

---

**RETIREMENT PLAN FOR  
CHICAGO TRANSIT AUTHORITY EMPLOYEES**

**ACTUARIAL VALUATION REPORT**

**for the Year Beginning January 1, 2003**



**Gabriel, Roeder, Smith & Company**  
*Actuaries and Consultants*

---



**GABRIEL, ROEDER, SMITH & COMPANY**  
CONSULTANTS & ACTUARIES

---

20 North Clark Street • Suite 1100 • Chicago, Illinois 60602 • 312-456-9800 • Fax 312-456-9801

July 17, 2003

Mr. John Kallianis  
Executive Director  
Chicago Transit Authority  
Retirement Allowance Committee  
10 S. Riverside Plaza – Suite 1625  
Chicago, IL 60606

**Subject: Actuarial Valuation Report for the Year Beginning January 1, 2003**

Dear John:

At your request, we have performed an actuarial valuation for the Retirement Plan for Chicago Transit Authority Employees (the “Plan”) as of January 1, 2003. This valuation has been performed to measure the funding status of the Plan and determine the contribution levels for 2003. In addition, it includes disclosure information required under GASB Statement No. 25 and Statement No. 27. These actuarial valuations of the Fund are performed annually.

This valuation is based upon:

**Data relative to the members of the Plan** - Data for active members and persons receiving benefits from the Plan was provided by the Plan’s staff. We have tested this data for reasonableness.

**Asset Values** - The asset amounts of the Plan were provided by the Plan’s auditors. The results for GASB Statement No. 25 and Statement No. 27 use an actuarial value of assets.

**Actuarial Method** - The actuarial method utilized by the Plan is the Entry-Age Actuarial Cost Method. The objective of this method is to amortize the costs of Plan benefits over the entire career of each member as a level of percentage of compensation. Any Unfunded Actuarial Accrued Liability (UAAL), under this method is separately financed. All actuarial gains and losses under this method are reflected in the UAAL.

**Actuarial Assumptions** - The actuarial assumptions have remained the same since last year except for those used to value the reimbursement of healthcare costs. They are set forth in Appendix 4: Actuarial Assumptions and Methods of the valuation report.

The funding objective is to provide employer and employee contributions sufficient to provide the benefits of the Fund when due.

The valuation results set forth in this report are based on the data and actuarial techniques described above, and upon the provision of the Plan as of the valuation date. Based on these items, we certify these results to be true and correct.

Respectfully yours,

Michael R. Kivi, F.S.A.  
Senior Consultant

Alex Rivera, A.S.A.  
Senior Consultant

# TABLE OF CONTENTS

---

<b>Section</b>	<b>Pages</b>	<b>Items</b>
		Cover Letter
<b>I</b>		<b>Valuation Results</b>
	1-3	Actuarial Study of Employees' Retirement Plan
	4	Schedule A - Computed Actuarial Liability
	5	Funding Ratio Components on GASB #25 Basis
	6	Funding Ratio Components on Market Value
	7-8	Plan Experience
	9	Assets
	10	Schedule B – Reconciliation of Assets
	11	Actuarial Value of Assets
	12	Financing for Present Active and Retired Members
	13	Expected Development of Present Population
	14	Retired Life Data
	15	Asset Valuation Method
	16-21	GASB Statement No. 25
<b>II</b>	<b>22-25</b>	<b>Actuarial Assumptions and Methods</b>
<b>III</b>	<b>26-28</b>	<b>Summary of Principal Plan Provisions Recognized in the Valuation</b>
<b>IV</b>		<b>Participant Data</b>
	29	Retired Participants
	30	Terminated Vested Participants
	31	Active Member Population

# **SECTION I**

---

## **Valuation Results**

# Retirement Plan for Chicago Transit Authority Employees Actuarial Study as of January 1, 2003

---

## Introduction

In accordance with the request of the Retirement Allowance Committee, we have prepared an actuarial valuation of the Retirement Plan for Chicago Transit Authority Employees (the "Plan") as of January 1, 2003. The purposes of an actuarial valuation of a retirement plan are:

- (1) To examine the funding status of the Plan as of the valuation date, and
- (2) To develop the contribution level for the next year which would support the benefits of the Plan.

## PLAN PROVISIONS

The plan provisions valued are unchanged from the January 1, 2002 actuarial valuation.

## PARTICIPANTS

The major characteristics of the data of the members of the Plan are summarized below.

	<b>January 1,</b>	
	<b>2002</b>	<b>2003</b>
<b>Active Participants</b>		
Number	10,106	10,170
Average Age	45.3 yrs	45.2 yrs
Average Service	12.5 yrs	12.2 yrs
Average Annual Salary	\$ 47,952	\$ 49,870
<b>Retirees</b>		
Number	6,507	6,579
Average Age	65.8 yrs	66.1 yrs
Average Annual Benefit	\$ 20,151	\$ 20,441

## Retirement Plan for Chicago Transit Authority Employees Actuarial Study as of January 1, 2003 (Cont'd)

	January 1,	
	2002	2003
<b>Disabled</b>		
Number	830	834
Average Age	58.6 yrs	59.3 yrs
Average Annual Benefit	\$ 10,980	\$ 11,003
<b>Survivors</b>		
Number	720	747
Average Age	73.1 yrs	73.7 yrs
Average Annual Benefit	\$ 7,117	\$ 7,296

### FUNDING STATUS

The funding status of the Plan is measured as a ratio of the value of pension fund assets to the actuarial present value of benefits earned to date. While there are several methods by which the present value of earned benefits may be measured, we recommend the use of the AAL (Actuarial Accrued Liability) developed in accordance with Statement #25 promulgated by the Governmental Accounting Standards Board ("GASB 25").

Using this measure, the results of the valuation are as follows (\$ in millions):

<b>Funding Status - GASB #25</b>	January 1,	
	2002	2003
Actuarial Value of Assets	\$ 1,864.7	\$ 1,726.9
Actuarial Accrued Liability	2,812.2	3,026.6
Funding Ratio	66.31%	57.06%

The decrease in funded ratio is due to three main factors. Firstly, the return on market value of assets was approximately (12.72%) which generated a significant loss. Secondly, healthcare claim costs increased more than expected which generated a loss. The third reason is due to a change in the dependent contribution rate. In our January 1, 2002 valuation we assumed that the dependent contribution would reflect claims experience from 1995 to 2001. We have modified this assumption to the actual dependent contribution rates, which have remained unchanged since 1995. Healthcare trend was assumed to begin in 2004 for dependent contributions.

## Retirement Plan for Chicago Transit Authority Employees Actuarial Study as of January 1, 2003 (Cont'd)

---

### CONTRIBUTIONS

The Authority's contribution is 6% of employee compensation and the employees' contribution is 3% of compensation. The Arbitration Board ruling in August 1993 specifies that the unfunded actuarial accrued liability be funded over a 40-year period.

The chart below shows the contribution percentages specified in the collective bargaining agreement as well as contributions expected under the 40-year funding policy for plan year 2003. The chart also shows the funded status using the actuarial value of assets (\$ in thousands):

	<b>2003</b>
Normal Cost	\$ 58,924
40-Year Amortization of Unfunded Actuarial Liability	\$ 110,841
Interest	\$ 7,639
Total Contribution for 40-year Amortization	\$ 177,404
40-year Amortization Contribution Rate	34.98%
Bargaining Agreement Contribution	\$ 45,646
Bargaining Agreement Contribution Rate	9.00%
Actuarial Accrued Liability	\$ 3,026,596
Actuarial Value of Assets	\$ 1,726,937
Funded Ratio	57.06%

This chart shows that the Bargaining Agreement Contribution is not sufficient to amortize the unfunded actuarial accrued liability. The amortization component of the contribution is expected to increase more rapidly than compensation and will produce a 40-year amortization contribution rate that steadily increases over future years. This contribution rate is expected to continue to exceed the actual contribution rate of 9%. Accordingly, additional contribution shortfalls are expected to accumulate.

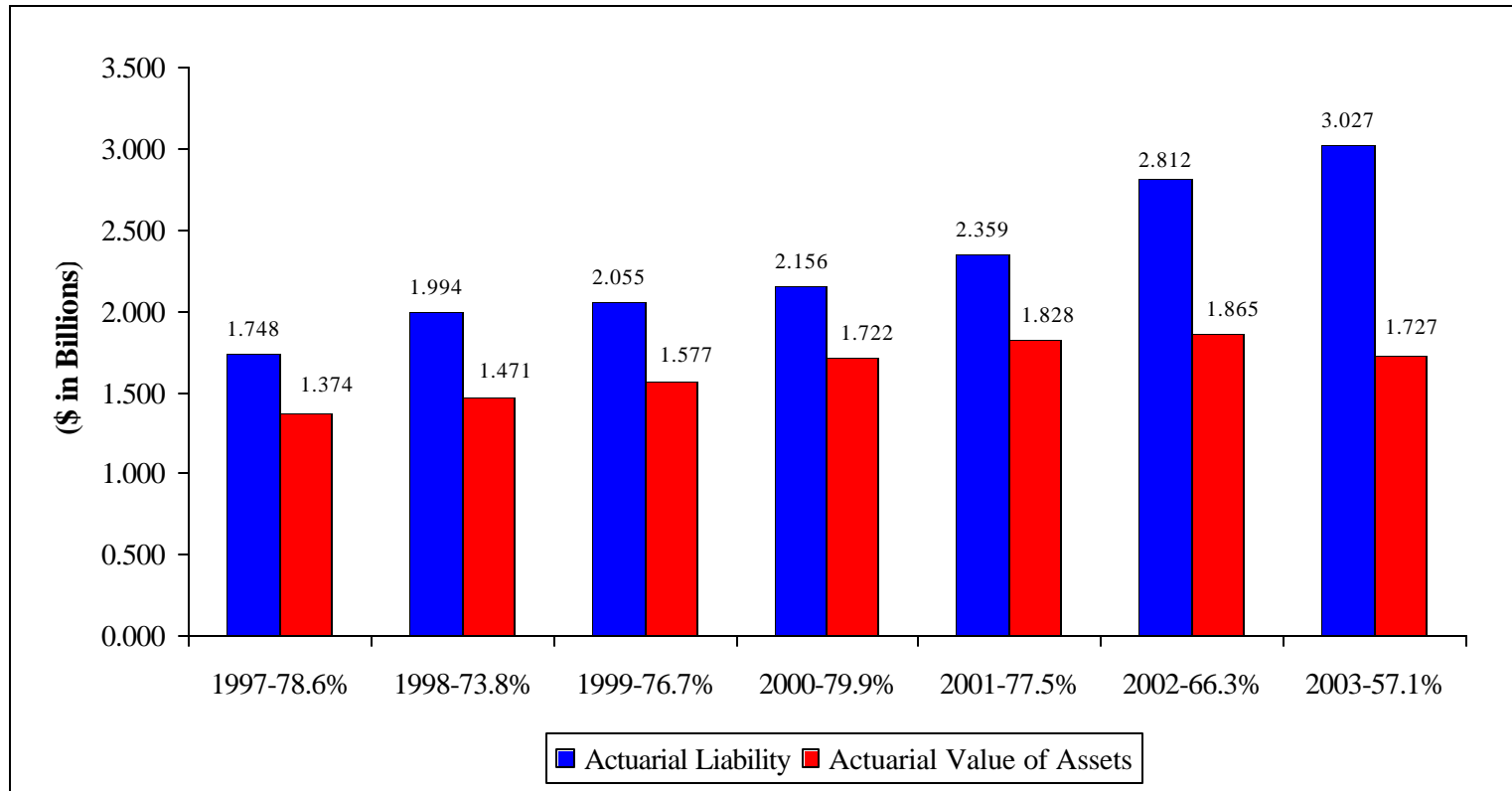


## COMPUTED ACTUARIAL LIABILITIES AS OF JANUARY 1, 2003

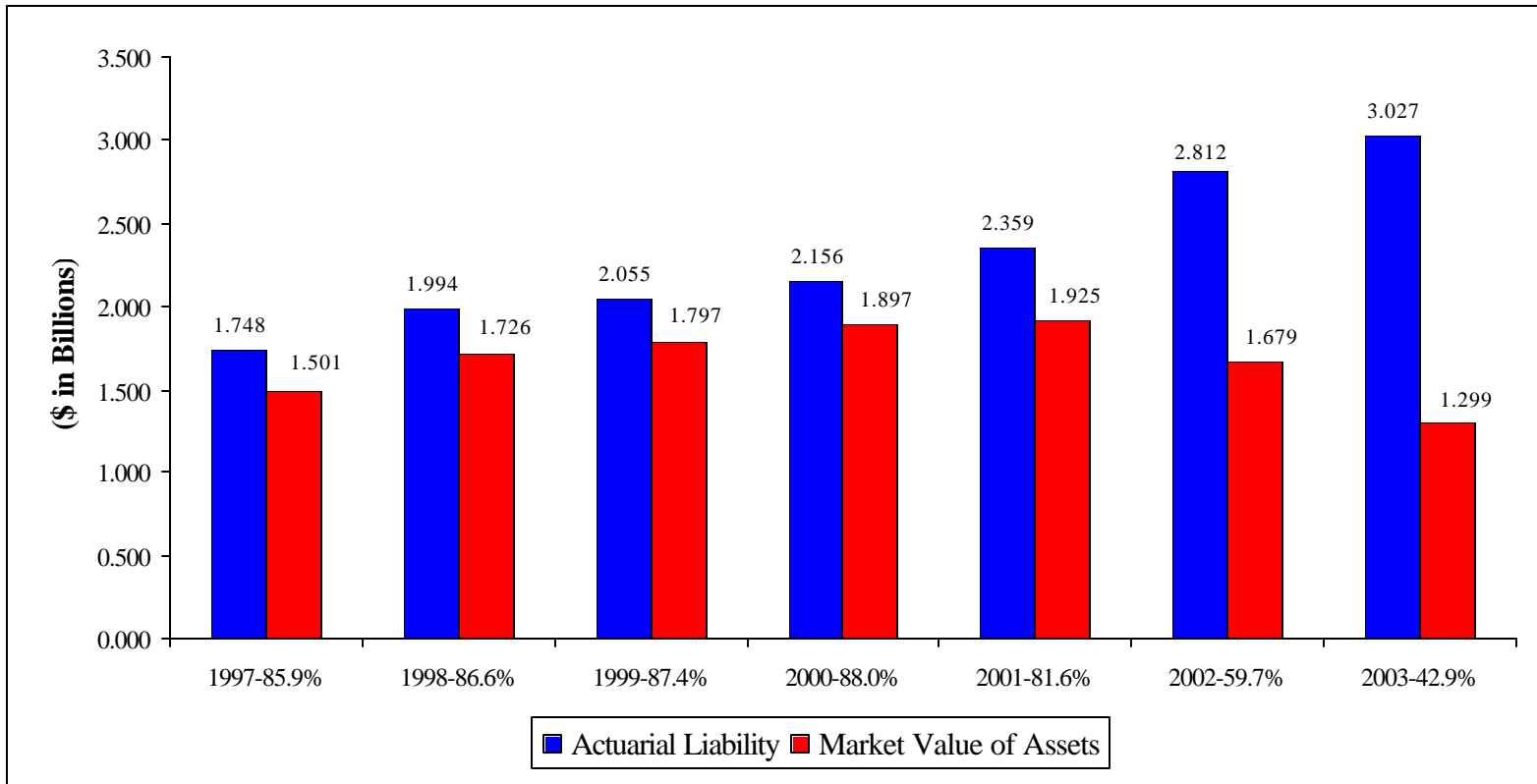
EMPLOYEE DATA	1/1/2002	1/1/2003	Expected Annual Pay	
			1/1/2002	1/1/2003
<b>Active Employees</b>				
Number of Employees	10,106	10,170	\$ 484,606,629	\$ 507,181,190
Average Age	45.3 yrs.	45.2 yrs.		
Average Past Service	12.5 yrs.	12.2 yrs.		
<b>Terminated Vesteds</b>				
Number of Employees	27	44		
	Number of Participants		Monthly Pension	
	1/1/2002	1/1/2003	1/1/2002	1/1/2003
<b>Retired Employees &amp; Survivors</b>				
Age/Service Retirements	6,507	6,579	\$ 10,925,201	\$ 11,206,787
Disability Recipients	830	834	759,450	764,700
Surviving Spouses	720	747	427,020	454,197
Total	8,057	8,160	\$ 12,111,671	\$ 12,425,684
<b>VALUATION RESULTS</b>				
(In Thousands of Dollars)				
		1/1/2002	1/1/2003	
<b>Annual Normal Cost</b>				
Age/Service Pensions		\$ 30,425	\$ 31,959	
Disability Allowance		3,179	3,352	
Pre-Retirement Death Benefits		521	559	
Healthcare Premium Reimbursement		21,682	23,054	
Total		\$ 55,807	\$ 58,924	
<b>Actuarial Accrued Liability</b>				
<b>Active Employees</b>				
Age/Service Pensions		\$ 752,018	\$ 760,947	
Disability Allowance		22,359	23,521	
Pre-Retirement Death Benefits		9,927	10,184	
Healthcare Premium Reimbursement		263,674	371,037	
Total		\$ 1,047,978	\$ 1,165,689	
<b>Terminated Vested Employees</b>				
		\$ 997	\$ 1,970	
<b>Retired Employees and Survivors</b>				
Age/Service Pensions		\$ 1,176,885	\$ 1,206,133	
Disability Allowance		68,087	68,549	
Post-Retirement Death Benefits		14,057	14,420	
Healthcare Premium Reimbursement		480,475	569,836	
Total		\$ 1,739,504	\$ 1,858,938	
<b>Liability Due to Excess Claims<sup>1</sup></b>		\$ 23,715	\$ 0	
<b>Total Actuarial Accrued Liability</b>		\$ 2,812,194	\$ 3,026,597	
<b>Actuarial Value of Assets</b>		1,864,727	1,726,937	
<b>Unfunded Actuarial Accrued Liability</b>		\$ 947,467	\$ 1,299,660	

<sup>1</sup> Assumes Plan will make payments of \$42,318,789 during plan year 2003 for reimbursement of actual healthcare claims in excess of premiums paid from 1995 through 2002. The actuarial liability of \$23,715,000 as of 1/1/2002 is the discounted value of assumed payments of \$26,988,000 in plan year 2003 for reimbursement of actual healthcare claims in excess of premiums paid from 1995 through 2001.

**RETIREMENT PLAN FOR CHICAGO TRANSIT AUTHORITY EMPLOYEES  
COMPONENTS OF FUNDING RATIO  
ON GASB #25 BASIS**



**RETIREMENT PLAN FOR CHICAGO TRANSIT AUTHORITY EMPLOYEES  
COMPONENTS OF FUNDING RATIO  
BASED ON MARKET VALUE**



## Retirement Plan for Chicago Transit Authority Employees Actuarial Study as of January 1, 2003 (Cont'd)

---

### PLAN EXPERIENCE

The unfunded actuarial accrued liability is expected to increase each year by the amount of the previous year's normal cost plus interest on both the normal cost and the unfunded actuarial accrued liability. Annual contributions are then applied to meet the normal cost plus the amortization of the unfunded actuarial accrued liability. The actual unfunded actuarial accrued liability will differ from the expected amount each year due to variations between actuarial assumptions and actual experience. Plan amendments and revisions to the assumptions will result in additional changes in the Plan's unfunded actuarial accrued liability.

The unfunded actuarial accrued liability at January 1, 2002 was \$947,466,742. Adding normal cost and interest to the end of the year at the assumed rate of 9% and subtracting the contributions of \$43,337,387 made in 2002 with interest thereon, generates an expected unfunded actuarial accrued liability as of January 1, 2003 of \$1,045,756,975. As shown in the third column of Schedule A, the actual unfunded actuarial accrued liability as of January 1, 2003 was \$1,299,659,422. The actual unfunded is greater than expected, so plan experience during 2002 produced an "actuarial loss" of \$253,902,447. This loss is composed of the following elements:

### SOURCES OF GAIN (LOSS)

Actuarial assumptions		
Economic		
Investment results	\$ (122,040,972)	
Pay increases	<u>21,791,630</u>	
		\$(100,249,342)
Demographic		
Retirement	\$ (9,801,665)	
Disability	2,279,217	
Withdrawal	(4,387,086)	
New entrants and rehires	(3,545,621)	
Mortality	<u>(9,760,784)</u>	
		\$ (25,215,939)
Data Corrections and other sources		\$ (22,942,594)
Healthcare Claims Experience		\$ (34,533,730)
Dependent Premium Update		\$ (70,960,842)
Total		\$(253,902,447)

## **Retirement Plan for Chicago Transit Authority Employees Actuarial Study as of January 1, 2003 (Cont'd)**

---

### **PLAN EXPERIENCE (Cont'd)**

A loss occurred because the rate of investment return during 2002, based on the actuarial value of assets, was 2.3% and was less than the assumed rate of 9%. The actuarial value of assets at January 1, 2003 was approximately \$122,040,972 less than would have been expected if the rate of return on the actuarial value of assets had been 9%.

A gain was generated by pay increases in 2002. The total payroll increased more than expected, but for older members with higher service, pay increased less than expected. The older members with higher service make up a greater portion of the total liability, so their pay changes have a greater effect than the changes of younger members with less service. If pay had increased for each participant at the assumed rate of 5.5%, the actuarial accrued liability at January 1, 2003 would have been higher by approximately \$21,791,630.

Retirement experience generated a loss of \$9,801,665. This loss resulted from a higher number of employees retiring than expected and greater actual benefits compared to expected benefits.

The disability assumption produced a small gain of \$2,279,217 in 2002. This gain occurred because the number of employees who became disabled in 2002 was less than the number that was expected.

The withdrawal assumption produced a loss of \$4,387,086 in 2002. The unfunded liability of the Plan generally decreases when an employee withdraws from service because the value of his forfeited employer provided benefit is usually greater than the value of the employee contributions that are returned. The net loss from the withdrawal assumption indicates that withdrawal from the Plan was less than expected during 2002.

Healthcare claims experience generated a loss of \$34,533,730. This loss occurred because healthcare claims increased at a rate greater than what was assumed. An additional loss of \$70,960,842 is attributable to dependent premiums. We used the actual premiums currently being paid. The current premiums have not been updated since 1995.

This year, an additional component of the loss is due to data corrections. This change resulted in an increase in liability of \$22,942,594.

## **Retirement Plan for Chicago Transit Authority Employees Actuarial Study as of January 1, 2003 (Cont'd)**

---

### **ASSETS**

The market value of assets shown in the Schedule B is based on information provided by the auditors. The market value of assets decreased from \$1.679 billion as of December 31, 2001 to \$1.299 billion as of December 31, 2002. Page 10 details the development of asset values during 2002 and Page 11 shows the development of the actuarial value of assets as of January 1, 2003. In determining the actuarial value of assets, gains and losses are phased in over 5 years. As a result, the actuarial value of assets is \$1.762 billion and the return on the actuarial value of assets was 2.30% even though the market return was (12.72%).

**SCHEDULE B**  
**RECONCILIATION OF ASSETS**  
**AS OF JANUARY 1, 2003**

	<u>Market Value</u>
1. Market Value of assets as of 12/31/2001	\$1,679,215,503
2. Adjustment as of 1/1/2002	(134,432)
3. Income for plan year:	
a) Member contributions	\$ 14,479,216
b) CTA contributions	28,858,171
c) Investment income net of expenses	(202,308,398)
d) Miscellaneous revenue	<u>-</u>
e) Total income	(\$158,971,011)
4. Disbursements for plan year:	
a) Pension and Death Benefits	\$ 148,606,970
b) Health Benefits <sup>1</sup>	70,563,184
c) Refunds	665,499
d) Administration	<u>1,650,380</u>
e) Total disbursements	\$ 221,486,033
5. Market Value of assets as of 12/31/2002	\$1,298,624,027
6. Estimated rate of return in 2002:	
a) Gross	(12.30)%
b) Net of investment expense	(12.72)%
(Investment expense of \$6,808,190)	
Method used for calculating rate of return does not reflect specific timing of income and outflows. It is also based on total assets, not invested assets.	

<sup>1</sup> Health benefit payments are comprised of \$42,318,789 for claims in excess of premiums for FYs 1995 to 2002 and \$28,244,395 for premiums net of dependent premiums for FY 2002.

## DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS

Year Ended December 31:	2000	2001	2002	2003	2004	2005
A. Actuarial Value Beginning of Year	\$1,722,215,000	\$1,828,095,000	\$1,864,727,258			
B. Market Value End of Year	1,925,058,000	1,679,215,503	1,298,624,027			
C. Market Value Beginning of Year	1,896,563,000	1,925,057,781	1,679,215,503			
D. Non-Investment Net Cash Flow	(137,896,000)	(136,702,461)	(178,148,646)			
E. Investment Return						
E1. Market Total: B - C - D	166,391,000	(109,139,817)	(202,442,830)			
E2. Amount for Immediate Recognition (9%)	164,485,350	167,103,590	143,112,706			
E3. Amount for Phased-In Recognition: E1-E2	1,905,650	(276,243,407)	(345,555,536)			
F. Phased-In Recognition of Investment Return						
F1. Current Year: 0.2 x E3	381,130	(55,248,681)	(69,111,107)	Unknown	Unknown	Unknown
F2. First Prior Year	13,115,300	381,130	(55,248,681)	(69,111,107)	Unknown	Unknown
F3. Second Prior Year	8,108,980	13,115,300	381,130	(55,248,681)	(69,111,107)	Unknown
F4. Third Prior Year	39,874,400	8,108,980	13,115,300	381,130	(55,248,681)	(69,111,107)
F5. Fourth Prior Year	17,810,840	39,874,400	8,108,980	13,115,300	381,130	(55,248,681)
<b>F6. Total Recognized Investment Gain</b>	<b>79,290,650</b>	<b>6,231,129</b>	<b>(102,754,378)</b>	<b>(110,863,358)</b>	<b>(123,978,658)</b>	<b>(124,359,788)</b>
G. Actuarial Value End of Year: A + D + E2 + F6	1,828,095,000	1,864,727,258	1,726,936,940			
H. Actual/Projected Difference between Market and Actuarial Value	96,963,000	(185,511,755)	(428,312,913)	(317,449,555)	(193,470,897)	(69,111,108)
I. Market Rate of Return	9.1%	-5.9%	-12.7%			
J. Actuarial Rate of Return	14.7%	9.8%	2.3%			
K. Ratio of Market Value to Actuarial Value	105.3%	90.1%	75.2%			

The Actuarial Value of Assets recognizes assumed investment return (line E2) fully each year. Differences between actual and assumed investment income (line E3) are recognized over a five year period at a rate of 20% per year. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than Market Value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than Market Value. *The Actuarial Value of Assets is unbiased with respect to Market Value.* At any time it may be either greater or less than Market Value. If assumed rates are exactly realized for four consecutive years, it will become equal to Market Value.



# FINANCING \$3.6 BILLION OF BENEFIT PROMISES FOR PRESENT ACTIVE AND RETIRED MEMBERS JANUARY 1, 2003

---

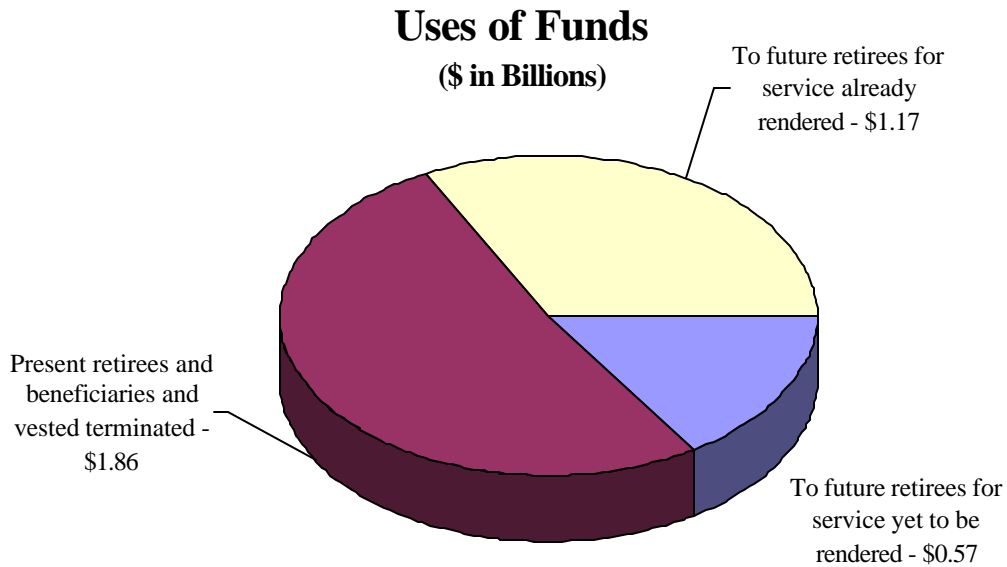
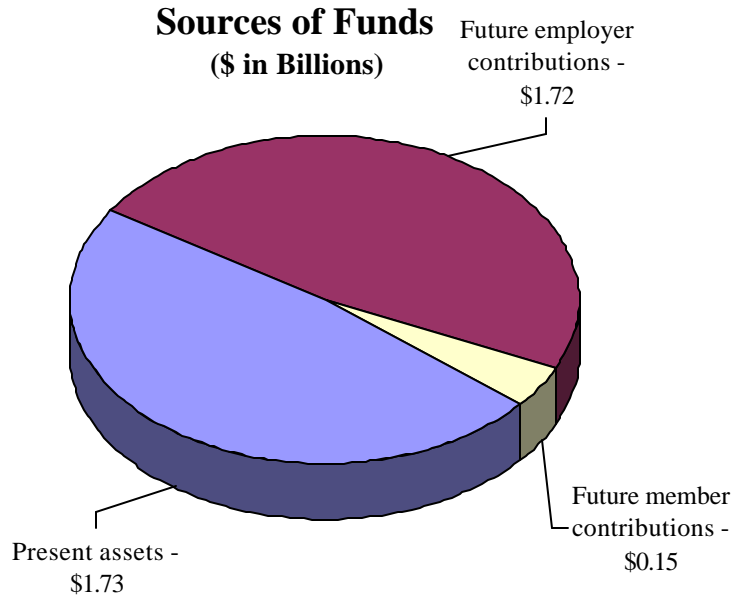
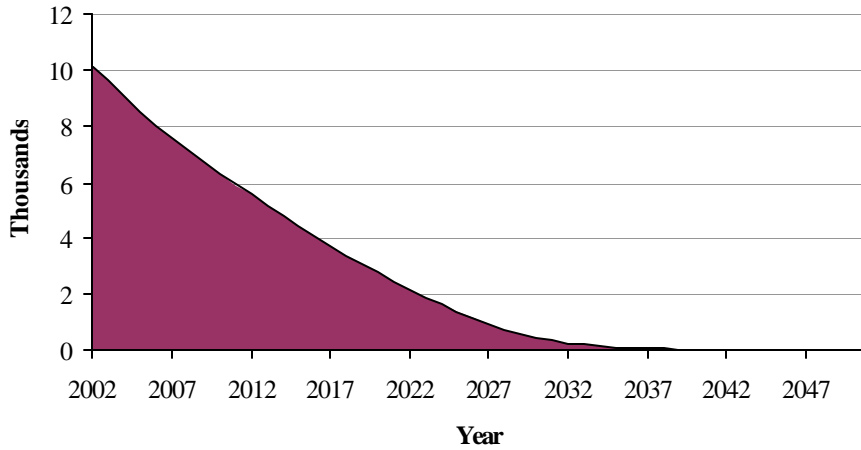


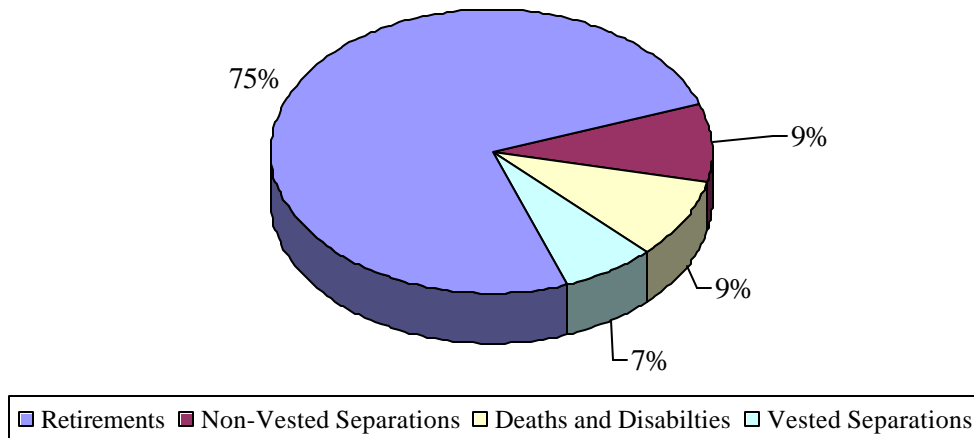
Chart 4  
**EXPECTED DEVELOPMENT OF PRESENT POPULATION  
 JANUARY 1, 2003**

**Closed Group Population Projection**



The charts show the expected future development of the present population in simplified terms. The retirement system presently covers 10,170 active members. Eventually, 9% of the population is expected to terminate covered employment prior to retirement and forfeit eligibility for an employer provided benefit. Approximately 82% of the present population is expected to receive monthly retirement benefits either by retiring directly from active service, or retiring from vested deferred status. 9% of the present population is expected to become eligible for death-in-service or disability benefits.

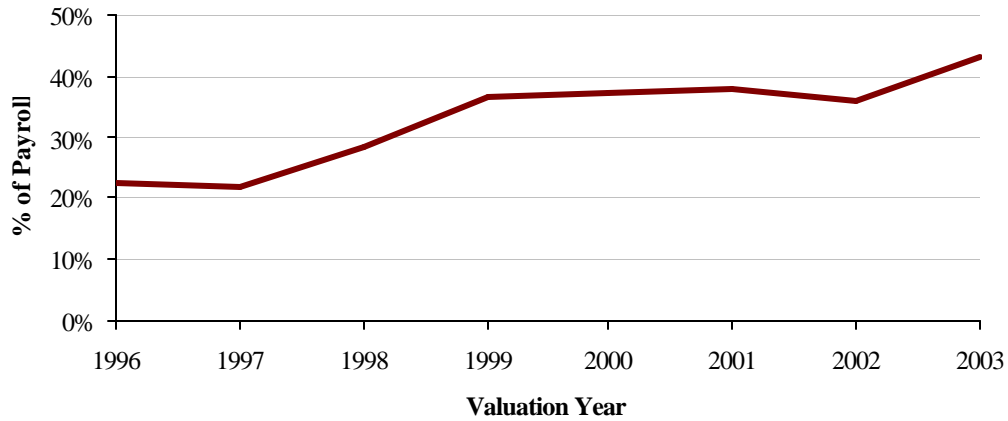
**Closed Group Population Projection**



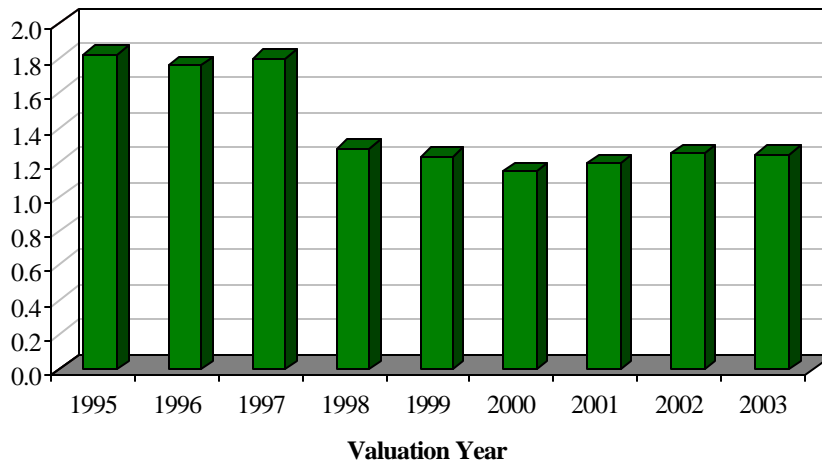
## Retirement Plan for Chicago Transit Authority Employees Actuarial Study as of January 1, 2003 (Cont'd)

---

### Pension Benefits Being Paid as a Percent of Member Payroll



### Active Members Per Retired Life



## VALUATION METHOD

---

An essential step in the valuation process is comparing valuation assets with computed liabilities. Valuation assets are those assets that are recognized for funding purposes.

Asset valuation methods are distinguished by the timing of the recognition of investment income. Total investment income is the sum of ordinary income and capital value changes. Under a pure market value approach, ordinary investment income and all capital value changes would be recognized immediately. Because of market volatility, use of pure market values in retirement funding can result in volatile contribution rates and unstable financial ratios, contrary to Plan objectives.

Under the Plan's asset valuation method (see page 25), assumed investment return is recognized fully each year. Differences between actual and assumed investment return are phased in over a five-year period. During periods when investment performance exceeds the assumed rate, the actuarial value will tend to be less than the market value. Conversely, during periods when investment performance is less than the assumed rate, actuarial value will tend to be greater than market value. If assumed rates are exactly realized for four consecutive years, actuarial value will become equal to market value.

A multi-year comparison of market value to actuarial value is shown below (\$ in millions):

<b>Valuation Date Dec. 31</b>	<b>Market Value of Assets (1)</b>	<b>Actuarial Value of Assets (2)</b>	<b>Ratio of MV to AV (1)/(2)</b>
1994	\$1,174	\$1,256	93.5%
1995	1,354	1,285	105.4%
1996	1,501	1,374	109.2%
1997	1,726	1,471	117.3%
1998	1,797	1,577	114.0%
1999	1,897	1,722	110.2%
2000	1,925	1,828	105.3%
2001	1,679	1,865	90.1%
2002	1,299	1,727	75.2%

**RETIREMENT PLAN FOR CHICAGO TRANSIT AUTHORITY EMPLOYEES**  
**GASB STATEMENT NO. 25**

**Schedule of Funding Progress**  
**(Pension & Healthcare)**

**In Accordance with Statement No. 25 of the**  
**Governmental Accounting Standards Board**  
**(\$ in Thousands)**

<b>Actuarial Valuation Date</b>	<b>Actuarial Value of Assets (a)</b>	<b>Actuarial Accrued Liability (AAL) Entry Age (b)</b>	<b>Unfunded AAL (UAAL) (b-a)</b>	<b>Funded Ratio (a/b)</b>	<b>Covered Payroll (c)</b>	<b>UAAL as a Percentage of Covered Payroll ((b-a)/c)</b>
01/01/2003	\$1,726,937	\$3,026,597	\$1,299,660	57.1%	\$480,740	270.3%
01/01/2002	1,864,727	2,812,194	947,467	66.3%	459,343	206.3%
01/01/2001	1,828,095	2,358,856	530,761	77.5%	431,703	122.9%
01/01/2000	1,722,215	2,156,279	434,064	79.9%	424,518	102.2%
01/01/1999	1,576,924	2,054,953	478,029	76.7%	407,406	117.3%
01/01/1998	1,470,510	1,994,422	523,912	73.7%	457,717	114.5%
01/01/1997	1,373,715	1,748,190	374,475	78.6%	443,508	84.4%
01/01/1996	1,285,155	1,669,915	384,760	77.0%	414,667	92.8%

**RETIREMENT PLAN FOR CHICAGO TRANSIT AUTHORITY EMPLOYEES**  
**GASB STATEMENT NO. 25**

**Schedule of Employer Contributions**  
**(Pension & Healthcare)**

**In Accordance with Statement No. 25 of the**  
**Governmental Accounting Standards Board**  
**(\$ in Thousands)**

<b>Year Ended 31-Dec</b>	<b>Authority Contribution (a)</b>	<b>Employee Contribution (b)</b>	<b>Total Contribution (a+b)</b>	<b>Annual Required Contribution (c)</b>	<b>Percentage Contributed ( [a+b]/c )</b>
2003	\$30,431	\$15,215	\$45,646	\$177,404	25.7%
2002	29,076	14,538	43,615	142,758	30.6%
2001	27,219	13,639	40,858	82,949	49.3%
2000	25,904	12,981	38,885	73,696	52.8%
1999	25,649	12,874	38,523	76,122	50.6%
1998	24,432	12,165	36,597	82,052	44.6%
1997	12,662	6,366	19,028	68,531	27.8%
1996	26,228	13,165	39,393	66,599	59.1%

Estimated contributions for fiscal year end 2003 based on expected covered payroll.

**RETIREMENT PLAN FOR CHICAGO TRANSIT AUTHORITY EMPLOYEES**  
**GASB STATEMENT NO. 25**

**Schedule of Funding Progress**  
**(Pension Only)**

**In Accordance with Statement No. 25 of the**  
**Governmental Accounting Standards Board**  
**(\$ in Thousands)**

<b>Actuarial Valuation Date</b>	<b>Actuarial Value of Assets (a)</b>	<b>Actuarial Accrued Liability (AAL) Entry Age (b)</b>	<b>Unfunded AAL (UAAL) (b-a)</b>	<b>Funded Ratio (a/b)</b>	<b>Covered Payroll (c)</b>	<b>UAAL as a Percentage of Covered Payroll ((b-a)/c)</b>
01/01/2003	\$1,190,087	\$2,085,723	\$895,636	57.1%	\$480,740	186.3%
01/01/2002	1,355,567	2,044,330	688,763	66.3%	459,343	149.9%
01/01/2001	1,595,609	2,058,871	463,262	77.5%	431,703	107.3%
01/01/2000	1,494,585	1,871,277	376,692	79.9%	424,518	88.7%
01/01/1999	1,363,625	1,776,994	413,369	76.7%	407,406	101.5%
01/01/1998	1,269,568	1,721,888	452,320	73.7%	457,717	98.8%
01/01/1997	1,182,931	1,505,398	322,467	78.6%	443,508	72.7%
01/01/1996	1,098,856	1,427,840	328,984	77.0%	414,667	79.3%

**RETIREMENT PLAN FOR CHICAGO TRANSIT AUTHORITY EMPLOYEES  
GASB STATEMENT NO. 25**

**Schedule of Employer Contributions  
(Pension Only)**

In Accordance with Statement No. 25 of the  
Governmental Accounting Standards Board  
(\$ in Thousands)

Year Ended 31-Dec	Authority Contribution (a)	Employee Contribution (b)	Total Contribution (a+b)	Annual Required Contribution (c)	Percentage Contributed ( [a+b]/c )
2003	\$20,122	\$10,061	\$30,183	\$117,305	25.7%
2002	19,766	9,883	29,648	97,044	30.6%
2001	24,081	12,067	36,148	73,387	49.3%
2000	22,827	11,439	34,266	64,943	52.8%
1999	22,481	11,284	33,765	66,720	50.6%
1998	21,417	10,664	32,081	71,928	44.6%
1997	11,075	5,568	16,643	59,943	27.8%
1996	22,769	11,429	34,198	57,815	59.2%

Estimated contributions for fiscal year end 2003 based on expected covered payroll.



**RETIREMENT PLAN FOR CHICAGO TRANSIT AUTHORITY EMPLOYEES  
GASB STATEMENT NO. 25**

---

**Annual Required Contribution  
For Fiscal Year Ending December 31, 2003**

**In Accordance with Statement No. 25 of the  
Governmental Accounting Standards Board  
(\$ in Thousands)**

Fiscal Year 2003	Pension	Healthcare	Total
<b>Assumptions and Methods</b>			
Interest Rate	9.00%	9.00%	9.00%
Amortization Period (years)	40	40	40
Cost Method	EAN	EAN	EAN
<b>Basic Results</b>			
Normal Cost	\$ 35,870	\$ 23,054	\$ 58,924
Actuarial Accrued Liability	2,085,724	940,873	3,026,597
Actuarial Value of Assets	<u>1,190,087</u>	<u>536,850</u>	<u>1,726,937</u>
Unfunded Actuarial Liability	\$895,637	\$ 404,023	\$1,299,660
<b>Annual Required Contribution (ARC)</b>			
Normal Cost	\$ 35,870	\$ 23,054	\$ 58,924
Amortization of Unfunded Actuarial Liability	76,384	34,457	110,841
Interest Adjustment	<u>5,051</u>	<u>2,588</u>	<u>7,639</u>
Total ARC	\$117,305	\$ 60,099	\$ 177,404

## **GASB STATEMENT NO. 25 REQUIRED SUPPLEMENTARY INFORMATION**

---

The information presented in the required supplementary schedules was determined as part of the actuarial valuations at the dates indicated. Additional information as of the latest actuarial valuation follows:

Valuation Date:	January 1, 2003
Actuarial Cost Method	Entry Age
Amortization Method	Level Dollar
Remaining Amortization Period for Unfunded Accrued Liabilities	40 Years
Asset Valuation Method	5-Year Smoothed Market
Actuarial Assumptions:	
Investment Rate of Return	9.0%
Projected Salary Increases	5.5%

Membership of the plan consisted of the following at January 1, 2003, the date of the latest actuarial valuation:

Retirees, Disabled and beneficiaries receiving benefits	8,160
Terminated plan members entitled to but not yet receiving benefits	44
Active plan members	10,170
Total	18,374

## **SECTION II**

---

### **Actuarial Assumptions and Methods**

**RETIREMENT PLAN FOR CHICAGO TRANSIT AUTHORITY EMPLOYEES**  
**Actuarial Assumptions and Methods**  
**used in the Valuation as of January 1, 2003**

---

1. **Rate of Covered Pay:** The rate of covered pay for participants has been estimated at \$507,181,190 for 2003. The following adjustments were made to the actual covered earnings for 2002 supplied by the Authority:
  - No earnings or a fractional year of earnings were submitted for employees with a work status date in 2002 who were hired during 2001. We have annualized the 2002 earnings as a participant and assumed minimum earnings of \$20,000 per year for this group.
  - For employees on layoff, extended leave of absence, or on inactive status, we have assumed minimum earnings of \$25,000 per year.
  - For employees whose 2002 earnings were less than \$15,000, we have assumed an annual rate of \$20,000 per year.
  - For all employees, 2002 earnings were increased by 5.5% to estimate the rate of pay for 2003.
  
2. **Actuarial Cost Method:** Entry Age Normal Cost (level percent of pay). Under the Entry Age Normal actuarial cost method, each participant's projected benefits are assumed to be funded by annual installments, equal to a level percentage of compensation, payable from date of participation to assumed retirement. The total "normal cost" is the sum of the current year's annual installments determined for all active participants. The "actuarial accrued liability" is the excess of the value of projected benefits for all participants (both active and retired) over the discounted value of normal costs determined for future years of service.
  
3. **Mortality:**
  - (a) *Retirees & Survivors*—According to the 1994 Group Annuity Mortality Table for males and females.
  - (b) *Disabled Employees*—According to a blend of 50% of the 1974 Railroad Retirement Board Totally Disabled Annuitants Mortality Table (Ultimate) and 50% of the 1994 Group Annuity Mortality Table for males and females.

**RETIREMENT PLAN FOR CHICAGO TRANSIT AUTHORITY EMPLOYEES**  
**Actuarial Assumptions and Methods**  
**used in the Valuation as of January 1, 2003 (Cont'd)**

---

4. **Interest on the Fund:** 9% per annum, compounded annually.

5. **Withdrawals from Service:** According to the following table as shown for illustrative ages:

Age	Rate of Termination for Reasons Other than Death or Disability
22	.0625
27	.0500
32	.0375
37	.0281
42	.0188
47	.0125
52	.0094
55 & Older	-

If service is 25 or greater, no withdrawal is assumed.

6. **Disability Retirements:** According to the following table as shown for illustrative ages:

Age	Rate of Disability
22	.0020
27	.0020
32	.0020
37	.0040
42	.0060
47	.0075
52	.0100
57	.0135
62	.0175
65 & Older	-

If service is 25 or greater, no disability is assumed.

7. **Compensation Increases:** 5.5% per annum, compounded annually.

**RETIREMENT PLAN FOR CHICAGO TRANSIT AUTHORITY EMPLOYEES**  
**Actuarial Assumptions and Methods**  
**used in the Valuation as of January 1, 2003 (Cont'd)**

---

**8. Service Retirements:**

Age	Probability of Retirement	
	If service is less than 25*	If service is 25 or greater
50 or less	.000	.075
51-54	.000	.075
55-56	.015	.150
57-59	.020	.150
60	.025	.200
61	.040	.200
62	.200	.550
63-64	.150	.400
65	.600	.750
66-69	.250	.333
70	1.000	1.000

\* For ages under 65, the above rates are multiplied by 75% if service is between 22 and 23 years, 50% if service is between 23 and 24 years and 25% if service is between 24 and 25 years.

**9. Per Capita Claim Costs:** The per capita healthcare claims costs for plan year 2003 for covered retirees and dependents were estimated to be \$ 8,499 for pre-Medicare coverage and \$ 3,242 for post-Medicare coverage. Per capita claim costs were developed using paid claims, enrollment and expense data for plan years 1998 through 2002. Separate claim costs were developed for coverage under the pre-Medicare PPO, Medicare Supplemental Plan and the Prescription Drug Plan.

**10. Dependent Contribution Rates:** In the previous valuation, dependent contributions were adjusted for claims experience through 2001 resulting in annual rates of \$ 5,329 for Pre-Medicare coverage and \$ 2,303 for post-Medicare coverage.

Currently, dependent contributions are based on 1995 levels and it is uncertain when their rates will be increased. Consequently, for the current valuation, dependent contributions were based on 1995 levels without any adjustment for claims experience through 2002. This produced dependent contribution rates of \$ 3,761 for pre-Medicare coverage and \$ 1,410 for post-Medicare coverage.

**RETIREMENT PLAN FOR CHICAGO TRANSIT AUTHORITY EMPLOYEES**  
**Actuarial Assumptions and Methods**  
**used in the Valuation as of January 1, 2003 (Cont'd)**

---

- 11. Healthcare Trend Rate:** Per capita claim costs and dependent contribution rates were assumed to increase as follows:

<u>Plan Year</u>	<u>Trend Rate</u>
2004	11%
2005	10%
2006	9%
2007	8%
2008	7%
2009 and After	6%

- 12. Spouse Data:** 75% of employees eligible at retirement are assumed to be married, and the average factor to convert their accrued pension to a spouse option (Option A-50%) is assumed to be .8500. A wife is assumed to be 3 years younger than her husband. The valuation assumes 60% of all married retirees will elect healthcare coverage for their dependents.
- 13. Asset Valuation:** The actuarial value is determined by adjusting the market value of assets to reflect the investment gains and losses (the difference between the actual investment return and the expected investment return) during each of the last 5 years at the rate of 20% per year.

## **SECTION III**

---

### **Summary of Principal Plan Provisions Recognized in the Valuation**



**RETIREMENT PLAN FOR CHICAGO TRANSIT AUTHORITY EMPLOYEES**  
**Summary of Principal Plan Provisions upon which the**  
**Actuarial Valuation as of January 1, 2003 has been Based**

---

**Eligibility**—All non-temporary employees of the Chicago Transit Authority are included in the Plan after completing 12 months of continuous service unless specifically excluded by the terms of a collective bargaining agreement.

**Contributions**—The Chicago Transit Authority will contribute a percent of compensation for all participating employees and each participating employee will contribute a percent of his compensation to the Plan according to the following schedule:

Dates	Contribution Percentage	
	Authority	Employees
July 1, 1997 and thereafter	6%	3%

**Normal Retirement**—The normal retirement age is 65. The annual normal retirement pension is equal to the greater of (a) or (b) below, but not greater than 62.5% of the employee's average annual compensation:

- (a) 1% of the employee's past service compensation as of May 31, 1948, for each full year of continuous service prior to June 1, 1949, plus 1-2/3% of the employee's compensation for continuous service after June 1, 1949.
- (b) 1% of the employee's average annual compensation for each full year of continuous service prior to June 1, 1949 plus 1.85% of average annual compensation for each year (and fraction to completed calendar months) of continuous service after June 1, 1949.

Average annual compensation is equal to the highest average compensation over any 4 calendar years out of the final 10 calendar years prior to normal retirement (or actual retirement, if later). If an employee has at least 20 years of service, his minimum annual pension is \$2,220.

**Early Retirement** — An employee may retire early after attaining age 55 and completing at least 3 years of continuous service, or after completion of 25 years of continuous service. The early retirement pension is equal to the accrued normal retirement pension based on compensation and service at early retirement, reduced by 5% for each year or fraction younger than age 65. The 5% per year reduction is not applied if the employee has at least 25 years of service.

**RETIREMENT PLAN FOR CHICAGO TRANSIT AUTHORITY EMPLOYEES**  
**Summary of Principal Plan Provisions upon which the**  
**Actuarial Valuation as of January 1, 2003 has been Based (Cont'd)**

---

**Disability Retirement**— An employee is eligible for a disability allowance if he becomes disabled after completing 10 years of service, or if his disability after completing 5 years of service is covered under the Workmen's Compensation Act. An employee is disabled if he either (a) is totally and permanently disabled or (b) is unable to return to work after receiving 26 weeks of benefits under the Authority's Group Accident and Sickness Insurance or from the Authority under the Workmen's Compensation Act. The disability allowance is equal to the normal retirement pension based on compensation and service at disability subject to a minimum annual pension of \$4,800.

**Death Benefits**—If an employee dies prior to retirement or disability and after one year of service, his contributions, accumulated with interest, are paid to his beneficiary. "Interest" is equal to the rate of interest earned by the Fund (to a maximum of 2%) prior to January 1, 1971, 1/2 of the rate of interest earned by the Fund (to a maximum of 3%) between January 1, 1971 and January 1, 1980, and 3% after December 31, 1979. If an employee dies after 90 days of service but prior to one year of service, his contributions, without interest, are paid to his beneficiary; and if he dies prior to 90 days of service, his contributions are not refunded.

If an employee is eligible for early retirement, he is automatically covered by a surviving spouse benefit, payable upon his death prior to retirement, in lieu of a return of his contributions. The spouse benefit is equal to 1/2 of the pension which would have been payable to the employee if he had retired on the first day of the month of his death and had elected an optional form of pension providing 1/2 of his reduced pension to his surviving spouse. Employees may elect not to be covered by this option and provide for the payment of their contributions with interest to their beneficiary in lieu thereof.

If an employee dies after his retirement pension has commenced, his beneficiary receives the excess, if any of his contributions, accumulated with interest to his retirement date, over the sum of the pension payments made to him. However, if his surviving spouse is entitled to a pension after his death, such excess will not be paid to his beneficiary. At the death of the surviving spouse, the excess, if any, of the contributions accumulated with interest to his retirement date over the sum of the pension payments made to him and his surviving spouse will be paid.

A retired employee's beneficiary will receive a death benefit equal to the amount from the following schedule according to the employee's age and service at retirement:

<u>Age</u>	<u>Service</u>	<u>Age + Service</u>	<u>Death Benefit</u>
65	20	N/A	\$8,000
60	N/A	90	8,000
N/A	25	N/A	8,000
N/A	N/A	94	8,000
60-64	20	N/A	6,000
55-59	20	N/A	5,000
All Others			2,000

**RETIREMENT PLAN FOR CHICAGO TRANSIT AUTHORITY EMPLOYEES**  
**Summary of Principal Plan Provisions upon which the**  
**Actuarial Valuation as of January 1, 2003 has been Based (Cont'd)**

---

**Termination Benefits**—If an employee terminates his employment prior to eligibility for retirement or disability and after completing one year of service, he receives a refund of his contributions, plus interest (3% after December 31, 1979). If he terminates after 90 days but prior to one year, he receives his contributions, without interest, and if he terminates less than 90 days after hire, he receives no refund. If an employee has completed 10 years of continuous service and elects to leave his contributions in the Plan, he remains entitled to his normal retirement pension beginning at age 65 but based on his compensation and service at termination.

**Optional Benefit Forms**—In lieu of a normal pension, an employee may elect an optional annuity of equivalent actuarial value providing payments of 1/2, 2/3, or all of his reduced pension to his spouse after his death (Option A).

Alternatively, an employee may elect an optional annuity of equivalent actuarial value providing payments of 1/2, 2/3, or all of his reduced pension to his spouse after his death with the further provision that his benefit will be restored to the full amount to him after the death of his spouse (Option B).

**Retired Employees**—Benefits for retired employees have been valued according to benefits in effect at time of retirement as modified by subsequent amendments. Such benefits are kept on records maintained by the Authority.

**Reimbursement of Healthcare Costs**—The Plan provides for payment towards retirees' group healthcare costs. For purposes of our valuation, we have assumed that all retirees who meet the following conditions will be eligible for group healthcare benefits.

- (a) Retired employees under age 65 will receive a monthly healthcare reimbursement supplement covering the full cost of benefits under the Blue Cross Blue Shield PPO and Prescription Drug Program.
- (b) Retired employees age 65 or older will receive a monthly reimbursement supplement covering the full cost of benefits under the Blue Cross Blue Shield Medicare Supplemental Plan and Prescription Drug Program
- (c) Dependents of retired employees are also eligible for healthcare coverage provided they make the required contribution.

**Voluntary Early Retirement Incentive Program**—During 1997, the Plan was amended to offer enhanced retirement benefits to all employees who have at least 25 years of continuous service on or before December 31, 1999 and who have not retired prior to January 1, 1997. Those eligible on or before June 30, 1997 must elect to participate during the period March 1, 1997 to June 30, 1997. Employees eligible during the period July 1, 1997 to December 31, 1999 must elect to participate between July 1, 1997 and February 28, 1998. All eligible employees who elect to participate must retire no later than December 31, 1999. The benefit is determined based on a formula multiplier of 2.40% of average annual compensation with the benefit cap at 70.0% of such average annual compensation.

## **SECTION IV**

---

### **Participant Data**

**RETIREMENT PLAN FOR CHICAGO TRANSIT AUTHORITY EMPLOYEES**  
**Retired Employees at January 1, 2003**

Attained Ages	Retirees		Disability		Beneficiaries		Totals	
	No.	Annual Allowances	No.	Annual Allowances	No.	Annual Allowances	No.	Annual Allowances
35-39	0	\$ 0	3	\$ 25,643		\$ 0	3	\$ 25,643
40-44	2	51,940	25	209,427	5	46,731	32	308,098
45-49	124	3,290,790	67	713,426	16	134,409	207	4,138,625
50-54	681	18,147,164	160	1,827,550	26	405,745	867	20,380,459
55-59	1,361	35,148,567	216	2,542,038	45	393,301	1,622	38,083,906
60-64	1,259	29,678,291	168	1,868,097	80	718,681	1,507	32,265,069
65-69	1,009	19,461,142	114	1,307,674	76	662,242	1,199	21,431,058
70-74	762	12,013,851	40	385,289	110	843,971	912	13,243,111
75-79	609	8,791,284	26	192,125	144	1,027,203	779	10,010,612
80-84	412	4,950,468	11	82,449	135	704,660	558	5,737,577
85-89	246	2,171,698	3	16,748	86	428,837	335	2,617,283
90-94	101	705,747	1	5,929	22	78,405	124	790,081
95-99	12	64,960	0	0	2	6,180	14	71,140
100-104	1	5,543	0	0	0	0	1	5,543
<b>Totals</b>	<b>6,579</b>	<b>\$134,481,445</b>	<b>834</b>	<b>\$9,176,395</b>	<b>747</b>	<b>\$5,450,365</b>	<b>8,160</b>	<b>\$149,108,205</b>

**RETIREMENT PLAN FOR CHICAGO TRANSIT AUTHORITY EMPLOYEES**  
**Terminated Vested Data at January 1, 2003**

---

Terminated, Vested Participants

Attained Ages	Terminated Vested	
	No.	Annual Allowances
35-39	1	\$ 6,652
40-44	1	10,133
45-49	9	90,141
50-54	10	126,737
55-59	15	190,617
60-64	7	87,073
65-69	1	13,882
70-74	0	0
75-79	0	0
<b>Total</b>	<b>44</b>	<b>\$525,235</b>

**RETIREMENT PLAN FOR CHICAGO TRANSIT AUTHORITY EMPLOYEES**  
**Distribution of Active Employees at January 1, 2003 by Age and Length of Service**

AGE	Years of Service									Total
	Under 1 year	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 and over	
Under 20	1	-	-	-	-	-	-	-	-	<b>1</b>
20 to 24	41	53	-	-	-	-	-	-	-	<b>94</b>
25 to 29	106	275	58	-	-	-	-	-	-	<b>439</b>
30 to 34	137	485	315	73	-	-	-	-	-	<b>1,010</b>
35 to 39	112	475	439	417	81	-	-	-	-	<b>1,524</b>
40 to 44	106	481	359	439	296	72	6	-	-	<b>1,759</b>
45 to 49	65	332	277	333	248	375	171	5	-	<b>1,806</b>
50 to 54	39	210	211	235	164	299	338	101	4	<b>1,601</b>
55 to 59	26	111	130	162	134	233	201	172	30	<b>1,199</b>
60 to 64	4	48	61	89	68	136	101	65	27	<b>599</b>
65 and over	1	9	14	29	16	29	28	7	5	<b>138</b>
<b>Total Active</b>	<b>638</b>	<b>2,479</b>	<b>1,864</b>	<b>1,777</b>	<b>1,007</b>	<b>1,144</b>	<b>845</b>	<b>350</b>	<b>66</b>	<b>10,170</b>

Number non-vested: 4,981

Number vested: 5,189