MASSACHUSETTS BAY TRANSPORTATION AUTHORITY

Financial Statements and Required Supplementary Information

June 30, 2003

(With Independent Auditors' Report Thereon)

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY

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Independent Auditors' Report

The Board of Directors of the
Massachusetts Bay Transportation Authority:

We have audited the accompanying statements of net assets of the Massachusetts Bay Transportation Authority (the Authority or MBTA), a component unit of the Commonwealth of Massachusetts, as of June 30, 2003, and the related statements of revenue, expenses, and changes in net assets, and cash flows for the year then ended. These financial statements are the responsibility of the Authority's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Authority as of June 30, 2003, and the results of its operations and its cash flows for the year then ended in conformity with accounting principles generally accepted in the United States of America.

The Management's Discussion and Analysis on pages 2 through 7 and the historical pension information on pages 35 – 36 are not required parts of the financial statements but are supplementary information required by accounting principles generally accepted in the United States of America. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the required supplementary information. However, we did not audit the information and express no opinion on it.

In accordance with *Government Auditing Standards*, we have also issued a report dated October 17, 2003 on our consideration of the Authority's internal control over financial reporting and on our tests of its compliance with certain provisions of laws and regulations, contracts, and grants. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* and should be read in conjunction with this report in considering the results of our audit.

KPMG LLP

October 17, 2003

The management of the Massachusetts Bay Transportation Authority offers readers of our financial statements the following narrative overview and analysis of our financial activities for the year ended June 30, 2003.

Basic Financial Statements

Our basic financial statements are prepared using proprietary fund (enterprise fund) accounting that uses the same basis of accounting as private-sector business enterprises. The Authority is operated under one enterprise fund. Under this method of accounting, an economic resources measurement focus and an accrual basis of accounting is used.

Revenue is recorded when earned and expenses are recorded when incurred. The basic financial statements include a statement of net assets, a statement of revenues, expenses and changes in net assets, and a statement of cash flows. These are followed by notes to the financial statements. In addition to the basic financial statements, this report also contains required supplementary information pertaining to the retirement plans of the Authority.

> The statement of net assets presents information on the assets and liabilities, with the difference between the two reported as net assets. Over time, increases or decreases in net assets may serve as a useful indicator of whether the financial position of the Authority is improving or deteriorating.
>
> The statement of revenue, expenses and changes in net assets reports the operating revenues and expenses and nonoperating revenues and expenses of the Authority for the fiscal year with the difference – the net income or loss – being combined with any capital grants to determine the net change in assets for the fiscal year. That change combined with the net assets at the end of the previous year total to the net assets at the end of the current fiscal year.
>
> The statement of cash flows reports cash and cash equivalent activities for the fiscal year resulting from operating activities, capital and related financing activities, noncapital and related financing activities and investing activities. The net result of these activities added to the beginning of the year cash balance total to the cash and cash equivalent balance at the end of the current fiscal year.

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY

Required Supplementary Information

Management's Discussion and Analysis

June 30, 2003

(Dollars in thousands)

Condensed Financial Information

Condensed financial information from the statements of net assets and revenues as of June 30, 2003 and 2002 and expenses and changes in net assets for the years ended June 30, 2003 and 2002 are as follows:

		June 30,	
		2003	2002
Current and other assets	$	1,291,871	1,120,368
Capital assets, net		6,700,124	6,497,670
Total assets		7,991,995	7,618,038
Current liabilities		405,710	431,956
Long-term liabilities		4,498,611	4,141,557
Total liabilities		4,904,321	4,573,513
Net assets:			
Invested in capital assets, net of related debt		2,939,502	2,891,730
Restricted		20,848	11,746
Unrestricted		127,324	141,049
Total net assets	$	3,087,674	3,044,525
Operating revenue:			
Revenue from transportation	$	274,206	283,288
Other		43,361	37,831
Total operating revenues		317,567	321,119
Operating expenses:			
Transportation services		421,286	436,026
Other operating expenses		387,795	360,943
Total operating expenses, excluding depreciation		809,081	796,969
Depreciation and amortization		233,061	220,671
Total operating expenses, including depreciation		1,042,142	1,017,640
Operating loss		(724,575)	(696,521)
Net nonoperating revenue/expense		642,253	613,900
Loss before capital grants		(82,322)	(82,621)
Capital grants and contributions		125,471	137,936
Increase in net assets		43,149	55,315
Beginning of year net assets		3,044,525	2,989,210
End of year net assets	$	3,087,674	3,044,525

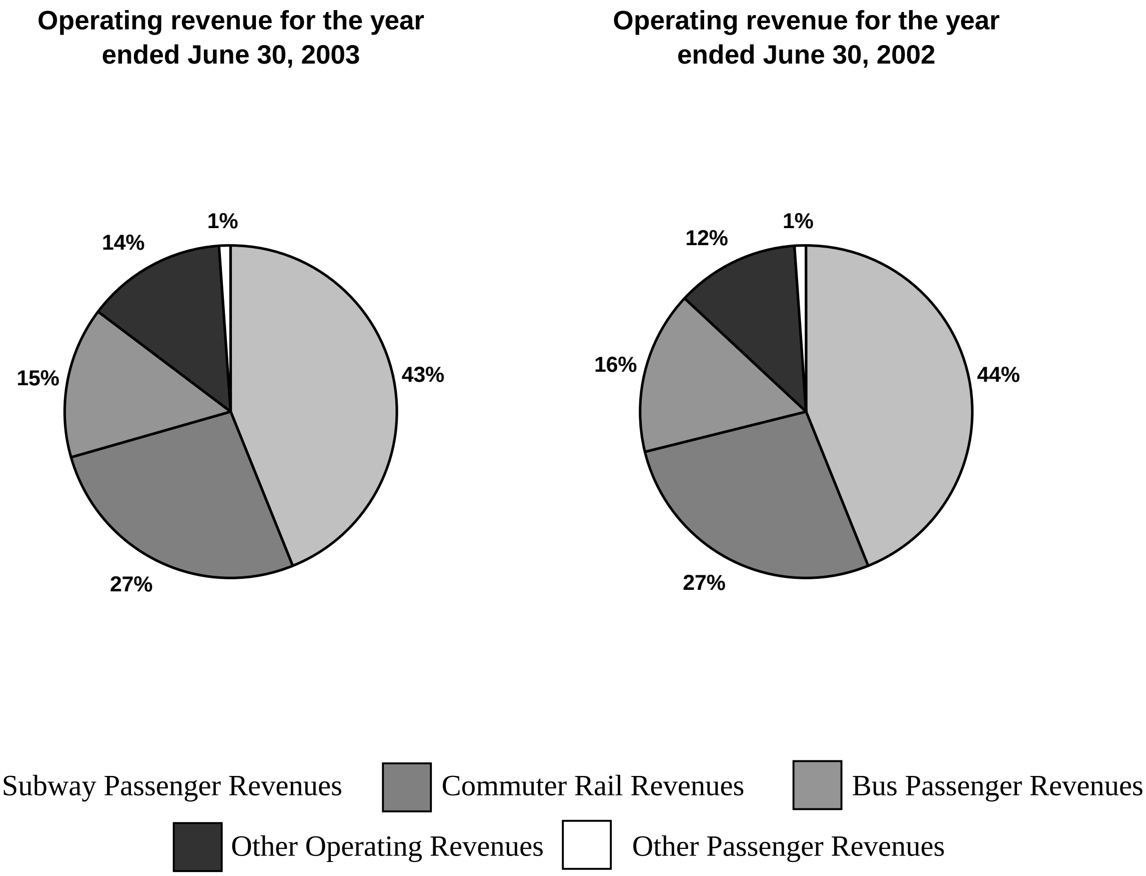
The information contained in the condensed financial information table is used as the basis for the discussion presented on the following pages, surrounding the Authority's activities for the fiscal year ended June 30, 2003.

Financial Highlights

- The Authority ended the year June 30, 2003 with a net asset balance of $3,087,674 of which $2,939,502 represented the amount invested in capital assets and $127,324 was unrestricted. This amount was $43,149 higher than the net asset balance at the beginning of the year. The increase in net assets is attributable to the investment in capital assets funded in the capital investment plan through increased debt borrowings and grants received by the Authority in fiscal 2003.
- Despite the increase in net assets, the Authority incurred an expected operating loss for the year ended June 30, 2003 of $724,575. The operating loss was mitigated as part of the Commonwealth of Massachusetts Forward Funding Legislation (Chapter 127 of the Acts of 1999 of the Commonwealth or Enabling Act). The legislation allows the Authority to receive a dedicated revenue stream consisting of the assessments on the communities in the Authority's service area and a Dedicated Sales Tax. For the year ended June 30, 2003 the Authority recognized $684,280 of sales tax revenues from the Commonwealth of Massachusetts. This amount was the guaranteed full year Base Revenue Amount for fiscal 2003. Local assessments on cities and towns within the Authority's service area accounted for another $141,143 in nonoperating revenue. Adding to the operating loss was nonoperating interest expense, net of interest and other income of $183,170.
- The Authority has taken steps to minimize interest expense by reducing the amount of high interest rate debt by refunding outstanding bonds and paying off debt as funds become available.
- The Authority ended the year June 30, 2003 with cash and investments of approximately $1,089,000. However, only $161,630 of this amount is available for operations as the bulk of these assets are restricted for specific purposes and unavailable for the Authority's general use.
- The statement of cash flows identifies the sources and uses of cash activity for the fiscal year. For fiscal 2003, cash and cash equivalents increased by $162,037. This increase resulted primarily from the $727,675 raised through bond issuances coupled with the spending activity in the Authority's capital investment program in which the Authority expended almost $400,000 and from the servicing of the Authority's debt, which resulted in the spending of over $600,000. The $493,740 cash used for operations is offset by the sales tax and local assessment receipts of $818,475.

Revenue

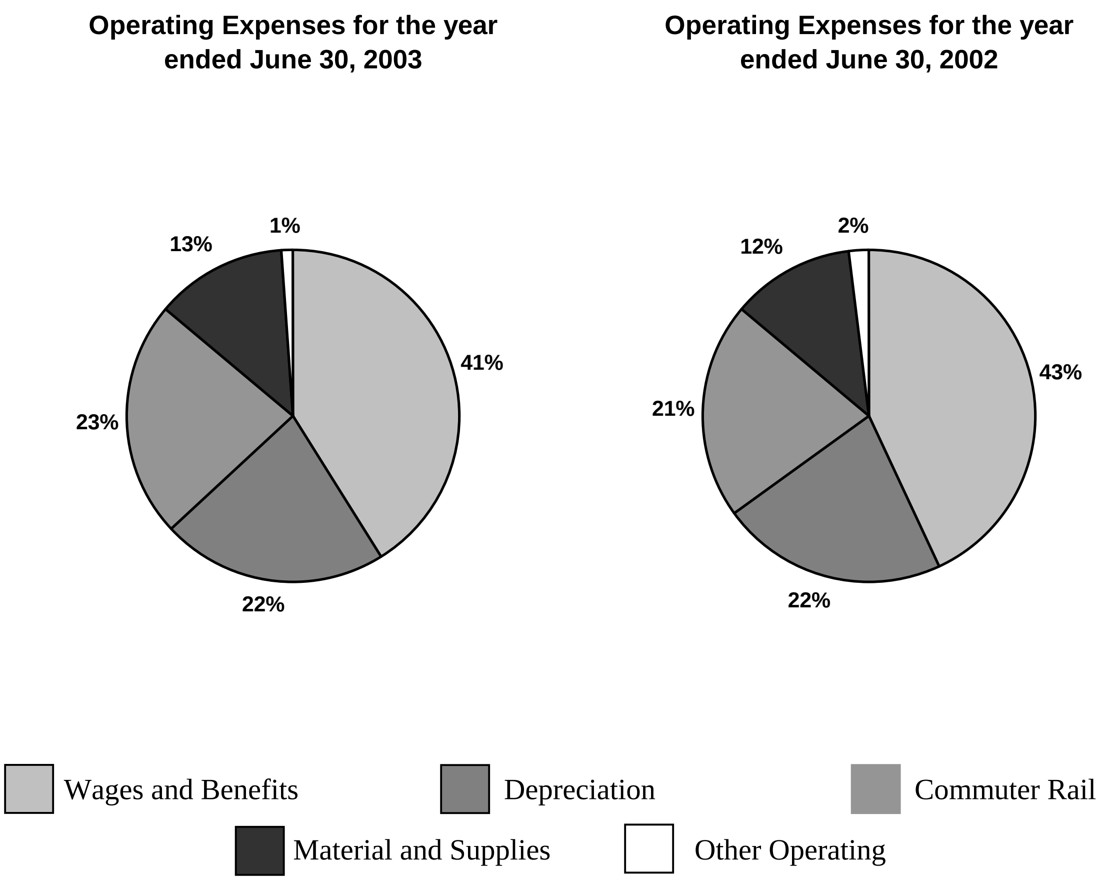
The following charts show the major sources of operating revenue for the years ended June 30, 2003 and June 30, 2002:



As in previous years, the passenger revenues make up over 85% of the total operating revenues. The Authority continues to work on increasing ridership through new equipment purchases, station upgrades and system expansion and will continue to pursue its policy of maximizing nonfare revenue opportunities.

Expenses

The following charts show the major sources of operating expenses for the years ended June 30, 2003 and 2002:



As in previous years, wages and benefits make up the largest portion of operating expenses. This is common in the public transportation industry as the provision of service is extremely labor intensive. Due to the significant investments the Authority has in capital assets, depreciation continues to be a large operating expense. Unlike the other expenses listed, depreciation is not a cash expense. The Authority has and continues to pursue ways to reduce costs without impacting service. In fiscal 2003, the Authority took such measures as bidding and contracting with a new commuter rail provider and utility companies to obtain competitive pricing. The Authority also entered into a fuel hedge agreement to contain the overall cost of fuel.

Capital Assets

The Authority's capital assets as of June 30, 2003 and 2002 amounted to $6,700,124 and $6,497,670 (net of accumulated depreciation) respectively. This investment in capital assets includes land, construction work in progress, ways and structures and buildings and equipment.

(Dollars in thousands)

Net capital asset additions included the following for the years ended June 30:

		2003	2002
Land	$	24	1,371
Construction work in progress		149,193	144,168
Ways and structures		197,590	188,425
Buildings and equipment		70,013	78,446
	$	416,820	412,410

The Authority primarily acquires its assets with the proceeds from federal capital grants and revenue bonds. Station improvements, new equipment purchases and system expansion are all part of the Authority's capital investment program. Commitments on approved capital asset construction projects currently exceed $1,271,891 and commitments to purchase new transportation equipment are approximately $660,000.

Debt

As of June 30, 2003, the Authority had $2,833,745 of General Transportation System bonds, $1,327,675 of revenue bonds and $25,510 of Boston Metropolitan District bonds outstanding. The total amount outstanding for these categories of debt increased by $311,759 during the fiscal year ended 2003. The Authority issued $727,675 in bonds during the 2003 fiscal year. Of the bonds issued, $303,595 were used to refund higher rate debt with the remainder financing system wide improvements and a Vehicle Replacement Program. The Authority has also entered into various agreements to help hedge against interest rate changes on certain outstanding debt. These agreements help the Authority better manage the total cost of borrowing and allow for better budgeting of future cash flows. The Authority's Assessment Bonds have a rating of AAA by Standard and Poor's and Aa1 by Moody's Investor Services. The Authority's most recent Sales Tax Bond issue which took place on February 26, 2003, was assigned a rating of AAA by Standard and Poor's and Aa2 by Moody's Investor Services.

Requests for Information

This financial report is intended to provide an overview of the finances of the Authority for those with an interest in this organization. Questions concerning any information within this report may be directed to the Deputy General Manager and Chief Financial Officer of the Authority.

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY

Statement of Net Assets

June 30, 2003

(Dollars in thousands)

Assets

Current assets:		
Cash and temporary cash investments (note 3)	$	161,630
Accounts receivable, net:		
Commonwealth of Massachusetts		101,290
Federal grants		12,699
Other trade		27,806
Materials and supplies		33,833
Prepaid expenses		3,011
Total current assets		340,269
Restricted and other special accounts (notes 2(j) and 3):		
Bond construction accounts		173,659
Lease accounts		552,822
Bond reserve accounts		123,412
Stabilization account		8,151
Other accounts		69,778
Total restricted and other special accounts		927,822
Capital assets, at cost (notes 2(c), 8, 9, and 11):		
Transportation property, being depreciated		8,223,166
Transportation property, not being depreciated		1,288,139
Less accumulated depreciation		(2,811,181)
Capital assets, net		6,700,124
Other assets:		
Net pension asset (note 7)		7,143
Deferred bond issue costs		16,638
Total other assets		23,781
Total assets	$	7,991,996

(Continued)

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY

Statement of Net Assets

June 30, 2003

(Dollars in thousands)

Liabilities

Current liabilities:		
Current maturities of bonds payable (note 5)	$	91,355
Current capital lease and other current obligations (notes 5 and 8)		18,304
Accounts payable		96,233
Accrued liabilities:		
Payroll and vacation		28,120
Interest		84,045
Injuries and damage claims, worker's compensation claims, and other (note 10)		87,654
Total current liabilities		405,711
Long-term liabilities, less current maturities:		
Bonds payable, net (note 5)		3,932,188
Other noncurrent obligations (note 5)		2,270
Obligations under capital leases (note 8)		535,658
Pension liability (note 7)		5,741
Deferred revenue (note 6)		22,754
Total long-term liabilities		4,498,611
Total liabilities		4,904,322
Net Assets		
Invested in capital assets, net of related debt		2,939,502
Restricted		20,848
Unrestricted		127,324
Commitments and contingencies (notes 10 and 11)		
Total net assets	$	3,087,674

See accompanying notes to basic financial statements.

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY

Statement of Revenue, Expenses, and Changes in Net Assets

Year ended June 30, 2003

(Dollars in thousands)

Operating revenue, not including local and federal assistance:	
Revenue from transportation	$ 274,206
Other	43,361
	317,567
Operating expenses:	
Wages and related employee benefits:	
Wages	304,854
Medical and dental insurance	78,983
Pensions	22,091
Social security taxes	26,820
Worker's compensation	5,912
Other	403
Capitalized costs	(17,777)
	421,286
Other operating expenses:	
Depreciation and amortization	233,061
Materials, supplies, and services	132,807
Injuries and damages	13,206
Commuter railroad and local subsidy expenses (note 4)	239,441
Other	2,341
	620,856
Total operating expenses	1,042,142
Operating loss	(724,575)
Nonoperating revenue (expense):	
Dedicated sales tax revenue	684,280
Dedicated local assessments	141,143
Other income	8,829
Interest income	5,508
Interest expense	(197,507)
Total nonoperating revenue	642,253
Loss before capital grants	(82,322)
Capital grants and contributions (note 2(f))	125,471
Increase in net assets	43,149
Beginning of year net assets	3,044,525
End of year net assets	$ 3,087,674

See accompanying notes to basic financial statements.

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY

Statement of Cash Flows

Year ended June 30, 2003

(Dollars in thousands)

Cash flows from operations:		
Receipts from transit customers	$	274,206
Receipts from other operations		43,730
Payments to suppliers and vendors		(424,631)
Payments to employees		(387,045)
Net cash used for operations		(493,740)
Cash flows from capital and related financing activities:		
Cash (used for) provided by:		
Additions to transportation property		(387,491)
Interest paid		(224,204)
Decrease in deferred credits/charges		(5,099)
Payments on long-term debt		(415,916)
Proceeds from bond issuances		727,675
Capital leases		4,348
Capital grants		120,480
Net cash used for capital and related financing activities		(180,207)
Cash flows from noncapital and related financing activities:		
Sales tax and local assessment		818,475
Reimbursable payments		(300)
Other		9,301
Net cash provided by noncapital and related financing activities		827,476
Cash flows from investing activities:		
Interest income		8,508
Net cash provided from investing activities		8,508
Change in cash, temporary cash investments, restricted, and other special accounts		162,037
Cash, temporary cash investments, restricted, and other special accounts, beginning of year		927,415
Cash, temporary cash investments, restricted, and other special accounts, end of year	$	1,089,452
Reconciliation of operating (loss) to net cash (used) by operating activities:		
Operating loss	$	(724,575)
Charges to cost of service not requiring current expenditure of cash:		
Depreciation and amortization		233,061
Changes in all other working capital accounts except cash, temporary cash investments, and short-term debt		(2,226)
Net cash used for operations	$	(493,740)

See accompanying notes to basic financial statements.

(1) The Reporting Entity

The Massachusetts Bay Transportation Authority (the Authority) was originally created in 1964 and is body politic and corporate and a political subdivision of the Commonwealth of Massachusetts (the Commonwealth).

The Authority is managed by a board of nine directors. The Secretary of the Executive Office of Transportation and Construction of the Commonwealth is the Chairman. The other eight directors are appointed by the Governor of the Commonwealth. All appointments to the Board became effective July 1, 2000. Since this time, seven have been reappointed with one new appointment. The Board has the power to appoint and employ a General Manager and other officers. The Advisory Board, consisting of a representative from each of the cities and towns paying Assessments, has the power to approve the Authority's long-term capital program and annual operating budget.

In accordance with the requirements of Statement No. 14, *The Financial Reporting Entity, of the Governmental Accounting Standards Board* (GASB), the financial statements must present the Authority (the primary government) and its component units. Pursuant to this criterion, no component units were identified for inclusion in the accompanying financial statements. Additionally, the accompanying financial statements are incorporated into the financial statements of the Commonwealth as the Authority is a component unit of the Commonwealth.

(2) Summary of Significant Accounting Policies

(a) Funding of Operation

Until June 30, 2000, the Authority was subsidized by the Commonwealth for its annual "Net Cost of Service" and certain debt costs as defined in Chapter 161A of Massachusetts General Law in effect prior to July 1, 2000. As part of the Commonwealth's Forward Funding Legislation (Chapter 127 of the Acts of 1999 of the Commonwealth or Enabling Act), the Commonwealth's funding mechanism was repealed and restated. Effective July 1, 2000, the new legislation allows the Authority to receive a dedicated revenue stream consisting of the assessments on the communities in the Authority's service area (the Assessments) and certain Dedicated Sales Tax. Additionally, the Authority's service territory expanded from 78 to 175 cities and towns. The Authority also funds operations through charges for providing transportation services.

(b) Financial Reporting

The Authority follows the provisions of the Governmental Accounting Standards Board Statement, Nos. 34, *Basic Financial Statements – and Management's Discussion and Analysis – for State and Local Governments* (Statement 34), 37, *Basic Financial Statements – and Management's Discussion and Analysis – for State and Local Governments: Omnibus* (Statement 37), and 38, *Certain Financial Statement Note Disclosures* (Statement 38), which establish the financial reporting standards for all state and local government entities.

The accompanying financial statements have been prepared using the economic resources measurement focus and the accrual basis of accounting and reflect transactions on behalf of the Authority, the reporting entity. The Authority accounts for its operations as an enterprise fund.

(Dollars in thousands)

Operating revenues and expenses result from providing transportation services to member communities. All other revenues and expenses are reported as nonoperating revenues and expenses.

Under GASB Statement No. 20, *Accounting and Financial Reporting for Proprietary Funds and Other Government Entities that Use Proprietary Fund Accounting*, the Authority has adopted the option to apply only those Financial Accounting Standards Board (FASB) statements and interpretations issued before November 30, 1989, that do not conflict with or contradict GASB pronouncements. Only GASB pronouncements issued after this date will be followed.

(c) Capital Assets

Capital assets are stated at historical cost. These costs include the Authority's labor costs for employees working on capital projects, related fringe benefits, and an allocated share of general and administrative costs.

Depreciation is provided on the straight-line method at rates that are designed to amortize the original cost of the property over its estimated useful life. The major categories of transportation property in service and their estimated useful lives are as follows at June 30:

	Estimated useful life
Ways and structures	10-60 years
Building and equipment	3-25 years

(d) Construction in Progress

During 2003, major construction projects aggregating $276,474 were completed and transferred to the appropriate transportation property accounts. Major projects included transit service extensions, right of way improvements and purchases of new rolling stock and other equipment.

Interest on debt used to finance construction that is capitalized as part of the Authority's fixed assets is calculated by offsetting interest expense incurred from the date of the borrowing until completion of the project, with interest earned on invested proceeds over the same period. In fiscal year 2003, the net interest cost eligible for capitalization was approximately $32,000, ($35,000 of interest cost offset by $3,000 of interest income). This amount is included in construction in progress at year-end.

Additionally, the Authority, under various interagency agreements, performs construction work on behalf of those agencies. Such construction costs are reimbursed upon completion of the work. Costs incurred during 2003 were approximately $15,500. Amounts owed to the Authority for these costs and prior year costs as of June 30, 2003 were approximately $18,100 and are presented in accounts receivable in the accompanying statements.

(Continued)

(e) Self Insurance

The Authority is fully self-insured for various risks including worker's compensation, injuries and damages and employee health claims. The Authority self-insures a portion of casualty and liability claims.

(f) Capital Grants and Contributions

The Authority receives capital grants from certain governmental agencies to be used for various purposes connected with the planning, modernization, and expansion of transportation facilities and equipment. Capital grants of the Authority are reported as revenue rather than contributed capital as required by GASB Statement No. 33, *Accounting and Financial Reporting for Nonexchange Transactions.*

(g) Statement of Cash Flows

For purposes of the statement of cash flows, the Authority considers all highly liquid investments purchased with a maturity of six months or less to be temporary cash investments.

(h) Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

(i) Compensated Absences

The Authority accrues for vested vacation pay when it is earned by employees. The amount of vested vacation pay accrued as of June 30, 2003 was approximately $14,744.

(j) Restricted and Other Special Accounts

Certain cash and investments are segregated from operating cash due to certain internal or external restrictions. The following are included in restricted and other special accounts:

- Bond Construction Accounts – represents unexpended bond proceeds.
- Lease Accounts – represents cash held by trustees to be used to pay lease payments on the Authority's defeased capital leases.
- Bond Reserve Accounts – represents cash funds required to be maintained by bond indentures.
- Stabilization Account – represents funds held in accordance with statutory requirements to be used when annual revenues are projected to be less than annual expenses, or if the Authority has insufficient funds on hand to pay current expenses.
- Other Accounts – represents funds held in accordance with the Authority's Trust Agreements for capital maintenance, debt service, and other expenses.

(Continued)

(Dollars in thousands)

(k) Materials and Supplies

Materials and supplies are stated at average cost and include items to support the Authority's operations.

(3) Deposits and Investments

The Authority is authorized by its board of directors to make deposits into checking and savings accounts and to invest in direct obligations of the U.S. Treasury, its agencies and instrumentalities, brokers' acceptances, investment agreements, municipal bonds, repurchase agreements secured by U.S. government and agency obligations, and certain other investments permitted under the trust indentures. Restricted investments are recorded at fair value. Other investments are recorded at amortized cost, which approximates market, and earn interest and dividends at prevailing rates.

Deposits and investments consisted of the following amounts presented in the accompanying balance sheet at June 30, 2003:

Construction accounts	$	173,659
Other accounts		201,341
Lease accounts		552,822
Cash and temporary cash investments		161,630
	$	1,089,452

(a) Deposits

The Authority's deposits are categorized as those that are fully insured or collateralized with securities held by the Authority or its agent in the Authority's name (Category 1), those deposits that are collateralized with securities held by the pledging financial institution's trust department or agent in the Authority's name (Category 2), and those deposits that are not collateralized (Category 3). Managed investment pools are not categorized.

A summary of these deposits as of June 30, 2003 is as follows:

	Category			Total bank	Carrying
	1	2	3	balance	amount
Cash and cash equivalents	$ 137,278	—	395,149	532,427	526,586
Not categorized:					
Mass Municipal Depository Trust	—	—	—	32,431	32,431
	$ 137,278	—	395,149	564,858	559,017

In 2003, outstanding checks largely account for the difference between the bank balance and carrying amount of deposits. The Authority's cash on hand as of June 30, 2003 was $1,436.

(Dollars in thousands)

(b) Investments

The Authority's investments are categorized according to the level of custodial credit risk assumed by the Authority. Category 1 includes investments that are insured, registered or held by a trustee in the Authority's name. Category 2 includes uninsured and unregistered investments held by the counterparty's trust department or agent in the Authority's name. Category 3 includes uninsured or unregistered investments held by the counterparty, its trust department or agent but not in the Authority's name.

A summary of these investments as of June 30, 2003 is as follows:

	Category			Fair
	1	**2**	**3**	**value**
U.S. government obligations	$ 166,736	—	—	166,736
Repurchase agreements	—	361,570	—	361,570
Common stock	—	—	693	693
	$ 166,736	361,570	693	528,999

The maximum amount of the Authority's uninsured deposits and investments in repurchase agreements was at year-end. These amounts vary during the year due to the timing of cash receipts. U.S. government and agency obligations that secure the repurchase agreements are held by the broker's agent in a safe-keeping account on behalf of the Authority, but such obligations do not bear the Authority's name.

(4) Commuter Railroad and Local Subsidy

Under General Laws, Chapter 161A, Section 3(f) of the Commonwealth of Massachusetts, the Authority may enter into agreements with private transportation companies, railroads, and other concerns providing for joint or cooperative operation of any mass transportation facility and for operation and use of any mass transportation facility and equipment for the account of the Authority.

On September 1, 1995, the Authority entered into an operating agreement with the National Railroad Passenger Corporation (AMTRAK) to provide commuter railroad service over the Authority's rail lines. The Authority agreed to pay AMTRAK a fixed price per year for the services specified in the agreement and its amendments. This agreement was terminated on June 30, 2003 and a new agreement was entered into with Massachusetts Bay Commuter Railroad Company beginning July 1, 2003 for a period of five years. The Authority will pay Massachusetts Bay Commuter Railroad Company a total of $1,043,300 over this five-year period. Residual amounts due to or from AMTRAK under the old contract have not yet been determined.

(5) Long-Term Debt

(a) Bonds Payable

The Enabling Act authorizes the Authority to issue general obligation debt, revenue, or other debt secured by a pledge or conveyance of all or a portion of revenues, receipts or other assets or funds of the Authority beginning July 1, 2000.

Debt issued by the Authority and outstanding at June 30, 2000 (prior obligations) is backed by the full faith and credit of the Commonwealth until the debt is paid off. Principal and interest payments on that debt were also subsidized by the Commonwealth prior to June 30, 2000.

Debt issued by the Authority after June 30, 2000 (new debt) will not be supported by the Commonwealth's guarantee. Additionally, the Authority is not expected to receive any principal or interest subsidies from the Commonwealth for the repayment of the prior obligations or new debt of the Authority, unless authorized by special legislation.

After July 1, 2000, the Authority issued Assessment Bonds 2000 Series A, payable in annual installments on July 1st beginning in fiscal 2005 through July 1, 2030 and Sales Tax Bonds 2000 Series A, payable in annual installments on July 1st from July 1, 2004 through July 1, 2010 and from July 1, 2020 through July 1, 2030. Interest is paid semiannually on July 1st and January 1st for both the 2000 Series A Assessment and 2000 Series A Sales Tax Bonds.

During fiscal 2003, the Authority issued Senior Sales Tax Bonds, 2002 Series A for $396,885 and 2003 Series A for $237,415. Principal is payable July 1, 2003 through July 1, 2032 on 2002 Series A and from July 1, 2003 through July 1, 2021 on 2003 Series A. Interest is payable semiannually on July 1st and January 1st on both series. The 2002 Series A were issued to provide funds for the financing of the Authority's capital program. The 2003 Series A were issued to refund $215,790 of the Authority's 1992 Series B GTS Bonds and pay the costs of a swap termination of $25,295. The economic benefit and cash flows resulting from terminating the swaption and refunding the hedged bonds was determined to be more advantageous to the Authority than to have the swaption exercised.

Also in fiscal 2003, the Authority issued Sales Tax Bonds Series 2003 Series B, payable March 1, 2013 through March 1, 2023. Interest is payable semiannually on March 1st and September 1st. These bonds were issued in two tranches. One tranche is for $50,000 and the other is for $43,375. These bonds were issued to refund $87,805 of the Authority's 1993 Series A GTS bonds. The 2003 Series B bonds are Auction Rate bonds. The Auction Rate is reset every twenty-eight days. The Authority has a SWAP arrangement on these bonds with a third party to enable the Authority to pay a fixed rate of 5.20% over the life of the bonds while the third party pays the Authority BMA (Bond Municipal Association) index (a variable rate).

General Transportation System (GTS) Bonds, all issued prior to July 1, 2000, are payable in annual installments on March 1st; interest is payable semiannually on March 1st and September 1st. The GTS bonds were issued to provide funds for the financing of the Authority's transportation property.

(Dollars in thousands)

Boston Metropolitan District Bonds (BMD) were issued for transit purposes prior to the formation of the Authority in 1964.

The bonds outstanding are as follows at June 30:

	Year of maturity	Interest rates	Outstanding balance 2003	Due in fiscal 2004
General transportation system bonds:				
1967 Series A Bonds dated March 1, 1967	2007	3.85%	$ 2,600	—
1974 Series A Bonds dated June 1, 1974	2014	5.0-6.6%	12,075	—
1991 Series A Bonds dated November 15, 1991	2021	6.3-7.0%	75,000	—
1992 Series B Refunding Bonds dated December 1, 1992	2021	5.5-6.25%	125,200	—
1992 Series C Bonds dated November 15, 1992	2023	5.6-6.1%	15,575	—
1993 Series A Refunding Bonds dated June 1, 1993	2022	4.9-5.5%	285,400	46,320
1994 Series A Refunding Bonds dated June 1, 1994	2019	5.0-7.0%	236,540	19,530
1994 Series B Bonds dated June 1, 1994	2024	5.0-5.3%	8,815	4,295
1995 Series A Bonds dated April 1, 1995	2025	4.9-5.88%	106,240	—
1995 Series B Bonds dated September 15, 1995	2025	4.5-5.38%	123,170	—
1996 Series A Bonds dated March 1, 1996	2026	4.7-5.38%	32,805	—
1996 Series B Bonds dated October 1, 1996	2026	5.0-5.25%	136,700	4,130
1997 Series A Bonds dated June 1, 1997	2027	4.5-6.0%	142,175	—
1997 Series B Bonds dated August 1, 1997	2014	4.25-5.0%	7,905	560
1997 Series C Bonds dated August 1, 1997	2024	4.5-6.0%	237,620	1,705
1997 Series D Bonds dated November 1, 1997	2027	5.0-5.5%	129,830	—
1998 Series A Bonds dated February 15, 1998	2026	4.0-5.5%	301,010	1,130

(Dollars in thousands)

	Year of maturity	Interest rates	Outstanding balance 2003	Due in fiscal 2004
1998 Series B Bonds dated November 1, 1998	2028	4.1-5.25%	$ 197,915	—
1998 Series C Bonds dated November 1, 1998	2022	4.0-5.75%	229,910	—
1999 Series A Variable Interest Rate Bonds dated June 29, 1999	2014	Variable	56,360	3,570
1999 Series A Bonds dated December 1, 1999	2021	4.5-6.0%	182,900	—
2000 Series Variable Interest Rate Bonds dated March 10, 2000	2030	Variable	188,000	—
Total general transportation system bonds payable			2,833,745	81,240
Boston metropolitan district bonds:				
Boston Elevated Railway Company and Metropolitan Transit Authority Debt	2014	5.0%-6.0%	18,210	400
Purchase of City of Boston Transit Properties	2014	5.25%-5.75%	4,565	1,490
Construction Bonds	2002, 2008	5.00%-5.75%	2,735	370
Total Boston Metropolitan District Bonds payable			25,510	2,260
Revenue bonds:				
2000 Series A Assessment Bonds dated August 1, 2000	2030	4.9%-5.75%	496,645	—
2000 Series A Senior Sales Tax Bonds dated August 1, 2000	2030	4.4%-5.7%	103,355	—
2002 Series A Senior Sales Tax Bonds dated November 1, 2002	2032	3%-5.25%	396,885	5,860
2003 Series A Senior Sales Tax Bonds dated January 29, 2003	2021	3%-5.25%	237,415	1,995
2003 Series B Senior Sales Tax Bonds dated February 26, 2003	2023	Variable	93,375	—
Total revenue bonds payable			1,327,675	7,855

(Dollars in thousands)

	Year of maturity	Interest rates	Outstanding balance 2003	Due in fiscal 2004
Total bonds payable			$ 4,186,930	$ 91,355
Less current maturities			91,355	
Total long-term bonds payable			4,095,575	
Less:				
Unamortized discount			20,912	
Unamortized gains/losses on refundings			142,475	
Total long-term bonds payable, net			$ 3,932,188	

The annual maturities of long-term bonds payable as of June 30, 2003 are as follows:

Fiscal years:	Principal	Interest
2004	$ 91,355	217,079
2005	103,075	212,776
2006	120,260	208,993
2007	139,540	204,880
2008	150,885	197,268
2009 – 2013	852,110	851,369
2014 – 2018	818,600	604,809
2019 – 2023	910,640	373,653
2024 – 2028	689,735	151,060
2029 – 2033	310,730	14,976
Total	$ 4,186,930	3,036,863

A summary rollforward of bonds is as follows:

	Balance 2002	Additions	Payments	Balance 2003
General Transportation	$ 3,247,020	—	413,275	2,833,745
Boston Metropolitan District	28,151	—	2,641	25,510
Revenue	600,000	727,675	—	1,327,675
	$ 3,875,171	727,675	415,916	4,186,930

(Continued)

(Dollars in thousands)

The following funds included in restricted assets at June 30, 2003 are in connection with the Authority's revenue bond trust agreements:

		Assessment bonds	Sales tax bonds
Debt service	$	11,996	30,809
Debt service reserve		46,044	34,247
	$	58,040	65,056

The minimum required balances in the debt service reserve funds at June 30, 2003 were $45,099 for the assessment bonds and $34,139 for the sales tax bonds. In addition, the Authority collected $818,475 in pledged revenue ($676,646 in dedicated sales tax receipts and $141,829 in local assessments). Management believes it has complied with its other material financial bond covenants.

(b) Debt Refundings

In current and prior years, the Authority defeased in-substance several General Transportation System Bonds by placing the proceeds of new bonds in an irrevocable trust fund to provide for future debt service payments on the old debt. Accordingly, the trust account asset and the liability for the defeased bonds are not included in the accompanying financial statements. On June 30, 2003, $663,545 of these bonds, considered defeased in-substance, are still outstanding.

Specifically, during fiscal 2003, the Authority refunded a portion of the 1992 Series B GTS Bonds with the proceeds of the Senior Sales Tax Bonds, 2003 Series A. The refunding qualified as an "in-substance defeasance." The difference in cash flows between the old and new bonds was approximately $6,282. In addition, the Authority will receive $17,600 from swaption premiums through August 2020, making the net cash flow savings $11,278. The net present value of these savings or economic gain is $9,835. The accounting loss of $26,493 has been deferred and is presented as a reduction in the amount of outstanding debt and will be amortized over the life of the old bonds.

Additionally, the Authority refunded a portion of the 1993 Series A GTS bonds with the proceeds from the Senior Sales Tax Bonds, 2003 Series B. The refunding qualified as an "in-substance defeasance." The difference in net cash flows between the old and new bonds was $1,180. The net present value or economic loss on the refunding is $616. The accounting loss of $12,500 has been presented as a reduction in the amount of outstanding debt and will be amortized over the life of the old bonds.

(c) Certificates of Participation

Outstanding Certificates of Participation (COPs) of the Authority totaled $3,410 at June 30, 2003. Under the Forward Funding legislation effective July 1, 2000, these COP payments are not reimbursable from the Commonwealth. However, the Commonwealth will continue to guarantee the debt until it is repaid.

(Dollars in thousands)

A rollforward of the COPs for the year ended June 30, 2003 is as follows:

Outstanding – June 30, 2002	$	4,550
Payments		(1,140)
Outstanding – June 30, 2003	$	3,410

The remaining COPs outstanding bear interest at rates ranging from 7.3% to 7.8% and mature as follows:

Fiscal years:		Principal		Interest
2004	$	1,140		264
2005		1,135		176
2006		1,135		88
		3,410	$	528
Less current maturities		1,140		
Total long-term COPs payable	$	2,270		

The remaining outstanding principal balance of COPs that were defeased in-substance in prior years is $9,075 at June 30, 2003.

(d) Derivative Investments

The Authority has entered into interest rate swaps and swaptions (referred to herein collectively as Swaps) in order to lower its cost of capital, protect against rising interest rates, lock in interest rate savings, realize refinancing savings according to schedules that suit the Authority's needs, and to provide the Authority with a stable and predictable cost of fuel. When the Authority has entered into Swaps, the Authority has done so in order to: (1) provide lower cost fixed rate financing for its capital needs through synthetic fixed rate structures; (2) lock in long-term fixed rate returns on invested assets in its required reserve funds; (3) create synthetic refinancing with cash flow savings realized as the Authority designates; or (4) create a synthetic fixed rate for the purchase of vehicular fuel for fixed periods of time rather than being exposed to unpredictable variations in fuel prices on the spot market. All premiums received by the Authority in connection with the swaps/swaptions are deferred and amortized into income over the life of the swap/swaption. Should a swap/swaption be terminated, any unamortized premiums are recognized as income in the period the termination occurs.

(Dollars in thousands)

Summary of Swap Transactions by Category

Synthetic Fixed Rate Swap Transactions

Date of execution	Notional amount	Termination date	Associated bonds	Fixed payable swap rate	Variable receivable swap rate	Lump-sum payment from counterparty	Counterparty credit rating at June 30, 2003	Fair value at June 30, 2003
June 2000	$ 188,000	2005	GTS Series 2000 VRDO	4.9284%	BMA	N/A	A2/A	$ (16,416)
December 2001	87,805	2022	Senior Sales Tax Series 2003 B	5.20%	BMA	$ 4,338 (August 2006)	Aaa/AAA	(12,621)

Swap Payments and Associated Debt. As of June 30, 2003, debt service requirements of the GTS Series 2000 VRDO (2000 Bonds) bonds and net swap payments, applying the fixed rate on the swap of 4.9284% and assuming the BMA rate is 0.98% and the variable rate on the 2000 Bonds is 0.95% through the term of the swap, were as follows. As rates vary, variable rate interest rate payments on the 2000 Bonds and net swap payments will vary.

Fiscal year ending June 30	2000 Bonds principal	2000 Bonds interest	Interest rate swap, net	Total
2004	$ —	1,786	7,423	9,209
2005	—	1,786	7,423	9,209
2006*	—	297	1,237	1,534

* Through September 1, 2005.

(Dollars in thousands)

As of June 30, 2003, debt service requirements of the 2003 B-1 and 2003 B-2 hedged bonds and net swap payments, applying the fixed rate on the swap of 5.2% and assuming the BMA rate is 0.98% and the variable rate on the 2003 B-1 bonds is 1% and 2003 B-2 bonds is 1.10% through the term of the swap, were as follows. As rates vary, variable rate interest rate payments on the 2003 bonds and net swap payments will vary.

Fiscal year ending June 30	2003 B Bonds principal	2003 B Bonds interest	Interest rate swap, net	Total
2004	$ —	919	3,705	4,624
2005	—	919	3,705	4,624
2006	—	919	3,705	4,624
2007	—	919	3,705	4,624
2008	—	919	3,705	4,624
2009 – 2013	5,995	4,594	18,527	29,116
2014 – 2018	35,960	3,578	14,429	53,967
2019 – 2022	45,850	1,383	5,577	52,810

Swaptions for Forward Refundings

Date of execution of swaption	Notional amount	Lump-sum payment from counterparty	Counterparty option exercise date	Term of swap	Associated bonds	Fixed payable swap rate	Variable receivable swap rate	Counterparty credit rating at June 30, 2003	Fair value at June 30, 2003
July 2001	$ 188,000	$ 12,230 (August 2005)	Each March and September from September 2005 through and including March 2010	2030	GTS Series 2000 VRDO	5.000%	67% of one-month LIBOR	Aa2/AA+	$ (22,796)
December 2001	79,645	4,140 (August 2005)	Each March and September from 2009 through and including 2011	2030	GTS Bonds, 1999 Series A maturing 2026 and 2030	5.610%	BMA	Aaa/AAA	(6,087)
January 2003	123,170	10,833 aggregate (payable in annual installments from 2003 to 2020)	Each March and September from 2005 through and including 2010	2025	GTS Bonds, 1995 Series B maturing 2013 through 2025	5.093%	BMA	Aa2/AA+	(8,061)
January 2003	96,085	6,728 aggregate (payable in installments from 2003 to 2020)	Each March and September from 2006 through and including 2011	2026	GTS Bonds, 1996 Series A maturing 2020 through 2026	5.037%	BMA	Aa2/AA+	(5,400)

These four swaptions are generally exercisable from September 2005 through March 2011.

(Dollars in thousands)

Asset-Side Swaption for Reserve Investment

Date of execution of swaption	Notional amount	Lump-sum payment from counterparty	Counterparty option exercise date	Term of swap	Associated asset	Fixed payable swap rate	Variable receivable swap rate	Counterparty credit rating at June 30, 2003	Fair value at June 30, 2003
December 2000	$ 49,123	$ 1,265 (July 2001)	January 1st and July 1st from July 2010 through July 2030	2030	Debt Service Reserve Fund for 2000 Assessment and Sales Tax Bonds	5.60%	BMA	Aa2/AA+	$ (2,185)

Fuel Hedge

Date	Commodity type	Initial notional amount	Counterparty (ratings – Moody's/S&P)	Price	Trade date	Termination date	Price source
11/01/01	Bus Fuel – LS Jet/Kero	12,200,000 gallons	Aa1/AA	$ 0.6775 per gallon	10/29/01	07/31/03	PLATT's Oilgram Price Report. LS Jet/Kero, Barge.
11/01/01	Rail Fuel – New York Harbor No. 2	13,140,000 gallons	Aa1/AA	0.6390 per gallon	10/29/01	06/30/03	PLATT's Oilgram Price Report. No. 2, Barge.
10/01/03	Bus Fuel – Jet Fuel	3,944,887 gallons	Aa1/AA	0.7925 per gallon	09/12/03	06/30/04	PLATT's Oilgram Price Report. LS Jet/Kero, Barge.
10/01/03	Rail Fuel – Heating Oil	6,318,000 gallons	Aa1/AA	0.7500 per gallon	09/12/03	06/30/04	PLATT's Oilgram Price Report. No. 2, Barge.

Risk Disclosure

Credit Risk. Because all of the Authority's Swaps rely upon the performance of the third parties who serve as swap counterparties, the Authority is exposed to credit risk, or the risk that a swap counterparty fails to perform according to its contractual obligations. The appropriate measurement of this risk at the reporting date is the fair value of the swaps, as shown in the columns labeled Fair Value in the tables above. All Fair Values have been calculated using the Mark to Market or Par Value Method. To mitigate credit risk, the Authority maintains strict credit standards for swap counterparties. All swap counterparties for longer term swaps are rated in the double-A category by both Moody's and Standard & Poors. On the Authority's shorter term swap that expires in September 2005, the counterparty is rated in the single-A category by both rating agencies. To further mitigate credit risk, the Authority's swap documents require counterparties to post collateral for the Authority's benefit if they are downgraded below a designated threshold.

Basis Risk. The Authority is exposed to basis risk if the relationship between the floating index the Authority receives on the swaps (BMA or 67% of LIBOR) falls short of the variable rate on the associated bonds. Should this occur, the expected savings may not be realized. As of June 30, 2003, the BMA rate was 0.98%, while the variable rate on the 2000 Bonds was 0.95% and the variable rates on the 2003 B-1 hedged bonds and 2003 B-2 hedged bonds were 1% and 1.10%, respectively. The Authority faces similar basis risk on its fuel swaps, where the fuel price index used on the swaps may not fully offset the actual cost of the Authority's fuel purchases.

Termination Risk. The Authority's swap agreements do not contain any out-of-the-ordinary termination events that would expose it to significant termination risk. In keeping with market standards the authority or the counterparty may terminate each swap if the other party fails to perform under the terms of the contract. In addition, the swap documents allow either party to terminate in the event of a significant loss of creditworthiness. The Authority views such events to be remote at this time. If at the time of the termination a swap has a negative value, the Authority would be liable to the counterparty for a payment equal to the fair value of such swap.

Rollover Risk. With the exception of the swap on the 2000 bonds, the Authority is not exposed to rollover risk. Because the swap for the 2000 bonds terminates prior to the maturity of such bonds, the Authority is exposed to rollover risk. Upon the termination of the swap, the Authority will no longer realize the synthetic rate on the 2000 bonds and will be exposed to floating rate risk on the underlying bonds if no new hedge is put in place.

Market Access Risk and Potential Basis Risk. In the case of the swaptions, other than one issued in July 2001, if any option is exercised and refunding bonds are not issued, the bonds expected to be refunded would not be refunded and the Authority would make net swap payments as required by the terms of each contract, as set forth above. There is no market access risk for the July 2001 swaption. If any of the options are exercised (and assuming the variable rate bonds are issued in the case of the three synthetic refundings), the actual savings ultimately recognized by the transaction will be affected by the relationship between the interest rate terms of the variable rate bonds versus the variable payment on the swap.

(6) Deferred Revenue

The deferred revenue amount relates principally to a settlement received from a supplier of green line cars. The deferral will be amortized over a remaining life of 8 years.

(7) Retirement Plans

The Authority provides retirement benefits to employees through four defined benefit retirement plans and one defined contribution plan: The MBTA Retirement Plan, the MBTA Police Association Plan, the MBTA Deferred Compensation Plan, the MBTA Qualified Deferred Compensation Plan, and the MBTA Deferred Compensation Savings Plan. The Authority also provides supplemental pension benefits after retirement.

The MBTA Retirement Plan, a single-employer plan, covers all employees except the MBTA police, who are covered separately, and certain executives who elect coverage under an alternate plan. This retirement plan and the MBTA Police Association Plan provide retirement, disability, and death benefits. Both plans issue a publicly available financial report that includes financial statements and required supplementary information for that plan. The MBTA Retirement Plan report may be obtained by writing to One Washington Mall, Boston, Massachusetts 02108, or by calling (617) 316-3800. The MBTA Police

(Dollars in thousands)

Association Plan may be obtained by writing to P.O. Box 6807, Boston, MA 02102 or by calling 1-800-281-0063.

The MBTA Deferred Compensation Plan provides supplemental pension benefits for certain executive and Local 453 (collective bargaining unit) employees after retirement. Employees may participate in both the MBTA Retirement Plan and the MBTA Deferred Compensation Plan.

The Authority created a new Qualified Deferred Compensation Plan effective January 1, 2001. The Plan is designed to supplement the Authority's Retirement Fund (Main Fund). Covered employees include all actively employed nonunion employees who are participating in the Authority Main Fund or the Police Association Retirement Plan. Employees are eligible after five years with the Authority, if they have reached age 30 and are paid as part of the executive payroll. The Plan currently provides benefits for 147 retirees. An actuarial valuation was performed on this plan; however, the cost of this plan to the Authority for fiscal 2003 was minimal and no contributions were made to this Plan in fiscal 2003.

(a) Funding Policy and Annual Pension Cost

The board of trustees of each plan establishes the contribution requirements; however, the Authority may amend these requirements. The MBTA Retirement Plan requires members to contribute 4% with the Authority currently paying an amount equal to approximately 6.23% of total payroll. The actuarial required contribution rate for the Authority was 5.92%. The contribution requirements for the Police Association Plan were 11.98% for the Authority and 4.12% for employees. Both were determined in accordance with actuarial valuations. Actual contributions made to this Plan in 2003 were in accordance with these contribution requirements.

Deferred Compensation contributions are made on a "pay-as-you-go" basis. The Authority's annual pension cost for the current year and related information for each plan is as follows:

Pension	MBTA Retirement Plan	MBTA Police Association Plan	Deferred Compensation Plan
Annual pension cost – Authority	$ 18,618	1,303	4,364
Contributions made – Authority	21,914	878	3,840
Actuarial valuation date/update	06/30/03	06/30/03	07/01/02
Actuarial cost method	Entry age	Entry age	Entry age
Amortization method	Level dollar	Level dollar	Level dollar
Amortization period remaining	33 years	12 years	33 years
Asset valuation method average	5-year moving	4-year smoothing	None
Actuarial assumptions:			
Interest rate	7.25%	7.00%	8.00%
Projected salary increases	5.00%	5.50%	5.00%

(Continued)

(Dollars in thousands)

Changes in the net pension assets (obligation) for these plans follows:

Pension		MBTA Retirement Plan	MBTA Police Association Plan	Deferred Compensation Plan
Net pension asset (obligation) – beginning of year	$	3,847	418	(5,210)
Annual pension cost		(18,618)	(1,303)	(4,364)
Contributions		21,914	878	3,840
Net pension asset (obligation) – end of year	$	7,143	(7)	(5,734)

(b) Three-Year Trend Information

	Year ending		Annual pension cost (APC)	Percentage of APC contributed		Net pension asset (obligation)
MBTA Retirement Plan						
	06/30/01	$	22,051	101%	$	992
	06/30/02		18,683	115%		3,847
	06/30/03		18,618	118%		7,143
MBTA Police Association Plan						
	06/30/01		837	114%		460
	06/30/02		1,014	96%		418
	06/30/03		1,303	67%		(7)
MBTA Deferred Compensation Plan						
	06/30/01		2,525	135%		(4,811)
	06/30/02		4,227	88%		(5,313)
	06/30/03		4,364	75%		(5,734)

(c) The MBTA Deferred Compensation Savings Plan

The Authority provides a defined contribution retirement plan for nonunion and grandfathered union management not participating in the MBTA Retirement Plan. Authority employee trustees administer the Plan and recommend benefit amendments which require approval from the Authority’s General Manager. The Plan requires members to contribute 4% of total covered payroll with the Authority contributing 8%. The Plan has approximately 290 members at June 30, 2003, and the cost of the Plan to the Authority was $848 for fiscal year 2003. Member contributions vest to Plan members immediately, while contributions made by the Authority vest to Plan members as follows: 50% after three years; 75% after four years; and 100% after five years of credited service.

(Continued)

(Dollars in thousands)

(d) Other Post-Employment Benefits

The Authority pays 100% of health insurance to retired employees eligible under the Deferred Compensation Savings Plan, MBTA Retirement Plan and MBTA Police Association Plan. These benefits are expensed on a current (pay-as-you-go) basis. There were approximately 6,118 retired employees eligible to receive post-retirement benefits at June 30, 2003. The cost of these benefits was approximately $36,361 in fiscal year 2003.

(8) Lease Obligations

(a) Lease-in/Lease-out

In prior years the Authority entered into various lease/sublease financing arrangements for heavy rail, commuter rail cars and buildings. These agreements provide for the lease of the property and equipment owned by the Authority to a financial party lessee and the sublease of such equipment back to the Authority for various periods. At the time of these transactions, the Authority deposited funds with a financial institution sufficient to meet all of its payment obligations under the terms of the lease and acquired United States Treasury Strips which would mature to an amount sufficient to satisfy each agreement's purchase option provided for in the leases. Because these transactions do not meet the criteria for an "in-substance defeasance," the funds on deposit, United States Treasury Strips, and the related lease liability have been included in the accompanying financial statements.

(b) Cross-Border Leases

In prior years, the Authority entered into several cross-border leases related to the financing of certain buses and heavy rail cars. The leases provide for the Authority to sell and lease back the equipment over a period of years. Additionally, there is a purchase option at the end of the lease terms. The Authority has deposited funds with financial institutions sufficient to meet all of its payment obligations under the terms of the leases. Because the transaction does not meet the criteria for an "in-substance defeasance," funds on deposit and the related lease liability have been included in the accompanying financial statements.

Transportation property and facilities under capital leases is summarized as follows and is included in capital assets (see note 9) at June 30, 2003:

Ways and structures	$	297,802
Rail cars		293,245
Buses		35,783
		626,830
Less accumulated depreciation		(188,845)
Net transportation property in service under capital lease	$	437,985

(Dollars in thousands)

The following is a schedule by year of future minimum lease payments under the lease-in/lease-out and cross-border lease arrangements together with the present value of net minimum lease payments as of June 30, 2003:

Fiscal years:		
2004	$	48,479
2005		41,401
2006		42,448
2007		47,907
2008		53,017
2009 – 2013		310,258
2014 – 2018		270,694
		814,204
Less amount representing interest		(261,382)
Present value of net minimum lease payments		552,822
Less current principal maturities		(17,164)
Obligations under capital leases	$	535,658

The long-term liability for these leases changed as follows:

Outstanding – June 30, 2002	$	548,473
Net change in obligation		4,349
Outstanding – June 30, 2003	$	552,822

(c) Operating Leases

The Authority has entered into several sale-leaseback agreements with major financial institutions (the lessors) covering equipment and rolling stock. The leases mature through 2013. At the end of the lease terms, the Authority may purchase the vehicles at prices equal to the lesser of a stated percentage (40% – 70%) of the lessors' original purchase price or residual fair market value, as defined.

The leases have been accounted for as operating leases. Prior to July 1, 2000, these lease payments were eligible for 90% reimbursement from the Commonwealth. After July 1, 2000, the Authority is no longer entitled to and has not received any of this assistance from the Commonwealth. However, these leases will continue to be guaranteed by the Commonwealth.

(Dollars in thousands)

Future minimum operating lease payments are as follows:

Fiscal years:		
2004	$	13,875
2005		12,864
2006		13,130
2007		13,499
2008		13,471
2009 – 2013		57,283
	$	124,122

(9) Capital Assets

Capital assets at June 30, 2003 are as follows:

		Beginning balance	Increases	Decreases	Ending balance
Capital assets not being depreciated:					
Land	$	269,591	24	—	269,615
Construction work in progress		869,331	425,667	276,474	1,018,524
Total capital assets not being depreciated		1,138,922	425,691	276,474	1,288,139
Other capital assets:					
Ways and structures		6,210,826	197,590	—	6,408,416
Buildings and equipment		1,744,737	78,884	8,871	1,814,750
Total other capital assets at historical cost		7,955,563	276,474	8,871	8,223,166
Less accumulated depreciation for:					
Ways and structures		1,798,086	131,253	—	1,929,339
Buildings and equipment		798,729	91,984	8,871	881,842
Total accumulated depreciation		2,596,815	223,237	8,871	2,811,181
Other capital assets, net		5,358,748	53,237	—	5,411,985
Capital assets, net	$	6,497,670	478,928	276,474	6,700,124

(10) Risk Management

The Authority is exposed to various risks of loss related to general liability, property and casualty, worker’s compensation, unemployment, and employee health insurance claims.

(Dollars in thousands)

Buildings are fully insured to the extent that losses exceed $100 per incident. The Authority is self-insured for workers' compensation, unemployment claims, vehicle damage and loss, and health insurance. The Authority pays 85% of all health premiums up to a maximum of $200 per individual for all Blue Cross plans and $100 per individual for Harvard and Tufts plans. Stop loss insurance is carried on health insurance claims in excess of these amounts per individual per illness.

The Authority self-funds a $7,500 per occurrence deductible for general liability. The Authority has a program of excess public liability insurance to provide for $67,500 of layered coverage on a per-accident basis. In the opinion of the General Counsel to the Authority, payments of claims by the Authority for amounts not covered by insurance, in the aggregate, are not expected to have a material adverse effect on the Authority's financial position.

During fiscal 2003, expenditures for claims and judgments, excluding worker's compensation, and health and life, were $15,206. Expenditures for claims related to worker's compensation were $7,446 and expenditures for the self-insured health plans were $83,297.

GASB Statement No. 10 requires that liabilities for self-insured claims be reported if it is probable that a loss has been incurred and the amount can be reasonably estimated. These losses include an estimate of claims that have been incurred but not reported. The Authority reserves such liabilities as accrued expenses as of June 30, 2003 and 2002. Changes in the self-insurance liabilities in fiscal 2003 and 2002 were as follows:

		2003	2002
Liability, beginning of year	$	86,644	69,476
Provisions for claims		103,949	114,651
Payments		(101,756)	(97,483)
Liability, end of year	$	88,837	86,644

The liability at year-end includes $39,875 for worker's compensation, $12,000 for health claims, and $36,962 for injuries and damages.

(Dollars in thousands)

(11) Commitments and Contingencies

(a) Capital Investment Program

The Authority's capital investment continuing program for mass transportation development has projects in service and in various stages of approval, planning, and implementation. The following table shows, as of June 30, 2003, capital project costs approved, expenditures against these projects, and estimated costs to complete these projects, as well as the major funding sources:

Funding source		Approved project costs	Expenditures through June 30, 2003	Unexpended costs
Federal grants	$	3,706,440	3,537,930	168,510
State and local sources		433,931	359,229	74,702
Authority bonds		5,422,222	4,393,543	1,028,679
Total	$	9,562,593	8,290,702	1,271,891

The Authority is presently authorized by law to issue bonds for capital purposes other than refunding, to an amount not exceeding $5,256,300 outstanding at any time. Such bonds outstanding as of June 30, 2003, amounted to $2,800,000.

The terms of the federal grant contracts require the Authority to, in part, utilize the equipment and facilities for the purposes specified in the grant agreement, maintain these items in operation for a specified time period, which normally approximates the useful life of the equipment, and to comply with the Equal Employment Opportunity and Affirmative Action programs required by the Transportation Equity Act for the 21st Century. Failure to comply with these terms may jeopardize future funding and require the Authority to refund a portion of these grants to the Federal Department of Transportation. In management's opinion, no events have occurred that would result in the termination of these grants or require the refund of a significant amount of funds received under these grants.

Other cases and claims include disputes with contractors and others arising out of the Authority's capital construction program. In the opinion of the General Counsel to the Authority, amounts reasonably expected to be paid by the Authority would be within the scope of grant funds and other funds available to the Authority for the respective projects.

The Authority has entered into several long-term contracts to purchase coaches, locomotives, buses, rapid transit cars and other transportation equipment. Unpaid amounts under these contracts total approximately $662,319 at June 30, 2003.

(b) Legal and Other

The Authority is involved in numerous lawsuits, claims, and grievances arising in the normal course of business, including claims for personal injury and personnel practices, property damage, and disputes over eminent domain proceedings. In the opinion of the General Counsel to the Authority, payment of claims by the Authority, for amounts not covered by insurance, in the aggregate, are not expected to have a material adverse effect on the Authority's financial position.

During 2003, a wrongful death claim was made against the Authority and AMTRAK, the operator of the Authority's commuter rail system at the time of the incident, for both compensatory and punitive damages, in connection with an incident on a commuter rail train. As this claim was recently made, General Counsel does not believe it is possible to predict the impact of this claim, if any, on the Authority's financial statements.

The Authority participates in a number of federally assisted grant programs. These programs are subject to financial and compliance audits by the grantors or their representatives. In the opinion of Authority Management, liabilities resulting from such disallowed expenditures, if any, will not be material to the accompanying financial statements.

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY

Required Supplementary Information

June 30, 2003

(Unaudited)

(Dollars in thousands)

MBTA Retirement Plan

Valuation date	Actuarial value of assets (a)	Actuarial accrued liability (AAL) (b)	(Funded) unfunded AAL (UAAL) (b-a)	Funded ratio (a/b)	Covered payroll (c)	UAAL as a percentage of covered payroll ((b-a)/c)
Year ended December 31:						
1996	$ 1,138,225	1,237,705	99,480	91.96	$ 257,141	38.69
1997	1,254,695	1,268,938	14,243	98.88	254,723	5.59
1998	1,389,496	1,410,753	21,257	98.49	274,661	7.74
1999	1,578,162	1,477,993	(100,169)	106.78	284,677	(35.19)
2000	1,757,327	1,533,284	(224,043)	114.61	301,132	(74.40)
2001	1,889,500	1,626,998	(262,502)	116.13	316,403	(82.96)

Deferred Compensation Plan

The Deferred Compensation Plan is not currently funded; however, management intends to start funding the plan. As a result, the normal Schedule of Funding Progress would show no provision having been made for the cost of this plan.

In the table below, Column (b) which normally would have contained the Plan's assets, contains instead the Net Pension Obligation (amounts previously charged against operations but not yet contributed to the Plan). This alternative presentation shows how much of the cost of the program has been charged against operations in prior years.

Valuation date	Actuarial accrued liability (a)	Net pension obligation (b)	Unrecognized actuarial accrued liability (c) (a)-(b)	Recognized ratio (d) (b)/(a)	Unrecognized ratio (e) (c)/(a)	Covered payroll (f)
07/01/97	$ 29,827	7,562	22,265	25.4	74.6	$ 27,779
07/01/98	29,881	7,029	22,852	23.5	76.5	31,299
07/01/99	29,225	6,413	22,812	21.9	78.1	31,299
07/01/00	28,357	5,688	22,669	20.1	79.9	34,507
07/01/01	40,509	4,708	35,801	11.6	88.4	34,590
07/01/02	41,094	5,211	35,883	12.7	87.3	36,319

(Continued)

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY

Required Supplementary Information

June 30, 2003

(Unaudited)

(Dollars in thousands)

Police Association Retirement Plan

Valuation date		Actuarial value of assets (a)	Actuarial accrued liability (b)	(Funded) unfunded actuarial accrued liability (c) (b)-(a)	(Unfunded) funded ratio (d) (a)/(b)		Covered payroll (e)	UAAL as a percentage of covered payroll (c)/(e)
12/31/96	$	17,730	17,851	121	99.3%	$	7,517	1.6%
12/31/97		21,676	19,527	(2,149)	111.0		7,186	(29.9)
12/31/98		25,440	23,596	(1,844)	107.8		7,534	(24.5)
12/31/99		30,078	22,511	(7,567)	133.6		8,391	(90.2)
12/31/00		28,962	31,971	3,009	90.6		10,351	29.1
12/31/01		31,282	35,447	4,165	88.3		10,814	38.5