded basis for which any appropriation is requested or any expenditure will be made over the next six years. The CIP includes:

- An analysis of the CIP, including its relationship to other programs, proposals, or other governmental initiatives.
- An analysis of each capital project, and an explanation of a project's total cost variance of greater than five percent.
- Identification of the years and amounts in which bonds would have to be issued, loans made, and costs actually incurred on each capital project. Projects are identified by applicable maps, graphics, or other media.

Why A Capital Improvements Program?

A Capital Improvements Program that coordinates planning, financing and infrastructure and facilities improvements is essential to meet the needs of a jurisdiction uniquely situated as the Nation's Capital. As mentioned previously, capital improvements are those that, because of expected long-term useful lives and high costs, require large amounts of capital funding. These funds are spent over a multi-year period and result in a fixed asset.

The primary funding source for capital projects is tax-exempt bonds. These bonds are issued as general obligations of the District. Debt service on these bonds (the repayment of principal and the payment of interest over the lifetime of the bonds) becomes expenditures in the annual operating budget.

The Home Rule Act sets certain limits on the total amount of debt that can be incurred. Maximum annual debt service cannot exceed 17 percent of general fund revenues to maintain fiscal stability and good credit rat-

ings. As a result, it is critical that the CIP balance funding and expenditures over the six-year period to minimize the fiscal impact on the annual operating budget.

Principles of the Capital Program

Several budgetary and programmatic principles are invested in the CIP. These are:

- To build facilities supporting the District stakeholders' objectives.
- To support the physical development objectives incorporated in approved plans, especially the Comprehensive Plan.
- To assure the availability of public improvements.
- To provide site opportunities to accommodate and attract private development consistent with approved development objectives.
- To improve financial planning by comparing needs with resources, estimating future bond issues plus debt service and other current revenue needs, thus identifying future operating budget and tax rate implications.
- To establish priorities among projects so that limited resources are used to the best advantage.
- To identify, as accurately as possible, the impact of public facility decisions on future operating budgets, in terms of energy use, maintenance costs, and staffing requirements among others.
- To provide a concise, central source of information on all planned rehabilitation of public facilities for citizens, agencies, and other stakeholders in the District.
- To provide a basis for effective public participation in decisions related to public facilities and other physical improvements.

It is the responsibility of the Capital Program to ensure that these principles are followed.

Program Policies

The overall goal of the Capital Program is to preserve the District's capital infrastructure. Pursuant to this goal, projects included in the FY 2007 to FY 2012 CIP and FY 2007 Capital Budget support the following programmatic policies:

- Provide for the health, safety and welfare needs of District residents.
- Provide and continually improve public educational facilities for District residents.
- Provide adequate improvement of public facilities.
- Continually improve the District's public transportation system.
- Support District economic and revitalization efforts

- generally and in targeted neighborhoods.
- Provide infrastructure and other public improvements that retain and expand business and industry.
- Increase employment opportunities for District residents.
- Promote mutual regional cooperation on area-wide issues, such as the Washington Area Metropolitan Transit Authority, Water and Sewer Authority, and solid-waste removal.
- Provide and continually improve public housing and shelters for the homeless.

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 out-

standing 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 District'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 jurisdiction 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 complement 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 assis-

tance 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 informa-

tion 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 - 1 percent

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.

