

**VOLUME TWO
INTRODUCTION**

Volume Two of the 2003-2007 Capital Improvement Plan (CIP) contains information on projects that receive primary funding from revenue bonds (Enterprise Capital Programs). Included are Airport Facilities Improvements, Convention & Entertainment Facilities Improvements (C&E), Wastewater Facilities Improvements, and Water System Improvements.

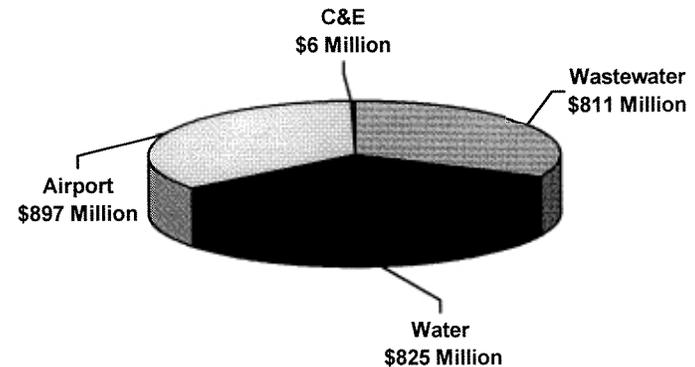
Overview

The Enterprise Capital Program for the 2003-2007 period totals \$2.54 billion. This is distributed among the four programs as illustrated in Figure 1. Airport Facilities Improvements constitute the largest program and represent 35% of the funds. Wastewater Treatment Facilities amount to 32%, Water System Improvements represent 32%, while Convention & Entertainment Facilities Improvements comprise less than 1% of the planned appropriations.

The Aviation Department must respond to the burgeoning demands of passenger traffic, the airline industry, and other airport tenants. The Airport System Program, therefore, is continuing to upgrade and expand the City's airports in accordance with its Master Plan. Implementation of the Master Plan is nearing the end of Phase I (see Airport Facilities Improvements Narrative on page 1).

The Convention and Entertainment Facilities Department is proposing \$5.8 million in capital improvements for FY2003, smaller than previous years. This is because the expansion of the George R. Brown Convention Center (\$163 million) is currently under construction. This project is being undertaken in conjunction with the new downtown hotel, a new basketball arena and related downtown police and fire facilities. Other funding sources are being used for these projects.

**FIGURE 1
ENTERPRISE PROGRAMS
PLANNED APPROPRIATIONS**



Total = \$2.5 Billion

The Water System Program is continuing to upgrade and expand the City's water distribution and purification facilities. Raw water supplies, however, are projected to be sufficient up to and beyond the year 2035. The CIP contains purification plants, storage, transmission, and distribution facilities, which will ensure sufficient potable water to the City's customers. Due to federal water quality regulations, the Water CIP may be revised in the later years.

The construction of water line projects for the areas included in the Neighborhood Renewal program are an important part of the larger neighborhood renewal and distribution system grid extensions. The neighborhood program targets neighborhoods for revitalization and stabilization by rehabilitating and upgrading area infrastructure.

The Wastewater Facilities Program supports the processing of raw wastewater by physical and biological treatment methods in compliance with Texas Natural Resource Conservation Commission (TNRCC) and the Environmental Protection Agency (EPA) standards. A little over 100 billion gallons of flow was treated in FY 2002. Funds are used to renovate and expand the current system, while maintaining compliance with all permits.

Funding Sources

Revenue supported bonds provide \$2.22 billion, or 87% of the funding for Enterprise Fund capital programs. Principal and interest payments on these bonds are made from revenues generated by the various enterprise operations, primarily through charges to the respective users and customers. For example, the Aviation Department charges the airlines and airline-related businesses for the use of airport facilities.

AVIATION FACILITIES IMPROVEMENTS PROGRAM

The City's Department of Aviation manages three major airport facilities in the region: George Bush Intercontinental Airport ("GBIAH")/Houston ("Intercontinental"), William P. Hobby Airport ("Hobby") and Ellington Field ("Ellington"). All three are subject to applicable provisions of Federal Aviation Administration ("FAA") regulations pertaining to the operational safety of air carriers and airports. During Fiscal Year 2002, the System had over 21 million enplanements and handled 704 million tons of cargo.

Intercontinental is situated on more than 9,500 acres and is located approximately 22 miles north of Houston's central business district. Intercontinental, which opened in 1969, is the City's dominant air carrier facility. It is the primary hub of operations for Continental Airlines and serves both domestic and international travelers, along with air cargo/freight.

Hobby is located approximately 10 miles southeast of the central business district on approximately 1,450 acres. It is a primary airport for Southwest Airline operations and serves a large domestic market. Hobby also accommodates significant general aviation activity. A new master plan for Hobby Airport is currently underway and is scheduled for completion in approximately 12 months.

Ellington is about 15 miles southeast of Houston's central business district on a site of approximately 2,362 acres, which was conveyed to the City by the federal government on July 1, 1984. The City and the federal government have entered into agreements under which Ellington is being operated for joint military/civil aviation use. Non-governmental use of Ellington is currently intended to primarily accommodate general aviation, relieving Hobby of that traffic. A master plan study for Ellington was initiated in October 2001 and is scheduled for completion early in 2003.

FY2003 Airport Facilities Improvements Program

Major capital projects to be undertaken in FY2003 include the following:

George Bush Intercontinental Airport

- Terminal C Interior/Utility Upgrade
- Upgrade Runway 8R/26L
- Terminal A/B Ramp Widening
- Chilled/Hot Water Mains Extension Terminal C To E
- Terminal "C" –Garage Upgrade
- ASC – A&G Expansion/Vehicle Maintenance Facilities
- Ramp Work
- Phase II and III Expansion of Central Plant

William P. Hobby Airport

- Construction of east concourse and terminal renovation
- North Ramp Environmental Protection System
- Construct A&G and Vehicle Maintenance Buildings
- Rehabilitate Runway 4/22
- Install new perimeter fence
- Repair and replace reinforcements in garage
- Master Plan Study

Ellington Field

- Perform repairs on ATCT Building
- Building 510 Upgrades
- Reconstruct portions of Runway 4/22 and rehabilitation of Taxiways D&G
- Master Plan Study
- Airside/Landside underground storm drain repair
- Building Demolition – Blue Building and Building 1050 and 117
- New Storage Facility/Warehouse

- Replace Incinerator
- Ramp and Pavement repairs

CONVENTION & ENTERTAINMENT FACILITIES

The Convention & Entertainment Facilities Department operates and maintains the City's convention and entertainment properties for the purpose of leasing the multi-purpose venues to a wide array of clients. The flagship George R. Brown Convention Center (GRBCC), recognized internationally for its state-of-the-art design and functional use of exhibit space, plays host to more than 250 events annually. These include conventions, trade shows, corporate meetings, medical conferences, social functions, and many other public events. The current expansion will enable the GRBCC to host larger, and more numerous events. Wortham Theater Center, Jones Hall for Performing Arts and Houston Center for the Arts host musicals, operas, ballet, symphony performances, Broadway shows, concerts, social functions, commencements, weddings and other public events.

The department also operates underground and surface parking lots with capacity for nearly 8,000 vehicles as well as the Fannin garage with 1,200 spaces. Funding for projects come from various sources, including hotel occupancy tax receipts and renewal and replacement funds.

FY2003 Convention & Entertainment Facilities Improvements Program

Highlights of the FY2003 program include:

- Completion of the Wortham Theater and Jones Hall electronic marquees
- Design of luminous gateways at key entrances to the Theater District
- Continuation of the major expansion of the GRBCC.

WASTEWATER TREATMENT FACILITIES

The Wastewater Treatment System collects, conveys and processes wastewater from an estimated 2.0 million people, generated in a service area which includes the City, several municipalities and unincorporated communities in the Houston metropolitan area. The system consists of approximately 6,200 miles of sanitary sewer lines, over 425,000 service connections, 358 lift stations, 41 wastewater treatment plants, and three major sludge treatment facilities. The average daily wastewater flow through the system for the Fiscal Year 2001 was 220 million gallons per day (mgd). As reflected by state permits, the effective treatment capacity of the system is 562 mgd. The permitted capacity of plants that are a part of the wastewater system treatment ranges from 0.20 mgd for the smallest plant to over 200 mgd for the 69th Street Wastewater Plant.

The City finances capital improvements and expansion through several funding mechanisms which include prior and junior lien bonds, renewal and replacement funds and impact fees.

Prior to granting a building permit for construction, the City evaluates the wastewater system's ability to transport and treat the estimated volumes of additional wastewater. Impact fees are collected, at least in part, to recover the cost of facilities previously constructed. These fees can be applied to the construction of new facilities providing additional capacity.

The Wastewater Treatment Facilities Capital Improvements Program provides for the continued upgrading of the wastewater collection and treatment system. Additional funds are provided to comply with the regulations issued by the Texas Natural Resource Conservation Commission (TNRCC) and the U.S. Environmental Protection Agency (EPA).

FY2003 Wastewater Treatment Facilities Improvements Program

Major capital projects to be undertaken in FY2003 include the following:

- Rehabilitation and replacement of neighborhood sewer systems in various service areas
- Rehabilitation of portions of the collection system to remove excessive infiltration and known overflows within the sewage system
- Rehabilitation or replacement of various wastewater lift stations
- Improvements to the 69th Street wastewater treatment plant
- Continued installation of sewer service to areas not previously provided such service.
- Rehabilitation of neighborhood sewers to improve service and eliminate sewage backups.

WATER SYSTEM

The Water System relies upon both surface and ground water supplies. Surface water is taken from Lake Conroe and Lake Houston in the San Jacinto River System and Lake Livingston in the Trinity River System. In aggregate, these supplies are sufficient to meet the City's expected water requirements up to and beyond the year 2035. However, additional water supplies must be developed to meet our long term needs. In addition, the System continues to shift its supply source from groundwater to surface water in accordance with State mandates.

The Water System delivers treated water to customers through a series of storage tanks, pump stations, and transmission/distribution mains. This potable water is sold to domestic, commercial, industrial, governmental, and other customers in the Houston metropolitan area.

Untreated surface water is also sold to governmental, industrial, and agricultural customers.

The Water System Capital Improvement Program continues to focus on neighborhood renewal by replacing old, unreliable water lines along with upgrading/improving the City's water transmission and treatment system to meet the demands of new growth and replace an aging infrastructure.

FY2003 Water System Facilities Improvements Program

Major capital projects to be undertaken in FY2003 include the following:

- Expansion and improvement of Southeast Water Purification plant
- Replacement of water mains in neighborhood.
- Replacement of old water mains in conjunction with METRO downtown projects
- Providing water service to areas not previously served by the city
- Acceleration of the Surface Water Transmission Program to meet subsidence requirements and provide a reliable water supply to north and west areas of Houston
- Complete the purchase and installation of automated meter reading system
- Rehabilitation of groundwater facilities including wells, tanks and pump stations to meet requirements of the TNRCC rules and regulations
- Expansion of existing pumping stations to accommodate surface water conversion and increased water demand

CIP Document Organization

The Executive Summary is a synopsis of Volume One and Volume Two. It includes a summary of all funding sources, a bond funds summary indicating bond supported funding, and a detailed listing of each project by program.

Each volume of the CIP is organized similarly. Following the introduction, all source of funds included in a volume are summarized. Following the source of funds summary is a five year debt issuance schedule. Subsequently, each capital program is presented with program summary forms listing all projects in the program, a summary of funding sources for that program, and project description forms which describe each project in detail including an implementation schedule.

Various terms used in the CIP are defined in the appendix.

MOTION NO. 2002 1282

MOTION by Council Member Robinson that the Proposed Fiscal Year 2003-2007 Capital Improvement Plan be amended to move project N-0644 from FY'06 to FY'04 and fund construction out of unspent funds from FY'03 under budget projects.

Seconded by Council Member Keller and carried.

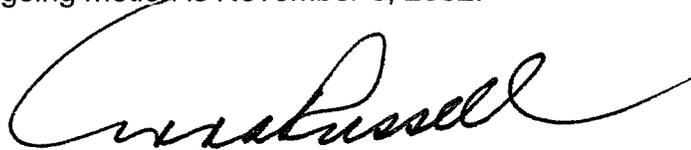
Mayor Pro Tem Quan, Council Members Tatro, Galloway, Goldberg, Edwards, Wiseman, Ellis, Keller, Vasquez, Alvarado, Parker, Sekula-Gibbs, Berry and Robinson voting aye
Nays none

Mayor Brown out of the City on City business

Mayor Pro Tem Quan presiding

PASSED AND ADOPTED this 30th day of October, 2002.

Pursuant to Article VI, Section 6 of the City Charter, the effective date of the foregoing motion is November 5, 2002.



City Secretary

Council Member Tatro presented the following written motion to amend the Proposed Fiscal Year 2003-2007 Capital Improvement Plan:

"The following are submitted as amendments to the Proposed FY 2003-2007 Capital Improvement Plan (CIP):

1) Pinemont Paving Phase I (N-0475 TC Jester to Ella.

<u>Proposed CIP-FY 2003/2007</u>	<u>Amendment to CIP-FY 2003/2007</u>
FY 2006 – Design - \$800,000	FY 2004 – Design - \$800,00
FY 2007 – Construction - \$4,000,00	FY 2006 – Construction - \$4,000,000

Note: Amendments is to move this project up 2 years from the proposed CIP. The FY2002 had scheduled this project for construction in FY2006, but the significant flooding in Ella Lee Forest subdivision warrants the advancement of this project. There is no change to the funding in this amendment, only the time frame is affected.

2) Afton Village Paving (N-0371) NSR 438 (Afton Village and Lakeview)

<u>Proposed CIP – FY 2003/2007</u>	<u>Amendment to CIP – FY 2003/2007</u>
FY2007 – Design - \$900,00	FY 2004 – Construction - \$5,8000,000 (add)

Note: Amendment is restore funding to NSR 438 as adopted to previous CIP Budgets, Letter dated 10/24/02 from Al Haines supports this amendment with source of funds, at this time, being designated as "Undetermined Funding".

Mayor Pro Tem Quan, Council Members Tatro,
Galloway, Goldberg, Edwards, Wiseman, Ellis,
Keller, Vasquez, Alvarado, Parker, Sekula-Gibbs,
Berry and Robinson voting aye
Nays none

Mayor Brown out of the City on City business

Mayor Pro Tem Quan presiding

PASSED AND ADOPTED this 30th day of October, 2002.

Pursuant to Article VI, Section 6 of the City Charter, the effective date of the foregoing motion is November 5, 2002.



City Secretary

MOTION NO. 2002 1285

MOTION by Council Member Quan that the recommendation of the Director of the Finance and Administration Department, for approval of the Proposed Fiscal Year 2003-2007 Capital Improvement Plan and to establish a charge for copies, be adopted, and the 2003-2007 Capital Improvement Plan as amended by Motion Nos. 2002-1282 and 2002-1283 and the attached recommended modifications are hereby approved by the City Council, and a charge of \$50.00, plus tax and postage, for the sale of Volume One, Volume Two and the Executive Summary, is hereby established for the sale of said documents.

Seconded by Council Member Vasquez and carried.

Mayor Pro Tem Quan, Council Members Galloway, Edwards, Wiseman, Ellis, Keller, Vasquez, Alvarado, Parker, Sekula-Gibbs and Robinson voting aye
Council Members Tatro and Goldberg voting no
Council Member Berry absent

Mayor Brown out of the City on City business

Mayor Pro Tem Quan presiding

PASSED AND ADOPTED this 30th day of October, 2002.

Pursuant to Article VI, Section 6 of the City Charter, the effective date of the foregoing motion is November 5, 2002.



City Secretary