NEW YORK CITY WATER BOARD

PUBLIC INFORMATION REGARDING WATER AND WASTEWATER RATES

APRIL 2003

NEW YORK CITY WATER BOARD
Information Booklet

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Introductory Statement

This information booklet has been prepared by the New York City Water Board ("The Board") in order to acquaint the public with its rate and billing policy proposals for Fiscal Year 2004 (FY2004) and with the financial condition of the water and wastewater system and its budget for the upcoming year.

Public hearings concerning the proposals set forth herein will be held in each borough of the City. The schedule of the dates, times and locations for these hearings, the purpose of which is to present and explain the Board's proposals and provide an opportunity for public comment is included in this information booklet.

The Board's FY2004 rate proposal is to increase water rates by 6.5% percent. This proposal is consistent with and continues the Board's policy of promoting the lowest possible annual rate change that also allows a stable and predictable rate profile for future years. This approach seeks to avoid large fluctuations in year to year rate changes and the current proposal supports this objective. Last year at this time, it was anticipated that a 9.7% rate increase would be required for FY2004. This proposal represents a substantial improvement over those prior projections.

Several factors have impacted the development of the proposed rates for FY2004. These factors include the following.

- **End of Drought Emergency**
  Reduced precipitation over the watershed in 2001 and 2002 resulted in the declaration of a drought emergency by Mayor Bloomberg effective April 1, 2002. The drought emergency had the effect of reducing water consumption and revenues from metered consumption in FY2003 and increasing the operating expenses of the Water System due to the need to pump water from the Croton watershed and implement conservation initiatives.

  Abundant precipitation during the fall of 2002 and winter months of 2002-2003 has refilled the City's reservoirs and relieved the water shortage and drought emergency condition. While no drought-related expenses are included in the proposed budget for FY2004, water consumption by metered customers is assumed to take two years to return to pre-drought levels.

- **Security**
  DEP continues to enhance its efforts to protect both the physical condition of its water and wastewater infrastructure as well as the day-to-day operation of facilities. Working with the U.S. Army Corps of Engineers, DEP has implemented a number of structural improvements to limit access to key facilities and provide other security protections for facilities. The number of security personnel has been significantly increased and other operational measures have been initiated to increase the level of security across the System.

- **Property Taxes on Watershed Lands**
  The City owns over 100,000 acres of property in its watersheds in upstate New York. The preservation of undeveloped land around the reservoirs helps reduce the potential for deterioration in the quality of water in the reservoirs. As part of its program to protect drinking water quality and avoid the potentially costly need to filter water from the Catskill/Delaware watershed, the City continues to expand its land holdings in the watersheds either through outright purchases of property or through other techniques such as the purchase of conservation easements. Property taxes on City land are expected to exceed $79 million in FY2004. Such taxes will continue to increase based on an increase in the size of land holdings as well as annual property tax increases in watershed communities that typically exceed the rate of inflation.

- **Increases in Other Operating Expenses**
  Operating expense increases from FY2003 to FY2004 are anticipated for energy costs related to wastewater pumping and treatment facilities, health and safety-related initiatives and customer service enhancements.

- **Federal and State Mandates**
  Federal and State environmental mandates continue to influence system costs. Mandated capital infrastructure investments under the Clean Water and Safe Drinking Water Acts and negotiated consent decrees account for about 70% of the system's capital budget over the next five years. The resulting debt service incurred on bonds issued to finance these investments continues to be the single most important factor driving the need for rate increases. In addition to capital improvement mandates, mandated environmental health and safety programs are impacting operating costs.

- **Favorable Interest Rates**
  Current financial operations are benefiting from the existence of low interest rates in the economy. Low interest rates permit higher cost bonds to be refinanced at lower rates and allows new borrowings to realize financial savings over previous estimates. Over the last year, the NYC Municipal Water Finance Authority has refinanced almost $2 billion in outstanding bonds achieving approximately $66 million in debt service savings in FY2003 and 2004. Present value savings from these refinancings amount to $190 million. Low interest rates also benefit the system's revenue performance by stimulating residential and commercial mortgage initiations and refinancings. Year-to-date revenue performance is approximately 6% above the plan anticipation.

- **New 10-Year Capital Plan**
  DEP recently received approval of a new 10-year capital program that provides for a $16.5 billion investment in water and wastewater system infrastructure over the period FY2004-2013. The new plan provides funds for continued compliance with federal and state mandates, the protection of drinking water quality, the completion of work on the in-City portion of the Third Water Tunnel as well as the initiation of important new water conveyance tunnels required to secure long-term water conveyance capacity, and for sustaining the integrity of the water main and sewer collection networks in the City.

New York City Water/Sewer Rates Remain Competitive

Although rates and charges for water and wastewater service in the City have increased in recent years, the information presented herein demonstrates that the charges in the City are competitive with the charges levied by other jurisdictions. In absolute dollars and as a percentage of median income, NYC charges for single family residential customers rank in the lower half of twenty-four large cities that were surveyed and are below the average of all of these cities. The increases in the rates and charges of other cities in the last year illustrates that many utilities in the water and wastewater industry are facing many of the same mandates and challenges that are driving the rate increases within the City.

A typical single family homeowner in the City pays about $44 per month for water and sewer services. This amount is likely to be less than his/her average monthly charges for electric service and heating and probably less than most telephone and cable TV services as well.

Proposed Billing Policy Changes

In addition to the rate proposal for basic water and wastewater service and the rate for wholesale water service for customers north of the City, the Board is also considering certain billing policy changes and adjustment to certain miscellaneous fees for services provided by DEP. A description of these proposed changes can be found in the Program Summary contained in this booklet.

One change under consideration is a reduction in the minimum quarterly charge for water and sewer service. The principal advantage to such a change is to encourage water conservation. A survey of the minimum charge practices of other cities shows that some cities have a lower minimum or no minimum charge for similar service.

A second change under consideration is a reduction in the sewer allowance for large water-cooled air conditioning and refrigeration systems. Currently, the rate schedule assumes that 99% of the water used in such systems is not returned to the sewer system and the sewer charge is adjusted accordingly. After reviewing information concerning such systems as well as the rate-setting practices of other cities, it is proposed to reduce the allowance to 85% of water use unless a building owner can demonstrate with an engineering analysis that a lesser percentage of water is returned to the sewer system.

Other proposed changes include adjustments to charges for a variety of miscellaneous services provided by DEP such as wet connections to the Water System and the dewatering of properties where the water pumped from the site is discharged to the Sewer System. The proposed changes are intended to better match the fees for such services with the cost to DEP of providing such services.

While the cost of water and sewer services remains at competitive and affordable levels, it is important to note that infrastructure investments are improving services to homes and businesses and are having beneficial impacts on the City's environmental resources. Consider the following.

Drinking Water Supply

DEP operates and maintains the New York City Water Supply System ensuring the highest quality drinking water for nearly eight million New York City residents, approximately one million people living in counties north of the City, and millions of tourists and commuters. DEP's water quality monitoring and testing programs – far more extensive than required by law – demonstrate that New York City's drinking water meets or exceeds all health-related State and federal drinking water standards. DEP's commitment to safe, high quality drinking water is made evident by the following:

- DEP continuously monitors the water in the upstate reservoirs and feeder streams, and the in-City wells that are the sources of supply. Water quality is monitored as water enters the distribution system and is regularly tested at sampling points throughout the entire City.
- Enhanced Watershed Regulations became effective on May 1, 1997, replacing regulations that had been in place since 1953. The Regulations are vital to water supply protection and provide a much higher level of defense against modern-day threats to water quality than earlier regulations.
- New York City continued implementation of its comprehensive watershed protection programs during 2002. These efforts focused on three key program areas: the acquisition of watershed lands; the enforcement of strengthened Watershed Regulations; and the expansion of partnership programs that target specific sources of pollution in the watershed.
- The United States Environmental Protection Agency granted an extension of the New York City's Catskill/Delaware Filtration Avoidance Determination (FAD) in November 2002, based on the long-term watershed protection plan announced by DEP in late 2001.
- The City continued to implement a multi-year capital program to upgrade and improve its upstate water supply facilities, including gatehouses, aqueducts, water testing laboratories and other facilities, which are important to ensuring a safe and reliable supply of drinking water.
- After the events of September 11, 2001, the City has taken additional steps to ensure the security of the water supply system, both upstate and within the five boroughs. DEP's security program has been reviewed by federal agencies, including the FBI and the Army Corps of Engineers.
- The City is planning to build a treatment facility to filter water from the Croton System, the City's oldest watershed. A decision will be made on a site in the near future.

Water Delivery and Wastewater Collection

Replacement and reinforcement of the trunk mains and the distribution main system has improved water circulation, water pressure and system reliability. All areas of the City experience better water pressure now than twenty years ago and there are fewer water pressure emergencies now than in the past.

Water Tunnel No. 3, under construction since the 1970s, will provide redundancy for much of the City's distribution system. The thirteen-mile, Stage 1 section of the Tunnel was activated in 1998 and currently delivers water to the Bronx and upper Manhattan. Stage 2, now under construction, had its first phase completed in May 2001 and is expected to begin delivering water

in 2005. Construction of the Manhattan leg is scheduled to commence in the summer of 2003. Tunnel completion is expected by 2020 and will encompass 60 miles and cost approximately $6 billion.

The City is planning to construct a new aqueduct from the Kensico Reservoir in Westchester County to the northern Bronx. This deep tunnel construction will run approximately 16 miles and take ten years to complete. When finished, the new aqueduct will provide redundancy and security for the water transmission system.

The City's water main break rate per mile of pipe is lower than in most other large cities in the United States; DEP has requested that the U.S. Army Corps of Engineers update its 1980 water main break survey in order to help prioritize its water main replacement program.

Improvements made to the Staten Island distribution network have increased system reliability and have enhanced fire protection as well.

Projects replacing cast iron trunk mains with steel mains at Atlantic Avenue and Clinton Street in Brooklyn have improved reliability in this area and will form the skeleton for interconnections with Tunnel No. 3 in the next few years.

Extension of the sanitary sewer system on Staten Island continues each year, connecting more homes and businesses to the City's wastewater system and eliminating septic systems.

Storm sewer construction in the Springfield Gardens section of Queens is beginning to relieve long-standing stormwater drainage and flooding problems in this area. While there is still more work to be done, substantial progress has already been made.

Wastewater Management

Harbor water quality has shown great improvement over the past thirty years. Significant improvement can be seen following treatment plant expansions and upgrades in 1985 and the start-up of the City's last two wastewater pollution control plants in1988. Further improvements since 1989 are attributed to increased surveillance and improved operation and maintenance for all of the City's sewage treatment plants. Signs of improved conditions in the harbor include the following:

- All of the City's public beaches remained open during last summer's bathing season.
- No major fish kills have been reported in the past two years.
- The number of nuisance algae blooms has been greatly reduced.
- Return to the harbor of several species of birds, including egrets and herons, and fish, such as sturgeon.

DEP has instituted an Enhanced Beach Protection Program to monitor facilities (pumping stations and regulators) that will impact beaches throughout the City. During the beach season, inspections are performed more frequently in order to minimize risks of dry weather discharges of sewage into surrounding waterways that could cause beach closures.

About 1.4 billion gallons of wastewater from homes, businesses, schools and streets in the five boroughs are treated each day at DEP's fourteen wastewater treatment plants. Purified effluent water is discharged back into the harbor.

In addition to basic wastewater treatment systems, DEP has initiated an Urban Watershed Planning Program that focuses on those areas within the harbor that remain impacted. This program will look at waterbodies and their drainage basins and will develop a comprehensive plan for each. Some of the projects in the program include construction of combined sewer overflow facilities in Paerdegat Basin, Brooklyn, Flushing Bay, Queens, and the Bronx River, which will measurably improve the surrounding waterbodies and their communities.

The Alley Creek Combined Sewer Overflow Project in the Bayside section of Queens is a multi-faceted project that will address a number of important public and environmental concerns. The project will eliminate street flooding in the area during rainstorms, improve the water quality of Alley Creek and Little Neck Bay, and create a natural park setting in an urbanized area.

The Staten Island Bluebelt program provides environmentally and economically prudent stormwater management for the borough's South Richmond area. Benefits of the program include improved drainage and flood control, enhancement of the natural environment, wetland restoration and improved stream quality. A similar program is being evaluated for New Creek in the Midland Beach neighborhood of Staten Island.

Schedule for Water Board Rate Adoption

March 31, 2003 **Water Board Meeting to Approve Public Notice of 6.5%**

Rate Hearing Dates and Locations

Borough	Location	Date/Time
Staten Island	College of Staten Island Center for the Arts, Recital Hall 2800 Victory Boulevard Staten Island, New York 10314	Tuesday April 22, 2003 9:30 A.M.
Brooklyn	Brooklyn Public Library 1st Floor Auditorium Cadman Plaza Brooklyn, New York 11201	Tuesday April 22, 2003 2:00 P.M.
Queens	Department of Environmental Protection Lecture Room, 6th Floor 59-17 Junction Boulevard Flushing, New York 11373	Wednesday April 23, 2003 9:30 A.M.
Manhattan	St. John's University - Manhattan 2nd Floor Auditorium 101 Murray Street New York, New York 10007	Wednesday April 23, 2003 5:00 P.M.
Bronx	Herbert H. Lehman College Carman Hall, Rm. B-08 250 Bedford Park Boulevard West Bronx, New York 10468	Thursday April 24, 2003 9:30 A.M.

May 5, 2003 **Water Board Meeting to Adopt Rates for Fiscal Year 2004**
St. John's University - Manhattan
101 Murray Street
New York, NY 10007

May 2003 **Flat-Rate Bills are mailed over the several weeks following Rate Adoption**

July 1, 2003 **Fiscal Year 2004 Rates become effective**

Program Summary

FY 2004 Rate Proposals

- Increase in-City water rates by 6.5% for all customers, flat-rate and metered, and for billing programs
- Maintain in-City wastewater rates at 159% of water charges
- Reduce the minimum charge for water and wastewater services by approximately 15%
- Increase wholesale water rate to upstate municipalities and water districts to $544.00 per million gallons

FY2004 Billing Policy Proposals and Changes to Miscellaneous Fees

Multiple Family Conservation Program (MCP) application extension
This program is set to expire 12/31/03. The Board proposes to extend the deadline to apply for MCP by one year to 12/31/04. The reason for the extension is to enable DEP to implement a limited toilet rebate program for those accounts eligible for and opting for MCP, and requiring toilet fixture replacement to qualify.

Transition Program for Residential Premises with Six or More Dwelling Units and Pre-Transition Program Flat-Rate Charge
In conjunction with MCP, these programs were set to expire on June 30, 2004, and in conjunction with the MCP extension described above, their expiration will also be extended one year to expire June 30, 2005. After June 30, 2005, properties currently in these programs must have filed an application and been approved for eligibility into MCP or they will be converted to metered billing.

Standard Wastewater Allowance for Air Conditioning/Refrigeration Units
The standard wastewater allowance for metered Air Conditioning and Refrigeration is currently 99%. It is proposed to reduce this allowance to 85%. Findings by DEP technical staff and the Board's Rate Consultant indicate that the current allowance is too high compared to reasonable estimates of the amount of water discharged to the sewer system and to the value of commonly approved allowances in other jurisdictions. In cases where owners can demonstrate their system discharges less water to the sewer system, they can apply for a higher allowance by submitting an application for an Exception to the Standard Allowance.

Miscellaneous Discharges to the Wastewater System
The current structure of this charge is inappropriate based on the administrative tasks involved in approving such discharges. Currently, the standard sewer rate of 159% of water charges is imposed on all discharges regardless of volume. There is at least a one-step and in some cases a two-step review process before approval of any discharge is granted. In cases of low volume discharges, the fee imposed does not cover the administrative review costs. Accordingly, it is proposed that:

- minimum charge of $300 be imposed on all discharges less than 100,000 gallons per year
- for discharges greater than 100,000 gallons per year the current fee structure will apply
- for discharges entering a storm sewer or other facility not connected with a treatment plant and which will not receive treatment services, the sewer use fee will be 38% of the charge for water from the Water Supply System.

Revise Selected Miscellaneous Fees

It is proposed that the following miscellaneous fees for services be adjusted based on an evaluation of the current cost of providing the service. These fees have not been revised since 1993. The proposed changes are as follows.

- Tap installation fee will be increased from $115 to $250
- Tap location fee will be increased from $150 to $375
- Hydrant flow test fee will be increased from $150 to $250
- Wet connection fees will be revised to reflect a flat rate of $1,200 for labor and OTPS

Eligibility for Billing Programs

It is proposed that a new provision be added to Part VI of the Board's Rate Schedule to provide that eligibility for the various discretionary billing programs be conditioned upon a premises account being paid current, or in the alternative, that a valid payment agreement be executed to provide for payment of any delinquent charges. It is also proposed that eligibility for any billing program secured by means of a payment agreement may be revoked if the customer defaults on such agreement.

Authorized Representative of Customer

The existing definition of an owner's Authorized Representative in the Rate Schedule requires a Letter of Authorization ("LOA") signed by the owner and notarized. This provision does not require that a LOA specify a definite time period for which the representative is authorized to act on the owner's behalf or specify an end date of such representation. Since representatives make decisions that can have significant consequences on the finances of a property, it is proposed that the definition of an Authorized Representative be revised to require owners to state a specific time period covered by the LOA or state an end date of such representation. In cases where owners fail to explicitly state a time period on an LOA, DEP will deem such instrument to expire one year from the date of notarization.

Back Billing Limits

Two language adjustments to this policy in Part V of the Rate Schedule are proposed. One represents a change in the existing policy, the second iterates in clearer language what has been DEP's and the Board's administrative practice with respect to billing adjustments involving multiple periods.

- The current rule provides that charges DEP deems "erroneously canceled" are not subject to the four-year limitation on back billing and can be reinstated. It is proposed that this provision be deleted thereby providing that erroneously canceled charges cannot be reinstated after four years have elapsed.
- With respect to billing adjustments involving multiple bills and multiple billing periods, the language will explicitly iterate the intent of the Board and the administrative practice of not

limiting back billing adjustments in cases where the total amount rebilled is less than the total amount billed prior to the billing adjustment.

Cap on Metered Charges

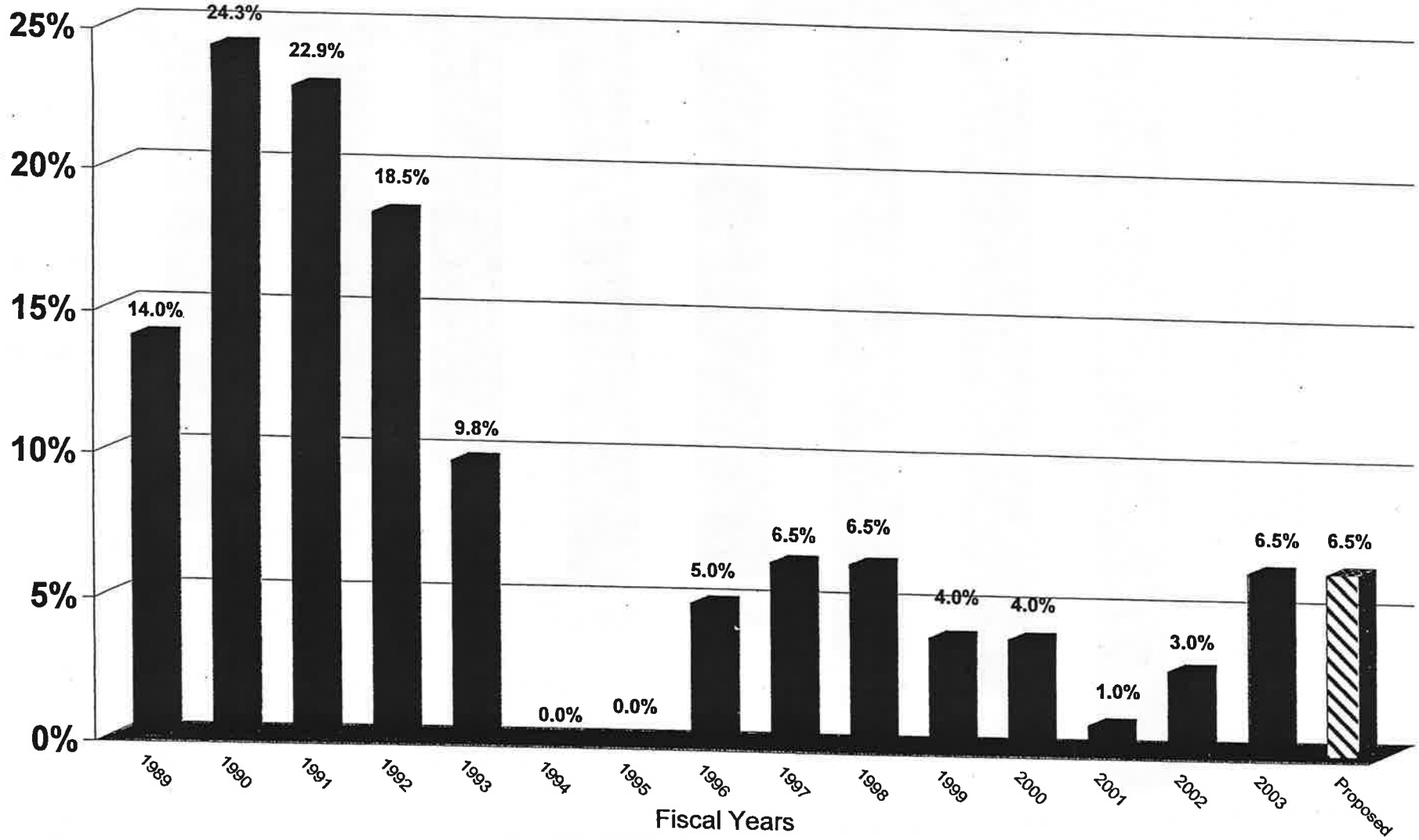
Two changes are proposed for this program in Part VI of the Rate Schedule.

- Billing Caps will not be available in cases of high consumption caused by substantial leaks at the premises. The existing rule already excludes from Cap consideration premises affected by high consumption caused by excessive use related to commercial, irrigation or recreational demands. Leaking premises, appropriately, also should be excluded. The Board did not intend to limit an owner's incentive to repair water leaks by capping the liability at a fixed amount. Billing adjustments related to leak situations are available under the Board's Leak Forgiveness Program also set forth in Part VI.
- Billing Caps will not be available for properties with 6 or more dwelling units. Staff believes that the Cap Program is no longer necessary for larger multiple family properties in view of the availability of the Multiple Family Conservation Program. MCP provides a better economic solution both for owners and for the Water System. The charge per dwelling under the Cap Program is $575.90/year, while the charge per dwelling unit under MCP is $465.11/year. In addition, certain metered multiple family properties may be eligible for the Pre-Transition Program that provides a flat-rate charge per dwelling unit of $454.18/year. DEP staff advises that few if any properties with 6 or more dwelling units utilize the Cap Program.

Innocent Purchaser

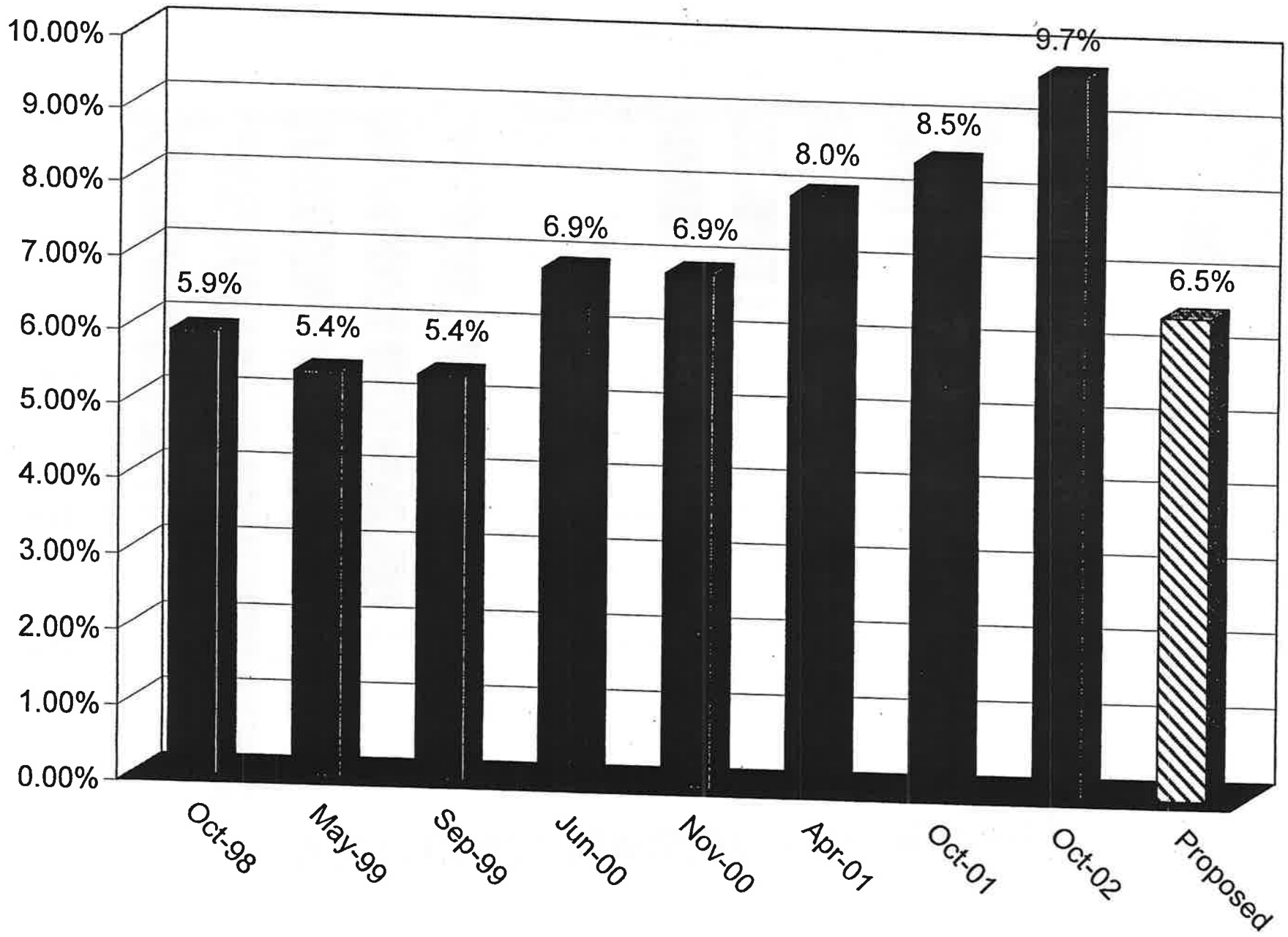
The Innocent Purchaser Program is intended to protect purchasers against previously unbilled charges. The current specification of the program requires that, in order to qualify for the program, a customer must request and DEP must obtain a special meter reading. Cases have been noted where a purchaser requests and pays for a special meter reading but DEP fails to read the meter and render a final bill. It is proposed to revise the specification of the program to afford Innocent Owner Protection in all cases where a purchaser properly requests and pays for a special meter reading at least 30 days prior to the property transfer date provided that DEP is not denied access to the property.

Water/Wastewater Rate History

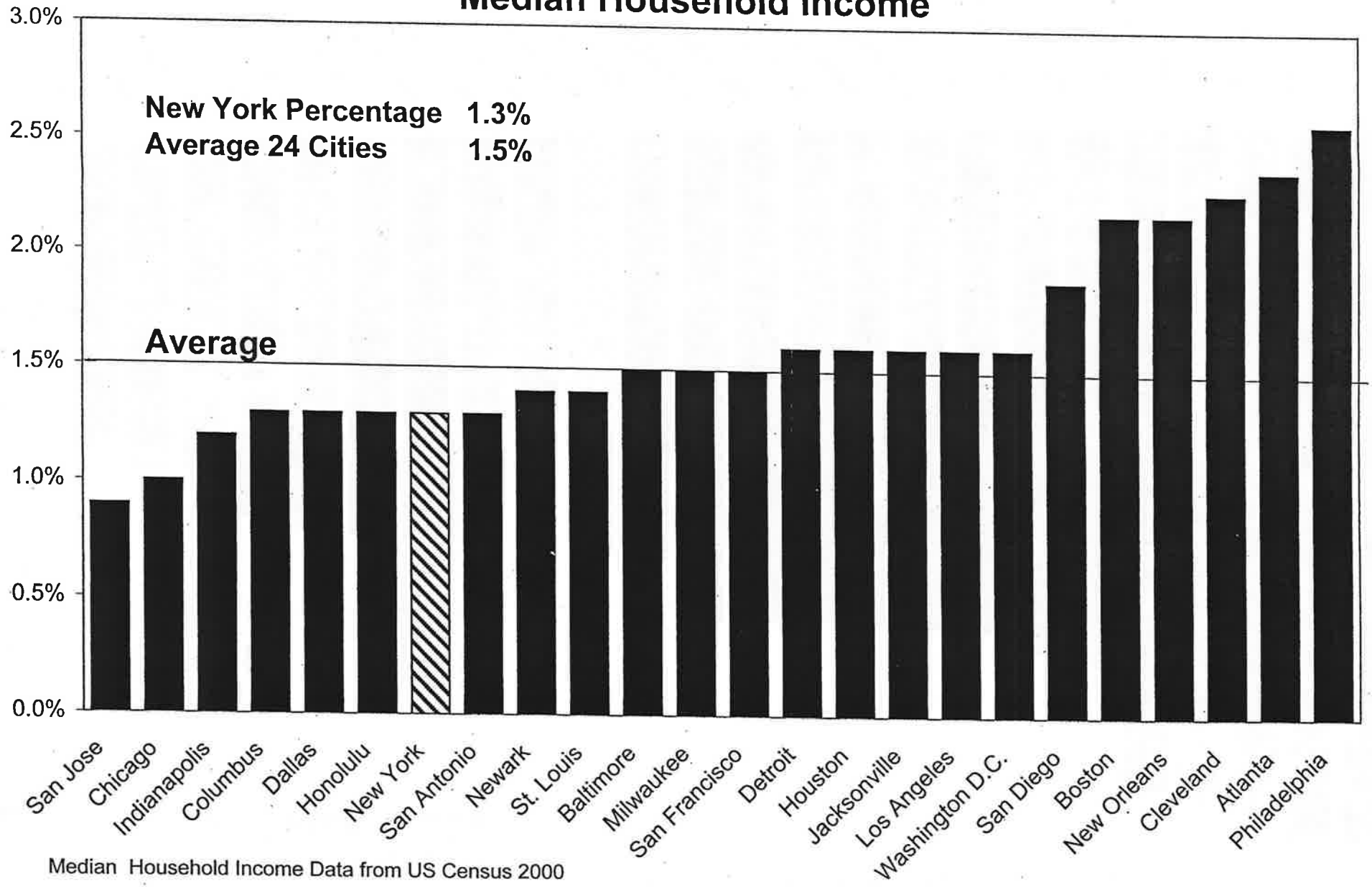


Projected FY 2004 Rate Forecast

Change Over Time



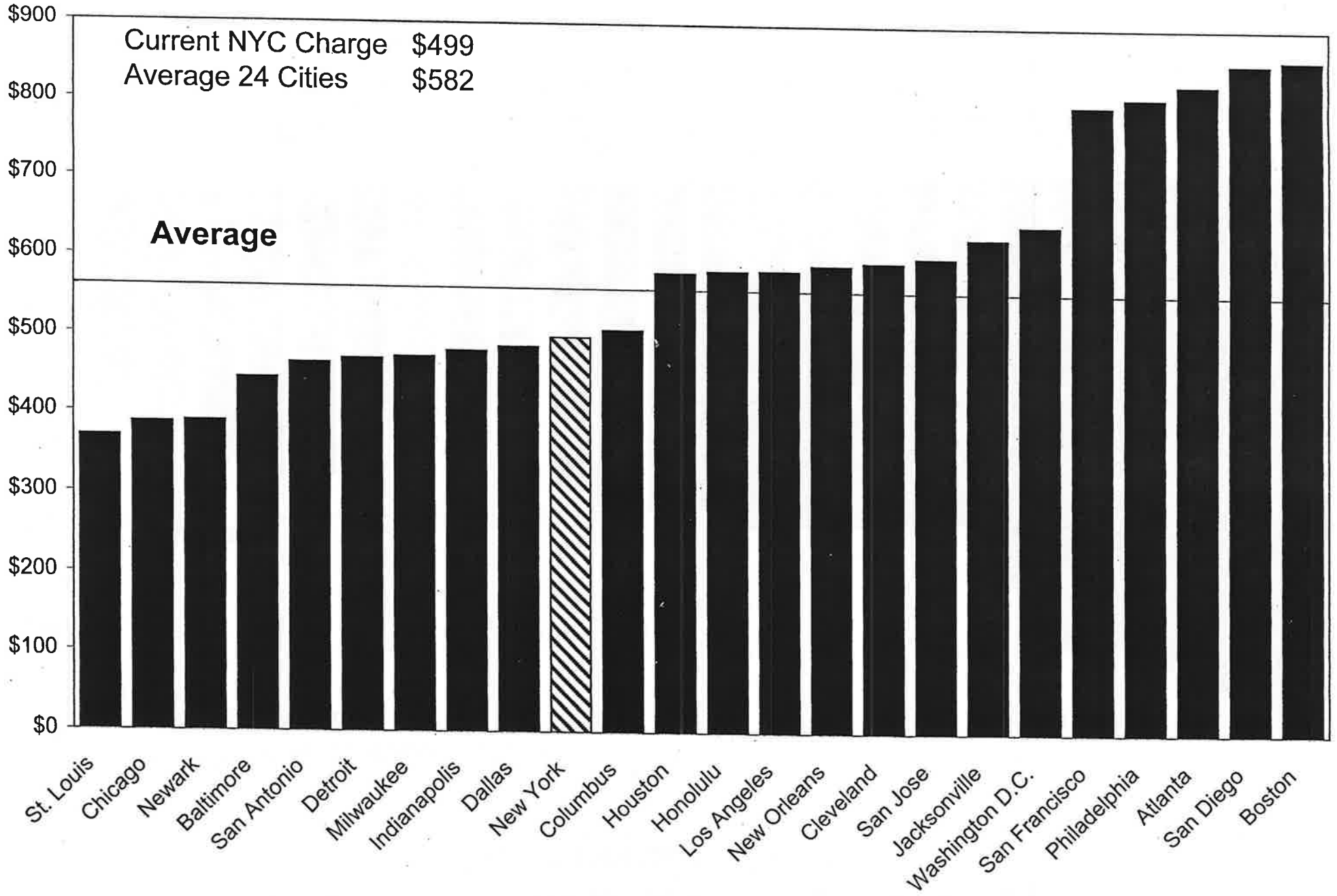
Residential Water/Wastewater Charges as Percent of Median Household Income



Median Household Income Data from US Census 2000

Annual Water/Wastewater Charges

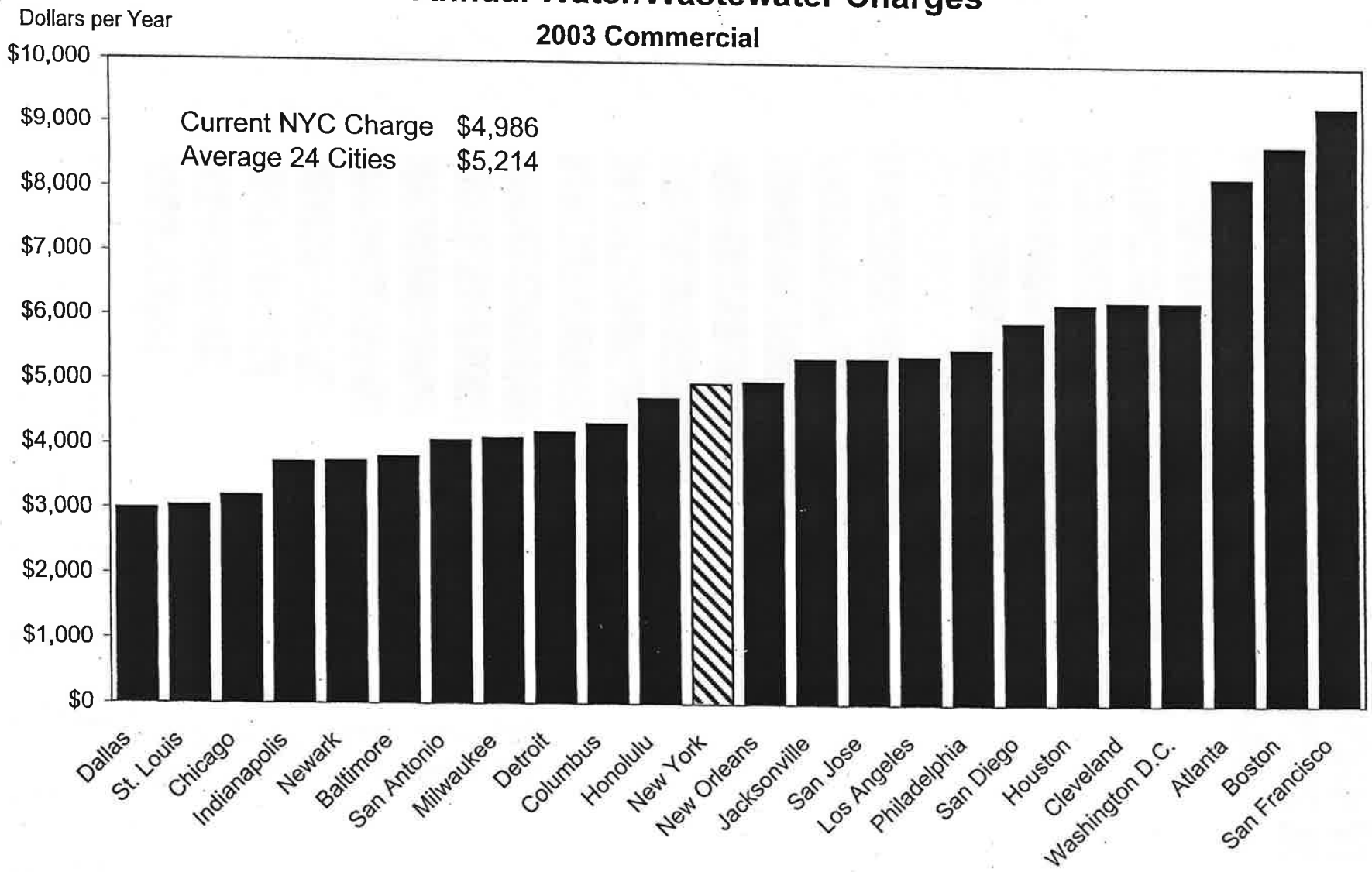
2003 - Residential



Annual Charges for all Cities Based on Consumption of 100,000 Gallons per Year.

Annual Water/Wastewater Charges

2003 Commercial

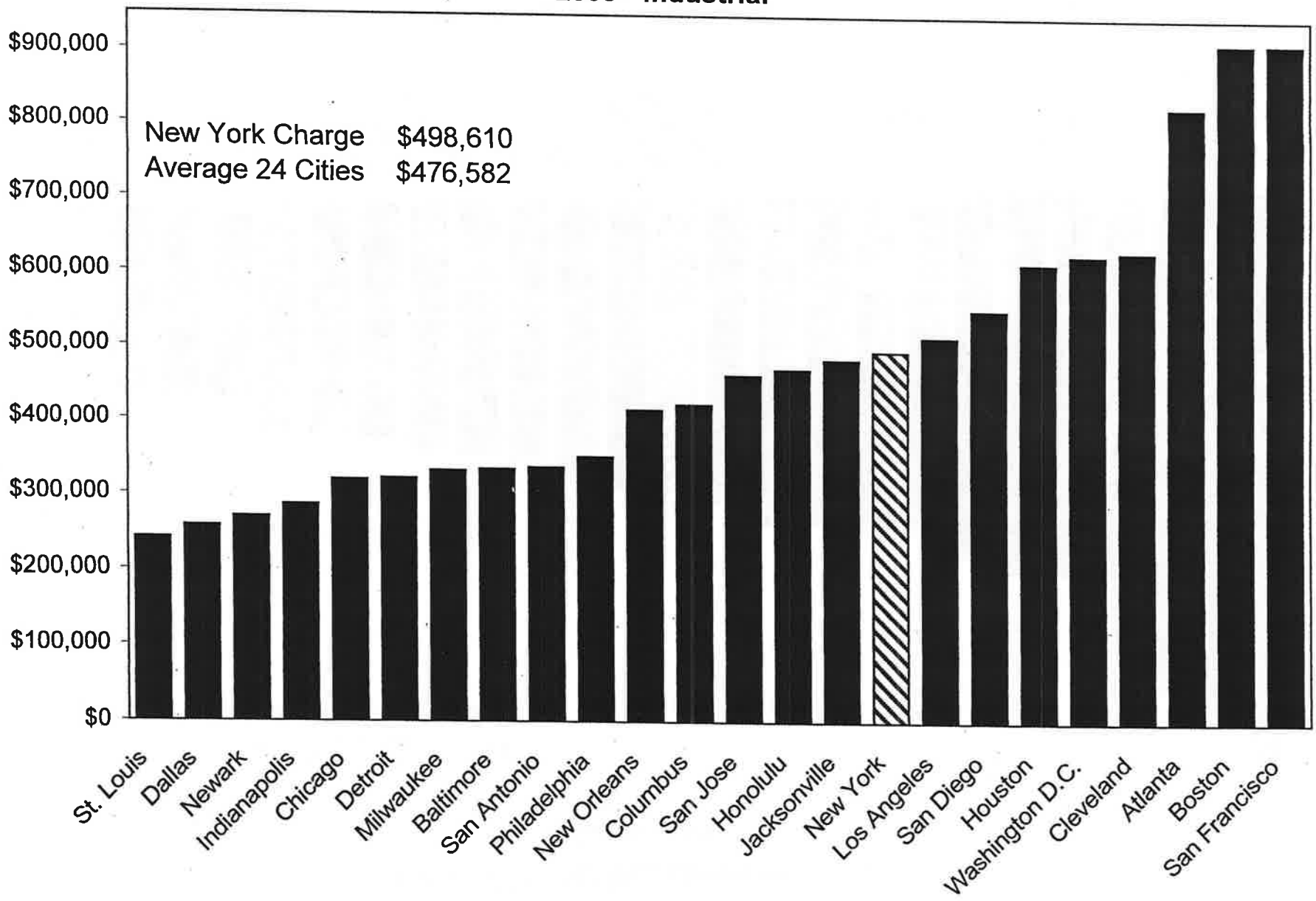


Annual Charges for All Cities Based on Assumed Consumption of 1 Million Gallons per Year.

Annual Water/Wastewater Charges

Dollars per Year

2003 - Industrial



Annual Charges for All Cities Based on Assumed Consumption of 100 Million Gallons per Year.

Typical NYC Water/Wastewater Charges

(Combined water/wastewater charge)

Flat-Rate Customers

	Average Annual Customer Charges		
	FY03 Average	FY04 Average	Change
Single-Family Residential	$562	$599	$37
Two-Family Residential	$872	$929	$57
Walk-Up Apartments	$2,672	$2,846	$174
Charge/Dwelling Unit	$402	$428	$26
Elevator Apartments	$30,067	$32,021	$1,954
Charge/Dwelling Unit	$456	$486	$30

Metered Customers

	Rate per 100 Cubic Feet		
Residential & Commercial			
Water	$1.44	$1.53	$0.09
Wastewater	$2.29	$2.43	$0.14
Combined	$3.73	$3.96	$0.23

Typical Metered Charges

	Average Annual Charges		
	FY03	FY04	Change
Single Family (100,000 gallons)	$499	$530	$31
Per Multifamily Unit (85,000 gallons)	$424	$450	$26

lote: Rounding may affect some of the additions and subtractions

Change in Single Family Charges
2002-2003

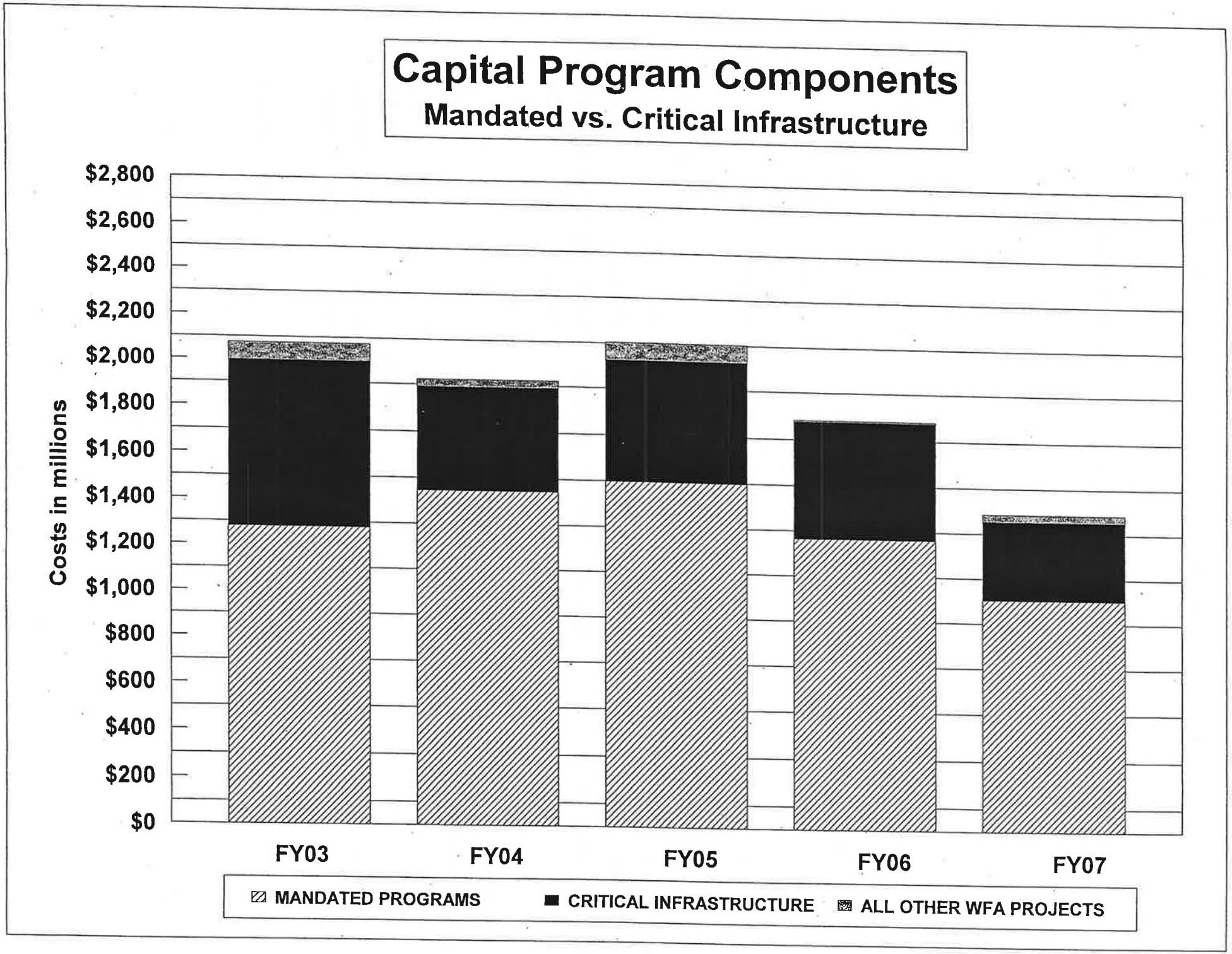
Philadelphia	$120	17.4%
Milwaukee	$68	16.9%
Indianapolis	$69	16.7%
New Orleans	$74	14.1%
Detroit	$57	13.7%
Baltimore	$49	12.3%
San Antonio	$49	11.9%
24 City Average	$42	9.8%

Water and Wastewater System Capital Program

(Per April 2003 Capital Plan)

Program $(000)'s

	FY03	FY04	FY05	FY06	FY07	5-Year Total
Combined Sewer Overflow	123,563	51,590	150,823	81,659	3,350	410,985
Watershed Investments	259,417	198,134	273,342	144,130	458,386	1,333,409
Hillview Reservoir	0	0	0	0	0	0
Newtown Creek	27,261	651,000	200,000	366,000	0	1,244,261
Croton Filtration	82,906	11,000	115,600	415,000	415,000	1,039,506
Meter Installations	47,290	28,000	4,223	4,223	4,223	87,959
Water Pollution Control Plants	697,449	484,038	732,300	230,016	101,450	2,245,253
Utility Relocation Costs	38,691	21,115	20,465	20,480	20,375	121,126
MANDATED PROGRAMS	**1,276,577**	**1,444,877**	**1,496,753**	**1,261,508**	**1,002,784**	**6,482,499**
	61.6%	**75.1%**	**71.2%**	**70.8%**	**72.3%**	**69.9%**
Sewer Construction	287,754	192,161	129,929	91,824	124,000	825,668
In-City WaterMain Construction	200,154	145,104	132,859	95,828	113,000	686,945
Third Water Tunnel	108,143	71,071	178,100	327,000	114,500	798,814
Delaware Aqueduct Project	122,325	38,000	86000	0	0	246,325
CRITICAL INFRASTRUCTURE	**718,376**	**446,336**	**526,888**	**514,652**	**351,500**	**2,557,752**
	34.7%	**23.2%**	**25.1%**	**28.9%**	**25.4%**	**27.6%**
ALL OTHER WFA PROJECTS	**78,118**	**32,964**	**79,090**	**5,360**	**32,134**	**227,666**
	3.8%	**1.7%**	**3.8%**	**0.3%**	**2.3%**	**2.5%**
TOTAL CAPITAL PROGRAM	**2,073,071**	**1,924,177**	**2,102,731**	**1,781,520**	**1,386,418**	**9,267,917**
	100%	**100%**	**100%**	**100%**	**100%**	**100%**


Capital Program Components
Mandated vs. Critical Infrastructure
Costs in millions
$2,800
$2,600
$2,400
$2,200
$2,000
$1,800
$1,600
$1,400
$1,200
$1,000
$800
$600
$400
$200
$0
FY03
FY04
FY05
FY06
FY07
MANDATED PROGRAMS
CRITICAL INFRASTRUCTURE
ALL OTHER WFA PROJECTS

Water and Wastewater System Capital Program

(Per April 2003 Capital Plan)

Program $(000)'s

	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	10-Year Total
Combined Sewer Overflow	51,590	150,823	81,659	3,350	24,200	36,000	21,000	210,000	10,000	100,000	688,622
Watershed Investments	198,134	273,342	144,130	458,386	316,300	11,609	11,927	11,255	11,593	44,191	1,480,867
Hillview Reservoir	0	0	0	0	0	0	0	0	0	0	0
Newtown Creek	651,000	200,000	366,000	0	0	260,000	0	0	1,000	20,000	1,498,000
Croton Filtration	11,000	115,600	415,000	415,000	425,000	0	7,000	0	0	0	1,388,600
Meter Installations	28,000	4,223	4,223	4,223	4,223	4,223	4,223	4,223	4,345	4,480	66,386
Water Pollution Control Plants	484,038	732,300	230,016	101,450	287,525	599,300	493,957	453,500	458,500	498,500	4,339,086
Utility Relocation Costs	21,115	20,465	20,480	20,375	20,375	20,375	20,375	20,405	20,435	20,510	204,910
MANDATED PROGRAMS	**1,444,877**	**1,496,753**	**1,261,508**	**1,002,784**	**1,077,623**	**931,507**	**558,482**	**699,383**	**505,873**	**687,681**	**9,666,471**
	75.1%	**71.2%**	**70.8%**	**72.3%**	**60.1%**	**54.0%**	**36.7%**	**48.0%**	**38.4%**	**47.2%**	**58.7%**
Sewer Construction	192,161	129,929	91,824	124,000	114,000	134,000	119,000	139,000	121,639	144,542	1,310,095
In-City WaterMain Construction	145,104	132,859	95,828	113,000	130,100	116,000	116,000	116,000	117,740	119,654	1,202,285
Third Water Tunnel	71,071	178,100	327,000	114,500	455,000	500,000	725,000	500,000	567,800	500,000	3,938,471
Delaware Aqueduct Project	38,000	86000	0	0	0	0	0	0	0	0	124,000
CRITICAL INFRASTRUCTURE	**446,336**	**526,888**	**514,652**	**351,500**	**699,100**	**750,000**	**960,000**	**755,000**	**807,179**	**764,196**	**6,574,851**
	23.2%	**25.1%**	**28.9%**	**25.4%**	**39.0%**	**43.5%**	**63.1%**	**51.8%**	**61.3%**	**52.5%**	**39.9%**
ALL OTHER WFA PROJECTS	**32,964**	**79,090**	**5,360**	**32,134**	**16,375**	**42,118**	**4,000**	**4,000**	**4,000**	**4,000**	**224,041**
	1.7%	**3.8%**	**0.3%**	**2.3%**	**0.9%**	**2.4%**	**0.3%**	**0.3%**	**0.3%**	**0.3%**	**1.4%**
TOTAL CAPITAL PROGRAM	**1,924,177**	**2,102,731**	**1,781,520**	**1,386,418**	**1,793,098**	**1,723,625**	**1,522,482**	**1,458,383**	**1,317,052**	**1,455,877**	**16,465,363**
	100%	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Anticipated Water and Wastewater System Expenditures

(in 000's)

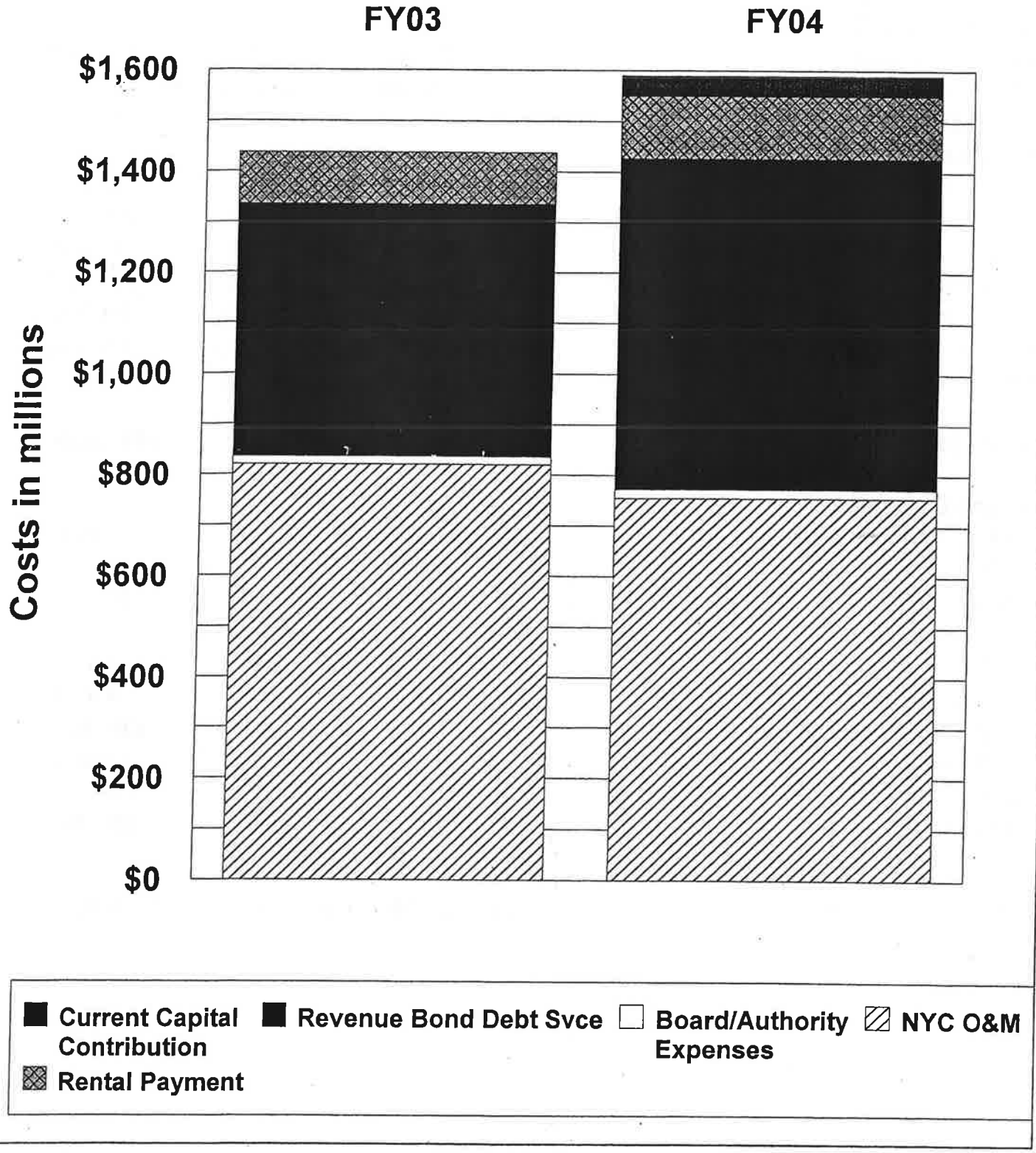
	FY03	FY04	Change
WFA Debt Service			
First Resolution Bonds:			
Outstanding Bonds	$499,900	$502,600	$2,700
Anticipated Future Bonds	1,000	75,700	$74,700
Total First Resolution DS	500,900	578,300	$77,400
Subordinate Obligations:			
Short-Term Obligations	12,000	28,900	16,900
Outstanding Bonds	220,500	240,300	19,800
Anticipated Future Bonds	0	46,600	46,600
Less: EFC Subsidy and capitalized interest	(64,500)	(79,700)	(15,200)
Actual Subordinate DS	168,000	236,100	68,100
Less: Carryforward and Other Revenues	(168,000)	(159,600)	8,400
Net Subordinate DS	0	76,500	76,500
Net Debt Service	**500,900**	**654,800**	**153,900**
Operating Expenses			
Authority/Board Operations	15,000	17,000	2,000
Water System	367,000	329,500	(37,500)
Wastewater System	400,300	404,400	4,100
Indirect Expenses	12,900	12,900	0
Judgments/Claims	18,000	8,000	(10,000)
Total Operations and Maintenance	**813,200**	**771,800**	**(41,400)**
Rental Payment	101,900	123,600	21,700
Current Capital Contribution	22,200	40,000	17,800
Net Operating Expenses	**$937,300**	**$935,400**	**($1,900)**
Total Expenditures	**$1,438,200**	**$1,590,200**	**$152,000**
Revenues			
User Payments	1,484,500	1,569,800	85,300
Upstate Revenues	24,000	25,400	1,400
Miscellaneous Revenue (Permits, etc.)	5,300	5,600	300
Miscellaneous Interest Income	25,000	25,000	0
Interest Income on System Funds	58,500	66,200	7,700
Gross System Revenues	**$1,597,300**	**$1,692,000**	**$94,700**
Carryforward	**$159,100**	**$101,800**	**($57,300)**

Water vs. Wastewater System Costs

(in 000's)

	FY2004 Total Costs	Water Costs	Wastewater Costs
WFA Debt Service			
First Resolution Bonds:			
Outstanding Bonds	502,600	250,800	251,800
Anticipated Future Bonds	75,700	37,800	37,900
Total First Resolution DS	578,300	288,600	289,700
Subordinate Obligations:			
Short-Term Obligations	28,900	11,400	17,500
Outstanding Bonds	240,300	24,000	216,300
Anticipated Future Bonds	46,600	4,700	41,900
Less: EFC Subsidy and capitalized interest	(79,700)	(8,000)	(71,700)
Actual Subordinate DS	236,100	32,100	204,000
Less: Carryforward and Other Revenues	(159,600)	(62,800)	(96,800)
Net Subordinate DS	76,500	(30,700)	107,200
Net Debt Service	**$654,800**	**$257,900**	**$396,900**
Operating Expenses			
Authority/Board Operations	17,000	4,500	12,500
Water System	329,500	329,500	
Wastewater System	404,400		404,400
Indirect Expenses	12,900	5,800	7,100
Judgments/Claims	8,000	3,600	4,400
Total Operations and Maintenance	**771,800**	**343,400**	**428,400**
Rental Payment	123,600	50,400	73,200
Current Capital Contribution	40,000	15,700	24,300
Net Operating Expenses	**$935,400**	**$409,500**	**$525,900**
Total Expenditures	**$1,590,200**	**$667,400**	**$922,800**

Water/Wastewater System Costs



Rate Advisor's Conclusions

- The 6.5% increase in water rates and charges proposed by the Board will yield anticipated revenues for Fiscal Year 2004 that are sufficient to cover the expected costs of providing water service and wastewater service.

- While the ratio of wastewater system costs to water system costs has declined somewhat in recent years due to ongoing water system investments to protect the quality of the City's water supply, scheduled investments in the capital improvement program for rehabilitation and construction of wastewater treatment facilities and combined sewer overflow projects will cause the ratio of wastewater system costs to increase in the future. Accordingly, the long term ratio of wastewater system costs to water system costs will approximate the current ratio of wastewater charges to water charges.

- The Rate Advisor has reviewed the Billing Policy and Miscellaneous Fee Proposals advanced by the Board and concluded that they are reasonable.

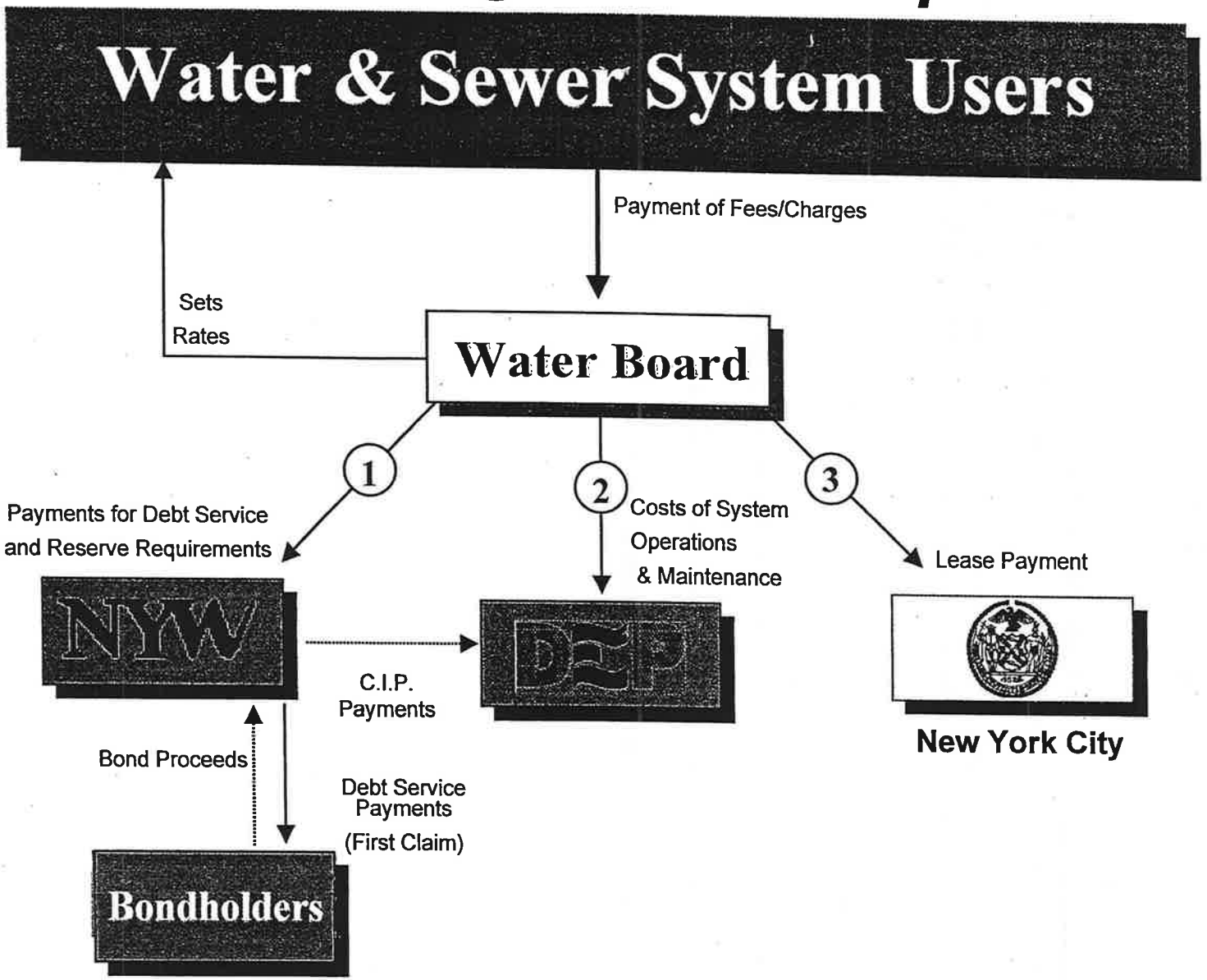
Process for Water Board Rate Adoption

- The Board must adopt rates which will satisfy the revenue requirements of the System
- The Water Finance Authority projects revenue bond debt service on bonds issued after 1988 to finance water and wastewater capital projects and certifies the FY 2004 amount to the Water Board
- The City Office of Management and Budget projects DEP's operating and maintenance expenses and certifies the FY 2004 amount to the Water Board based on the Mayor's Executive Budget
- The City projects debt service on general obligation bonds to finance water and wastewater capital projects based on information received from the Office of the Comptroller and certifies the FY 2004 amount to the Water Board
- The system's consulting engineer must certify that expenses are reasonable and appropriate
- The Board must hold a public hearing in each borough of New York City
- At its annual meeting in May, the Board adopts an annual budget based on the system expenses that have been certified to it, and adopts a rate which will produce sufficient revenues to meet those expenses

Important Objectives Of The Water Board In Establishing Rates And Charges

- Sufficient revenues must be raised by rates and charges and other sources of revenue in order to satisfy the revenue requirements of the Water System and the Wastewater System
- Rates and charges should be equitable and fair, in the sense that charges levied on different users reflect, as closely as practicable, the costs incurred in providing water and wastewater services
- The rate structure, both present and long term, should provide a reasonably stable and predictable flow of revenue
- The rate structure should be relatively simple and easy to administer
- The rate structure should be understandable to the customer
- The rate structure should encourage water conservation

Operating Relationships



Description of the Water System And The Wastewater System

The Water System

Water for the System is impounded at three upstate reservoir systems: the Croton, Catskill and Delaware watersheds. There are 18 reservoirs and three controlled lakes with a storage capacity of 550 billion gallons. The Water System provides an average of 1,400 million gallons per day from its upstate surface water systems and an average of 33 million gallons per day from wells located in southeast Queens. The Water System provides an average of 1,374 million gallons per day to customers within the City and in upstate reservoirs. Water is conveyed to the City through large aqueducts and balancing reservoirs. Within the City, water is distributed through two major tunnels. A third tunnel is now under construction and will supplement the two City tunnels currently in use. The water distribution system covers approximately 300 square miles in the City and consists of 6,794 miles of pipe, 94,358 mainline valves and 106,312 fire hydrants.

In comparison to other public water systems, the City's Water System is both economical and flexible. Approximately 95% of the total daily water supply is delivered to the consumer by gravity. Only about 5% of the water is regularly pumped to maintain the desired pressure. As a result operating costs are relatively insensitive to the cost of power.

The Wastewater System

The Wastewater System is primarily a combined system designed to carry both stormwater and sanitary wastewater. It consists of an extensive network of facilities including approximately 6,400 miles of wastewater lines, 131,243 catch basins and 5,000 seepage basins. The wastewater treatment facilities include 14 operating wastewater treatment plants, one storm-overflow retention plant, 89 pumping stations, nine wastewater laboratories, three inner-harbor vessels and eight sludge dewatering facilities. The wastewater treatment facilities treat approximately 1,200 million gallons per day of dry-weather wastewater.