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RETIREMENT PLAN FOR CTA EMPLOYEES

Actuarial Valuation Report as of January 1, 2012

December 2012

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December 6, 2012

Board of Trustees and Executive Director Retirement Plan for CTA Employees 10 S. LaSalle, Suite 1100 Chicago, IL 60602

Certification of Actuarial Valuation

Ladies and Gentlemen:

This report represents the results of the annual valuation of the assets and liabilities of The Retirement Plan for Chicago Transit Authority Employees ("the Plan") as of January 1, 2012, prepared in accordance with 40 ILCS 5/22-101(e). In addition it includes disclosure information as of December 31, 2011, as required under GASB Statements No. 25 and 27. The actuarial valuation of the Plan is performed annually and Buck Consultants was retained to perform the valuation as of January 1, 2012. This valuation has been conducted in accordance with all applicable Actuarial Standards of Practice (ASOPs) issued by the Actuarial Standards Board (ASB).

Public Act 94-839, effective June 6, 2006, requires that the Plan's pension and retiree health care programs be separated into two distinct trusts by December 31, 2008. This January 1, 2012 valuation report for the Plan does not reflect the liabilities and assets that were spun off in the healthcare trust.

Contribution rates were determined in accordance with 40 ILCS 5/22-101(e) using the projected unit credit cost method and provide for a funded ratio of at least 60 percent no later than ten years after the current year (2012) through fiscal year end 2039. Contribution rates reflect the issuance of bond or notes by the Authority, as defined in 70 ILCS 3605/12c. Authority contribution rates are adjusted by a debt service credit, for debt service paid in the prior year, of up to six percent of compensation per year from 2009 to 2040, as defined in 40 ILCS 5/22-101(e)(2).

Based on the preceding provisions, the sum of current assets, net bond proceeds, future contributions and investment earnings, less benefit payments and expenses, is projected to be at least equal to 60 percent of actuarial liabilities by 2022 and through fiscal year end 2039, if the following contributions, expressed as a percentage of compensation, are made to the Plan and the Plan experiences no net actuarial losses in the future.

	Annual Contributions to the Plan (Percentage of Compensation)		
Fiscal Year	Authority	Employees	
2013 to 2039	14.250%	10.125%	

40 ILCS 5/22-101(e)(4) provides for a minimum contribution, determined either by the Board of Trustees or the Auditor General, to bring the funded ratio of the Plan "up to" or "no less than" 90% by December 31, 2059. Thus, the attached schedules contain funded ratios in the years just prior to 2059 which may enable a lowering of contribution rates at that point.

Board of Trustees and Executive Director Retirement Plan for CTA Employees December 6, 2012 Page 2

While not required by 40 ILCS 5/22-101(e)(3), GASB 25 suggests an annual required contribution ("ARC") of approximately 27.57% (total contribution). Buck has recommended that the Board of Trustees consider, as appropriate, moving towards a contribution of the ARC over the next several years. The rates adopted by the Board pursuant to its ten-year plan are higher than the minimum required by 40 ILCS 5/22-101(e)(3). We understand that the Board anticipates an annual review of rates during the ten-year period.

The results documented in this report are estimated based on data that may be imperfect and on assumptions about future events. Certain plan provisions may be approximate or deemed insignificant and therefore are not valued. Assumptions may have been made about participant data or other factors. Reasonable efforts were made in this valuation to ensure that items that were significant in the context of the actuarial liabilities or costs are treated appropriately, and not excluded or included inappropriately. We believe that the use of approximation in our calculations, if any, has not resulted in a significant difference relative to the results we would have obtained using more detailed calculations.

A range of results, different from those presented in this report could be considered reasonable. The numbers are not rounded, but this is for convenience only and should not imply precision, which is not inherent in actuarial calculations.

This valuation was based on the actuarial assumptions and methods as adopted by the Board of Trustees. Please see Section 6.2 and 6.3 of this report for a description of the assumptions and methods used. Actuarial Standards of Practice now require that the likelihood and extent of future mortality improvements be considered for valuations performed on or after June 30, 2011. Traditionally for the CTA Retirement Plan, experience studies are performed once in every five year period. Our initial conclusion is that the mortality tables currently in use and adopted by the Board provides for some future mortality improvements. We will explore this issue in more detail during the experience review to be conducted before the January 1, 2014 valuation. The most recent study of the plan's experience, used in developing the current actuarial assumptions, was based on a period from January 1, 2001 – December 31, 2007 and first used with the January 1, 2009 actuarial valuation; the next review will cover the period from January 1, 2008 through December 31, 2012. In our opinion, the actuarial assumptions used in the valuation are, in the aggregate, reasonable

The assumptions and methods used for this valuation are unchanged from the prior valuation other than the use of the market value of assets instead of the value used in the prior valuation. During the course of transitioning the valuation from the prior actuary, the undersigned inquired whether "total assets" in 40 ILCS 5/22-101(e)(3) referred to the market value of assets or a smoothed value. After consultation with Plan counsel, the Board of Trustees directed an instruction to me that "total assets" should be understood as a reference to the market value of assets. From an actuarial perspective, market value has the advantage of being the most readily understood by stakeholders, and is fully supported by the actuarial standards of practice.

Future actuarial measurements may differ significantly from the current measurement presented in this report due to such factors as: plan experience different from that anticipated by the economic and demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurement; and changes in plan provisions or applicable law. Due to the limited scope of this report, an analysis of the potential range of such future measurements has not been performed.

All historical valuation results presented in this report represent results taken from prior actuarial reports and reflect the funding methods and techniques used by the prior actuary. Our report/certification does not apply to those results other than to represent that our report has presented accurately information developed by prior actuaries.

Board of Trustees and Executive Director Retirement Plan for CTA Employees December 6, 2012 Page 3

The undersigned are Enrolled Actuaries, a Fellow or Associate of the Society of Actuaries and Members of the American Academy of Actuaries. We meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained in this report. This report has been prepared in accordance with all applicable Actuarial Standards of Practice. We are available to answer any questions on the material contained in the report, or to provide explanations or further details as may be appropriate.

In our opinion the calculations also comply with Illinois law and where applicable, federal laws such as the Internal Revenue Code, and the Statements of the Governmental Accounting Standards Board. We certify that the information presented herein is accurate and fairly portrays the actuarial position of the Plan as of January 1, 2012.

Respectfully submitted,

BUCK CONSULTANTS, LLC

Larry Langer, ASA, MAAA, EA Principal and Consulting Actuary

cc: Paul Wilkinson Emily Urbaniak Kevin Peng

William R. Mª Oanald

William McDonald, FSA, MAAA, EA Senior Consultant, Actuary

Executive Summary

Overview

The Retirement Plan for CTA Employees provides pension and ancillary benefit payments to the terminated and retired employees of the Chicago Transit Authority. A Board of Trustees comprised of appointed representatives is responsible for administering the Plan and making investment decisions. This report presents the results of the actuarial valuation of the Plan benefits as of the valuation date of January 1, 2012.

Purpose

An actuarial valuation is performed on the retirement plan annually as of the beginning of the fiscal year. The main purposes of the actuarial valuation detailed in this report are:

- 1. To certify the statutory contribution requirements for plan year 2013, as required under 40 ILCS 5/22-101(e)(3);
- 2. To disclose the funding assets, liability measures and funded ratio as of the valuation date;
- 3. To disclose the accounting measures for the Plan required by GASB No. 25 as of the end of the last fiscal year;
- 4. To compare actual and expected experience under the Plan during the last fiscal year;
- 5. And to report trends in contributions, assets, liabilities, and funded status over the last several years.

This actuarial valuation provides a "snapshot" of the funded position of the Retirement Plan based on the plan provisions, membership, assets, and actuarial assumptions as of the valuation date. Actuarial projections are also performed to provide a long-term view of the expected future funding status and contribution patterns.

Membership

Actives: As of January 1, 2012, there were 8,751 employees in active service covered under the provisions of the Plan. The significant age, service, salary and accumulated contribution information for these employees is summarized below, along with comparative figures from the last actuarial valuation one year earlier.

	January 1, 2012	January 1, 2011
Number of active employees	8,751	8,932
Average age	47.4	47.0
Average years of service	13.8	13.7
Total annual valuation salary	541,353,693	528,287,879
Average annual salary	62,132	59,499
Total accumulated contributions	271,327,054	242,723,521
Average accumulated contributions	31,140	27,337

Note – Salary information does not include participants who have opted out of participation and are only entitled to a refund of contributions. These participants number 53 and 38 for 2011 and 2012, respectively.

The number of active members decreased by 2.0% from the previous valuation date. The average age of the active members increased by 0.4 years, and the average service increased by 0.1 years. The total annual valuation salary increased by 2.7%. The average salary increased by 4.4% from the previous valuation.

Distributions of active members by age and service are given in Section 5.2.

Inactives: In addition to the active members, there were 84 inactive vested members who did not elect to receive their accumulated contributions when they left covered employment. The significant age and annual benefit information for these inactive members is summarized below with comparative figures from the last actuarial valuation one year earlier.

	January 1, 2012	January 1, 2011
Number of inactive members	84	60
Average age	55.1	54.9
Average annual benefit payments	25,223	22,980

The number of inactive vested members increased by 40.0% from the previous valuation. The average age of the inactive vested members increased by 0.2 years. The Average Monthly Pension Benefit for these members increased by 9.8% from the previous valuation.

Distributions of inactive members by age and pension benefit are given in Section 5.4.

Retirees and Beneficiaries: In addition to the active and inactive members, there were 8,638 retired members and 780 beneficiaries who are receiving monthly benefit payments on the valuation date. The significant age and annual benefit information for these members are summarized below with comparative figures from the last actuarial valuation performed one year earlier.

	January 1, 2012	January 1, 2011
Number of members receiving payments		
➢ Retirees	8,638	8,514
Beneficiaries	780	796
≻ Total	9,418	9,310
Average age	68.9	68.6
Annual benefit amounts		
➢ Retirees	216,315,908	207,568,270
Beneficiaries	7,734,087	7,713,882
➤ Total	224,049,995	215,282,152
Average annual benefit payments	23,790	23,124

The number of retired members and beneficiaries increased by 1.2% from the previous valuation date. The average age of these members increased by 0.3 years. The total annual benefit payments for these members increased by 4.1% from the previous valuation date.

Distributions of retired members by age and benefit amounts are given in Section 5.3.

In our opinion, the membership data collected and prepared for use in this actuarial valuation meets the data quality standards required under Actuarial Standards of Practice No. 23.

Plan Assets

The Plan's assets are held in trust and invested for the exclusive benefit of plan members. The trust is funded by member and employer contributions, and pays benefits directly to eligible members in accordance with plan provisions. The assets are audited annually and are reported at fair value. On a fair value basis, the Plan has Net Assets Available for Benefits of \$1,662.2 million as of January 1, 2012. This includes a decrease of \$132.5 million over the Net Assets Available for Benefits of \$1,794.7 million as of January 1, 2011. During the prior year, the investment return was 3.13% as reported by the Plan.

Starting with the January 1, 2012 valuation, the Board of Trustees has adopted the market value of assets to determine the actuarial value of assets used for funding purposes. This method recognizes gains and losses, i.e. the difference between actual investment return during the year and the expected return based on the valuation interest rate immediately.

A summary of the assets held for investment, a summary of changes in assets, and the development of the actuarial value of assets is shown in Section 2.

Actuarial Experience

Differences between the expected experience based on the actuarial assumptions and the actual experience create changes in the actuarial accrued liability, actuarial value of assets, and the unfunded actuarial accrued liability from one year to the next. These changes create an actuarial gain if the experience is favorable, and an actuarial loss if the experience is unfavorable. The Plan experienced a total net actuarial loss of \$138.8 million during the prior year. This net loss is about 5.1% of the plan's prior year actuarial accrued liability. The net loss is a combination of two principal factors, demographic experience and investment performance.

The demographic experience tracks actual changes in the plan's population compared to the assumptions for decrements such as mortality, turnover, and retirement, as well as pay increases. The Plan experienced a demographic loss of \$34.5 million during the year ending December 31, 2011. This loss increased the unfunded actuarial accrued liability by \$34.5 million and decreased the funded ratio by 0.8%.

Continued tracking of the demographic experience is warranted in order to confirm the appropriateness of the actuarial assumptions. Details of the demographic, economic, and other assumptions used to value the plan liabilities and normal cost can be found in Section 6. In our opinion, the economic assumptions comply with Actuarial Standards of Practice No. 27 and the demographic assumptions comply with Actuarial Standards of Practice No. 35.

On the asset side, the Plan experienced a loss on an actuarial value of assets basis. The actual rate of return on the actuarial value of plan assets before the method change to market was 2.87% for the year ending December 31, 2011 compared to the assumption of 8.5%, resulting in an asset loss of \$104.3 million. This loss increased the unfunded actuarial accrued liability by \$104.3 million and decreased the funded ratio by 3.7%. This paragraph does not reflect the change in the actuarial value of assets to market value of January 1, 2012.

The rate of return on the fair value of assets for the year ending December 31, 2011 was lower than the assumed rate of 8.5%. The actuarial value of the assets in use during the 2011 plan year recognizes only 20% of the 2011 loss on fair value, delaying the recognizion of the remaining 80% over the next four years. Moreover, the actuarial value of assets also recognizes deferred portions of prior years' gains and losses on fair value. The investment loss recognized this year is primarily due

to the investment losses suffered in 2008 and 2009. It should be noted that the plan's assumed asset return of 8.5% is a long-term rate and short-term performance is not necessarily indicative of expected long-term future returns.

A summary of the actuarial gains and losses experienced during the prior year is shown in Section 1.3.

GASB 25 Actuarial Contributions

Actual required contribution rates were determined in accordance with 40 ILCS 5/22-101(e) using the projected unit credit cost method and provide for a funded ratio of at least 60 percent no later than ten years after the current year (2012) through fiscal year end 2039 and 90 percent funding by fiscal year end 2059. Contribution rates reflect the issuance of bond or notes by the Authority, as defined in 70 ILCS 3605/12c. Authority contribution rates are adjusted by a debt service credit, for debt service paid in the prior year, of up to six percent of compensation per year from 2009 to 2040, as defined in 40 ILCS 5/22-101(e)(2).

While not required by 40 ILCS 5/22-101(e), GASB 25 suggests a funding policy be sufficient to pay the normal cost and amortize the unfunded actuarial accrued liability over a fixed period of 30 years. Buck has recommended that the Board of Trustees consider, as appropriate, moving towards a contributions of the ARC over the next several years. The rates adopted by the Board pursuant to its ten-year plan are higher than the minimum required by 40 ILCS 5/22-101(e)(3). We understand that the Board anticipates an annual review of rates during the ten-year period.

The normal cost represents the cost of the benefits that accrue during the year for active members under the Projected Unit Credit Cost Method. It is determined as the present value of the unit of benefit attributable to the respective plan year. The normal cost for 2011 has been determined to be \$51.0 million, or 9.42% of pay. This represents an increase in the normal cost rate of 0.28% of pay from last year's normal cost rate of 9.14%.

The cost method also determines the actuarial accrued liability which represents the value of all accumulated past normal cost payments. This amount is compared to the actuarial value of assets to determine if the Plan is ahead or behind in funding as of the valuation date. The difference between the total actuarial accrued liability and the actuarial value of assets equals the amount of unfunded actuarial accrued liability or surplus (if negative) on the valuation date. This amount is amortized and added to the normal cost to determine the annual required contribution for the year suggested by GASB 25.

The unfunded actuarial accrued liability as of January 1, 2012 is \$1,146.0 million. This represents an increase of \$331.8 million in the unfunded actuarial accrued liability from last year's amount of \$814.2 million. The annual payment required to amortize the unfunded actuarial accrued liability of \$1,146 million as of January 1, 2012 is \$98.3 million, or 18.15% of pay.

The ARC for 2013 is \$149.3 million, or 27.57% of pay. This represents an increase of \$31.1 million in the contribution amount of \$118.1 million for 2011, or an increase of 5.21% of pay from last year's contribution rate of 22.36%.

Please note that the significant increases in the preceding two paragraphs are due to the adoption of valuing the plan assets at market value. This change increased the unfunded actuarial accrued liability by \$183.3 million.

The actuarial liabilities and development of the ARC is shown in Sections 1.1 and 1.2.

In our opinion, the measurement of the benefit obligations and determination of the actuarial cost of the Plan is performed in compliance with Actuarial Standards of Practice No. 4.

Funded Status

The funded status is a measure of the progress that has been made in funding the plan as of the valuation date. It is determined as a ratio of the actuarial value of assets divided by the total actuarial accrued liability on the valuation date. A ratio of over 100% represents a plan that is ahead in funding, and a ratio of less than 100% represents a plan that is behind in funding on the valuation date.

As of January 1, 2012 the funded ratio of the Plan is 59.2%. This represents a decrease of 4.4% due to plan experience and a decrease of 6.5% due to the change in actuarial value of assets to market effective January 1, 2012 from last year's funded ratio of 70.1% as of January 1, 2011.

A history of the unfunded actuarial accrued liability and the funded ratio is shown in Section 1.5.

Accounting Information

The Governmental Accounting Standards Board (GASB) issues statements which establish financial reporting standards for defined benefit pension plans and accounting for the pension expenditures and expenses for governmental employers. The required financial reporting information for the Plan and the Employer under GASB No. 25 can be found in Section 3.

Projections

As part of the annual actuarial valuation, a forecast of expected future valuation results is performed over a 50 year period beginning on the valuation date. This analysis provides a dynamic look into the future to identify trends in future employer contributions and funded status. The forecast replaces active members who are assumed to decrement (terminate, retire, etc.) during the period with new employees resulting in a stable active membership. The forecast assumes all actuarial assumptions are exactly realized each year during the forecast period. The results of these forecasts can be found in Section 4.

Changes in Plan Provisions

There have been no significant changes in the plan provisions which changed the meaning of the Plan according to Plan Counsel since the last actuarial valuation performed as of January 1, 2011.

Changes in Actuarial Assumptions, Methods, or Procedures

There have been no changes in the actuarial assumptions, actuarial cost method, asset valuation method, or valuation procedures since the last actuarial valuation performed as of January 1, 2011 other than the change in asset valuation method to market as discussed above.

Comparative Summary of Key Actuarial Valuation Results

2. Membership Data a. Active Employees Number 8,751 8,932 Annualized Salaries (in thousands) Average Pay 541,354 528,288 b. Terminated Participants with Vested Benefits Number 84 60 Total Monthly Accrued Benefit 176,558 114,901 Average Monthly Accrued Benefit 2,102 1,915 c. Retirees and Beneficiaries Number 8,474 8,397 Total Monthly Pension 2,067 2,008 d. Disabled Recipients Number 944 913 Number 944 913 Total Monthly Pension 1,159,164 1,082,689 Average Monthly Pension 1,228 1,186 3. Statutory Minimum Contribution Rates (as a percentage of Payroll)' 1,228 1,186 3. Statutory Minimum Contribution Rate 9,983 % 8.650 % 4. GASB Annual Required Contribution 13,966 % 11,300 % b. Employee Contribution Rate 9,983 % 8.650 % i. Amount 50,976,090 48,309,000 ii. As a % of pay 18.15 % 13.22 %		January 1, 2012	January 1, 2011
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i. Amount 155,600,474 123,158,582			
		155,600,474	123,158,582
	ii. As a % of pay		23.31 %

5. Actuarial Funded Status (\$ in thousands)		
a. Actuarial Accrued Liability	2,808,183	2,724,191
b. Actuarial Value of Assets (AVA)	1,662,196	1,909,967
c. Unfunded Accrued Liability	1,145,988	814,224
d. Funded Ratio	59.2 %	70.1 %
e. Market Value of Assets (MVA)	1,662,196	1,794,742
f. Return on MVA (prior year)	(0.9) %	11.8 %
g. Return on AVA (prior year)	(0.9) %	4.8 %

¹ Contribution rate applicable for the plan year following the year of valuation.

Section 1

Actuarial Funding Results

Section 1.1

Actuarial Liabilities and Normal Cost

Actuarial Accrued Liability	
1. Active Members	
a. Retirement Benefits	789,663,133
b. Withdrawal Benefits	25,989,952
c. Disability Benefits	33,636,547
d. Death Benefits	<u>12,935,804</u>
Total	862,225,436
2. Inactive Members with Deferred Benefits	7,989,433
3. Retired Members and Beneficiaries Receiving Benefits	1,937,968,715
4. Total Actuarial Accrued Liability (1. + 2. + 3.)	2,808,183,584

Normal Cost	
1. Active Members	
a. Retirement Benefits	44,563,615
b. Withdrawal Benefits	2,589,021
c. Disability Benefits	2,892,080
d. Death Benefits	931,374
2. Total Normal Cost (Dollar amount)	50,976,090
3. Total Normal Cost (As a % of pay)	9.42%

Section 1.2

Actuarial (Gain) / Loss (\$'s in 000's)

Developm	Amount	
1. Expecte	ed Actuarial Accrued Liability	
a. Ac	ctuarial Accrued Liability at January 1, 2011	2,724,191,000
b. No	ormal Cost at January 1, 2011	48,309,000
c. Int	terest on a. + b. to End of Year	235,662,500
d. Be	enefit Payments for 2011, with Interest to End of Year	<u>234,447,920</u>
	pected Actuarial Accrued Liability Before Changes (a. + b. + c d.)	2,773,714,580
	nange in Actuarial Accrued Liability at January 1, 2012, Due to Change in ctuarial Assumptions	0
	nange in Actuarial Accrued Liability at January 1, 2012, Due to Change in Plan rovisions	<u>0</u>
h. Ex	pected Actuarial Accrued Liability at January 1, 2012 (e. + f. + g.)	2,773,714,580
2. Actuaria	al Accrued Liability at January 1, 2012	2,808,183,584
3. Liability	(Gain)/Loss (2 1.h.)	34,469,004
4. Expecte	ed Actuarial Value of Assets	
a. Ac	ctuarial Value of Assets at January 1, 2011	1,909,967,000
b. Int	terest on a. to End of Year	162,347,195
c. Co	ontributions Made for 2011	107,487,301
d. Int	terest on c. to End of Year	4,475,054
e. Be	enefit Payments for 2011, with Interest to End of Year	234,447,920
f. Cł	nange in Actuarial Value of Assets at January 1, 2012 due to Change in Method	<u>183,334,710</u>
g. Ex	pected Actuarial Value of Assets at January 1, 2012 (a. + b. + c. + d e f.)	1,766,493,920
5. Actuaria	al Value of Assets as of January 1, 2012	1,662,195,612
6. Actuaria	al Asset (Gain)/Loss (4.g 5.)	104,298,308
7. Actuaria	al (Gain)/Loss (3. + 6.)	138,767,312

Section 1.3

Actuarial Balance Sheet

Financial Resources	January 1, 2012
1. Actuarial Value of Assets (market)	1,662,195,612
2. Present Value of Future Contributions	496,188,060
3. Unfunded Actuarial Accrued Liability/(Reserve)	<u>1,145,987,972</u>
4. Total Assets (1 + 2 + 3)	3,304,371,644
Benefit Obligations	January 1, 2012
1. Present Value of Future Benefits	

a.	Active Members	1,358,413,496
b.	Inactive Members	7,989,433
C.	Retirees, disabilities and beneficiaries	<u>1,937,968,715</u>
d.	Total	3,304,371,644

Section 1.4

History of UAAL and Funded Ratio
(\$'s in 000's)

Valuation Date	Actuarial Accrued Liability (AAL)	Actuarial Value of Assets (AVA)	Funded Ratio (AVA as a % of AAL)	Unfunded Actuarial Accrued Liability (UAAL)
January 1, 2012	2,808,184	1,662,196	59.2%	1,145,988
January 1, 2011	2,724,191	1,909,967	70.1%	814,224
January 1, 2010	2,588,462	1,936,849	74.8%	651,613
January 1, 2009	2,632,356	1,995,953	75.8%	636,403
January 1, 2008	2,531,440	941,864	37.2%	1,589,576
January 1, 2007	2,466,106	1,007,305	40.8%	1,458,801
January 1, 2006	2,354,125	810,336	34.4%	1,543,789
			39.4%	
January 1, 2005	2,291,162	902,117		1,389,045
January 1, 2004	2,189,666	1,062,399	48.5%	1,127,267
January 1, 2003	2,085,723	1,190,087	57.1%	895,636

Section 1.5

Solvency Test - Comparative Summary of Accrued Liability and Actuarial Value of Assets

	Ac	crued Liability fo	or:			of Accrued by Actuaria Assets	
	(1)	(2)		(1)	(2)	(3)	
		Detirooo	Active Member				
		Retirees,					
Valuation	Active	Beneficiaries,	(Employer	Actuarial			
as of	Member	TVRs and	Financed	Value of			
January 1	Contributions	Disableds	Portion)	Assets ¹			
2012	271,327,054	1,945,958,148	590,898,382	1,662,195,612	100 %	71.47 %	0.00 %
2011	242,723,521	1,866,770,851	594,696,243	1,909,967,120	100 %	88.36 %	0.00 %

^{1.} Excludes health care assets.

Section 1.6

	Board Adopted Contribution Rates			Boar	Board Adopted Contributions				
Year	Employee Contribution Percent	Employer Contribution Percent	Total Percent	Employee Contribution	Employer Contribution	Total Contribution	Actuarial Accrued Liability	Actuarial Value of Assets (Market)	Funded Ratio
2012	8.650%	11.300%	19.950%				2,808,183,584	1,662,195,612	59.19%
2013	10.125%	14.250%	24.375%	57,077,761	80,331,663	137,409,424	2,866,512,259	1,675,185,883	58.44%
2014	10.125%	14.250%	24.375%	58,071,894	81,730,813	139,802,707	2,942,362,790	1,715,694,745	58.31%
2015	10.125%	14.250%	24.375%	60,017,201	84,468,653	144,485,854	3,026,052,487	1,758,231,836	58.10%
2016	10.125%	14.250%	24.375%	62,159,938	87,484,358	149,644,296	3,096,040,025	1,804,720,352	58.29%
2017	10.125%	14.250%	24.375%	64,433,153	90,683,697	155,116,850	3,169,509,774	1,855,649,646	58.55%
2018	10.125%	14.250%	24.375%	66,758,160	93,955,929	160,714,089	3,246,032,466	1,911,339,047	58.88%
2019	10.125%	14.250%	24.375%	69,218,456	97,418,567	166,637,023	3,325,400,109	1,971,788,874	59.29%
2020	10.125%	14.250%	24.375%	71,726,418	100,948,292	172,674,710	3,406,871,695	2,036,998,630	59.79%
2021	10.125%	14.250%	24.375%	74,245,057	104,493,043	178,738,100	3,488,954,385	2,106,115,921	60.37%
2022	10.125%	14.250%	24.375%	76,890,098	108,215,693	185,105,791	3,570,404,535	2,178,262,132	61.01%
2023	10.125%	14.250%	24.375%	79,739,681	112,226,217	191,965,898	3,651,314,144	2,254,367,843	61.74%
2024	10.125%	14.250%	24.375%	82,615,313	116,273,403	198,888,716	3,731,884,975	2,335,312,781	62.58%
2025	10.125%	14.250%	24.375%	85,583,849	120,451,343	206,035,192	3,811,211,237	2,420,874,092	63.52%
2026	10.125%	14.250%	24.375%	88,683,317	124,813,557	213,496,874	3,889,400,616	2,511,335,296	64.57%
2027	10.125%	14.250%	24.375%	91,871,768	129,301,006	221,172,774	3,966,257,337	2,607,145,361	65.73%
2028	10.125%	14.250%	24.375%	95,223,047	134,017,622	229,240,669	4,040,913,546	2,708,544,244	67.03%
2029	10.125%	14.250%	24.375%	98,872,713	139,154,189	238,026,902	4,113,449,853	2,816,995,991	68.48%
2034	10.125%	14.250%	24.375%	121,152,091	170,510,350	291,662,441	4,510,283,141	3,566,423,164	79.07%
2035	10.125%	14.250%	24.375%	126,433,027	177,942,778	304,375,805	4,610,168,904	3,779,672,761	81.99%
2036	10.125%	14.250%	24.375%	132,086,032	185,898,859	317,984,891	4,722,654,084	4,023,086,530	85.19%
2037	10.125%	14.250%	24.375%	138,090,166	194,349,122	332,439,288	4,851,093,317	4,301,384,061	88.67%
2038	10.125%	14.250%	24.375%	144,405,431	203,237,273	347,642,704	4,998,386,478	4,619,176,217	92.41%
2039	10.125%	14.250%	24.375%	151,012,701	212,536,394	363,549,095	5,168,578,928	4,981,922,283	96.39%

Section 2

Plan Assets

Section 2.1

	As of December 31		
	2011	2010	
ASSETS			
 Total investments, at fair value Invested securities lending cash 	1,657,097	1,789,227	
3. Receivables:	234,653	244,925	
a. Employer contributions	5,019	5,704	
b. Employee contributions	3,924	4,453	
c. Securities sold, but not received	10,706	3,028	
d. Accrued interest and dividends	2,153	2,301	
e. Other	<u>881</u>	<u>1,358</u>	
4. Total assets	1,914,433	2,050,996	
LIABILITIES			
1. Payable upon return of securities	234,653	244,925	
2. Accounts payable	5,475	4,052	
3. Other payables	0	896	
4. Securities purchased, but not paid	<u>12,109</u>	<u>6,381</u>	
Total liabilities	252,237	256,254	
Net assets held in trust for Plan benefits	1,662,196	1,794,742	

Statement of Net Plan Assets (\$'s in 000's)

Section 2.2

	2011	2010
ADDITIONS		
1. Net investment (loss) income	(12,976)	197,317
2. Employer contributions	60,318	56,216
3. Employee contributions	47,169	45,265
4. Other income	4	0
Total additions	94,515	298,798
DEDUCTIONS		
1. Benefit payments	222,198	216,217
2. Contribution refunds, including interest	2,879	2,128
3. Administrative expenses	<u>1,984</u>	2,028
Total liabilities	227,061	220,373
NET ASSETS HELD IN TRUST FOR PLAN BENEFITS		
1. Beginning of year	1,794,742	1,716,317
2. Net (decrease) increase	<u>(132,546)</u>	<u> </u>
End of year	1,662,196	1,794,742

Changes in Net Plan Assets (\$'s in 000's)

Section 2.3

Actuarial Value of Assets

The actuarial value of assets is the market value as of January 1, 2012 of \$1,662,195,612.

Section 2.4

Historical Asset Rate of Return

Year Ending December 31	Actuarial Value Annual Recognized Rate of Return	Fair Value Annual Market Rate of Return
2012	3.13% ¹	3.13% ¹
2011	4.80%	11.80%
2010	4.10%	6.60%

¹ As reported by the Plan.

Section 2.5

Year Ending	Active	Inactive	
December 31	Members	Members	Total Payments
2012	7,516,459	223,549,651	231,066,110
2013	16,089,676	218,982,136	235,071,812
2014	24,304,814	214,313,974	238,618,788
2015	33,138,499	209,456,404	242,594,903
2016	42,286,852	204,406,731	246,693,583
2017	51,877,147	199,093,481	250,970,628
2018	61,983,461	193,592,772	255,576,233
2019	72,932,017	187,796,888	260,728,905
2020	85,087,459	181,932,902	267,020,361
2021	98,588,085	175,721,554	274,309,639
2022	112,361,654	169,393,769	281,755,423
2023	126,302,933	162,806,094	289,109,027
2024	140,936,529	156,121,300	297,057,829
2025	155,926,061	149,327,703	305,253,764
2026	171,461,964	142,176,738	313,638,702
2027	187,384,585	134,965,553	322,350,138
2028	202,834,093	127,589,527	330,423,620
2029	217,080,322	120,225,687	337,306,009
2030	230,036,998	112,707,716	342,744,714
2031	241,279,814	105,249,866	346,529,680
2032	251,757,902	97,779,800	349,537,702
2033	261,320,244	90,362,775	351,683,019
2034	269,344,630	83,069,632	352,414,262
2035	275,475,545	75,942,464	351,418,009
2036	280,060,116	69,022,969	349,083,085
2037	283,339,410	62,365,700	345,705,110
2038	284,505,604	55,981,435	340,487,039
2039 2040	283,707,708	49,919,596	333,627,304
2040 2041	281,575,468 277,975,378	44,210,853 38,879,762	325,786,321 316,855,140
2041	273,142,992	33,944,067	307,087,059
2042	267,084,592	29,414,623	296,499,215
2043	260,083,218	25,295,480	285,378,698
2044	252,110,256	21,583,957	273,694,213
2046	243,614,552	18,270,859	261,885,411
2047	234,410,341	15,341,111	249,751,452
2048	224,534,220	12,774,811	237,309,031
2049	214,253,567	10,548,403	224,801,970
2050	203,616,696	8,635,743	212,252,439
2051	192,680,128	7,009,011	199,689,139
2052	181,444,193	5,639,554	187,083,747
2053	170,166,144	4,498,605	174,664,749
2054	158,883,745	3,557,955	162,441,700
2055	147,692,887	2,790,566	150,483,453
2056	136,660,245	2,171,056	138,831,301
2057	125,849,306	1,676,084	127,525,390
2058	115,352,704	1,284,595	116,637,299
2059	105,217,629	977,971	106,195,600
2060	95,494,168	740,058	96,234,226
2061	86,216,406	557,098	86,773,504
2062	77,424,973	417,561	77,842,534
2063	69,145,459	311,938	69,457,397
2064	61,396,510	232,511	61,629,021

Forecast of Expected Benefit Payments

buckconsultants⁻

Year Ending	Active	Inactive	
December 31	Members	Members	Total Payments
2065	54,189,695	173,125	54,362,820
2066	47,529,525	128,941	47,658,466
2067	41,414,002	96,203	41,510,205
2068	35,835,410	72,025	35,907,435
2069	30,780,915	54,212	30,835,127
2070	26,233,298	41,112	26,274,410
2071	22,171,814	31,488	22,203,302
2072	18,572,966	24,419	18,597,385
2073	15,411,060	19,223	15,430,283
2074	12,658,545	15,395	12,673,940
2075	10,286,208	12,562	10,298,770
2076	8,263,454	10,449	8,273,903
2077	6,558,695	8,852	6,567,547
2078	5,139,711	7,622	5,147,333
2079	3,974,120	6,651	3,980,771
2080	3,030,022	5,859	3,035,881
2081	2,276,620	5,189	2,281,809
2082	1,684,743	4,601	1,689,344
2083	1,227,304	4,067	1,231,371
2084	879,703	3,573	883,276
2085	620,128	3,110	623,238
2086	429,726	2,676	432,402
2087	292,607	2,272	294,879
2088	195,698	1,899	197,597
2089	128,506	1,561	130,067
2090	82,820	1,258	84,078
2091	52,369	994	53,363
2092	32,477	768	33,245
2093	19,746	580	20,326
2094	11,767	427	12,194
2095	6,871	305	7,176
2096	3,931	212	4,143
2097	2,203	143	2,346
2098	1,209	94	1,303
2099	650	59	709
2100	343	36	379
2101	177	21	198
2102	90	12	102
2103	45	7	52
2104	22	4	26
2105	11	2	13
2106	5	1	6
2107	2	0	2
2108	1	0	1
2109	0	0	0

Note: Forecast based on the present employees without assumption about replacement employees.

Section 3

Accounting Information

Section 3.1

Schedule of Funding Progress (\$'s in 000's)

The GASB Statement No. 25 liabilities and assets resulting from the last ten actuarial valuations are as follows:

Actuarial Valuation Date		Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Projected Unit Credit (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b-a)/c]
January 1, 2012	1	1,662,196	2,808,184	1,145,988	59.19%	541,354	211.69%
January 1, 2011	2	1,909,967	2,724,191	814,224	70.11%	528,288	154.13%
January 1, 2010		1,936,849	2,588,462	651,613	74.83%	567,173	114.89%
January 1, 2009		1,995,953	2,632,356	636,403	75.82%	594,139	107.11%
January 1, 2008	3	941,864	2,531,440	1,589,576	37.21%	571,314	278.23%
January 1, 2007	4	1,007,305	2,466,106	1,458,801	40.85%	562,567	259.31%
January 1, 2006		810,336	2,354,125	1,543,789	34.42%	547,532	281.95%
January 1, 2005		902,117	2,291,162	1,389,045	39.37%	544,442	255.13%
January 1, 2004		1,062,399	2,189,666	1,127,267	48.52%	486,626	231.65%
January 1, 2003		1,190,087	2,085,723	895,636	57.06%	480,740	186.30%

¹ Effective January 1, 2012, the actuarial value of assets was changed to market value.

² Effective January 1, 2011, the rate of return for disclosure purposes was changed to 8.50 percent.

³ Effective January 1, 2008, the rate of return for disclosure purposes was changed to 8.75 percent. Prior year's information is based on a rate of 9.00 percent as defined in the terms of the bargaining agreement.

⁴ Effective January 1, 2007, retiree healthcare assets have been marked to the market value of the retiree healthcare account, and are disclosed under GASB No. 43. Previously, retiree healthcare assets disclosed under GASB No. 25 were allocated in proportion to actuarial accrued liabilities. Note that the increase in funded ratio is predominantly due to this change and without this change the funded ratio would have declined.

Section 3.2

Schedule of Employer Contributions (\$'s in 000's)

The GASB Statement No. 25 required contributions and actual percentages contributed over the last ten years are as follows:

Fiscal Year Ended December 31	Valuation Date December 31	Authority Contribution	Employee Contribution	Total Contribution	Annual Required Contribution	Percentage Contributed
2012	2011	60,318	47,169	107,487	123,158	87.3%
2011	2010	56,216	45,265	101,481	108,478	93.5%
2010	2009	41,448	34,974	76,422	118,717	64.4%
2009	2008	1,165,947	27,798	1,193,745	206,670	577.6%
2008	2007	25,038	12,549	37,587	198,457	18.9%
2007	2006	23,931	11,971	35,902	194,926	18.4%
2006	2005	19,850	9,784	29,634	180,227	16.4%
2005	2004	20,210	10,123	30,333	153,253	19.8%
2004	2003	19,570	9,813	29,383	117,305	25.0%
2003	2002	19,766	9,883	29,649	97,044	30.6%

Section 3.3

Notes to Trend Data

Actuarial Assumptions, Method and Additional Information under GASB No. 25

Valuation Date:	January 1, 2012
Actuarial Cost Method:	Projected Unit Credit
Amortization Method:	Level Dollar
Amortization Period:	30
Asset Valuation Method:	Market Value
Investment Rate of Return	8.50%
Salary Increases (including merit increases and wage inflation)	1.5% for 2012-2014, and service graded table with 5% ultimate rate after 5 years of service

Section 4

Projections

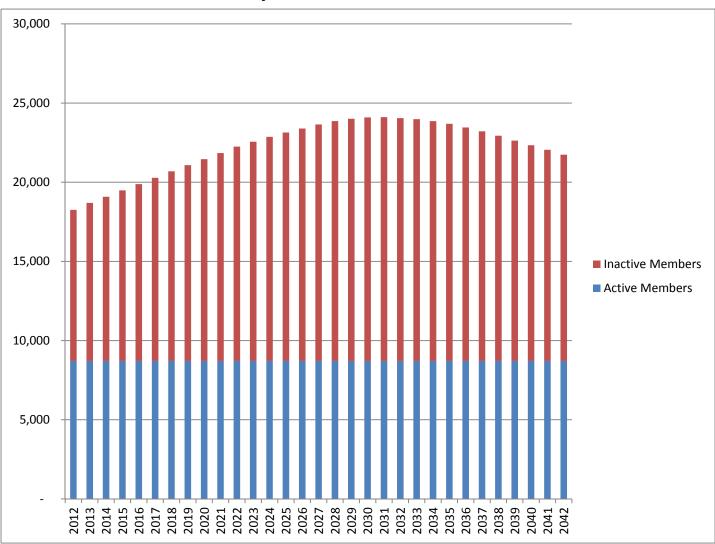
Section 4.1

Projection Assumptions and Methods

Key Assumptions

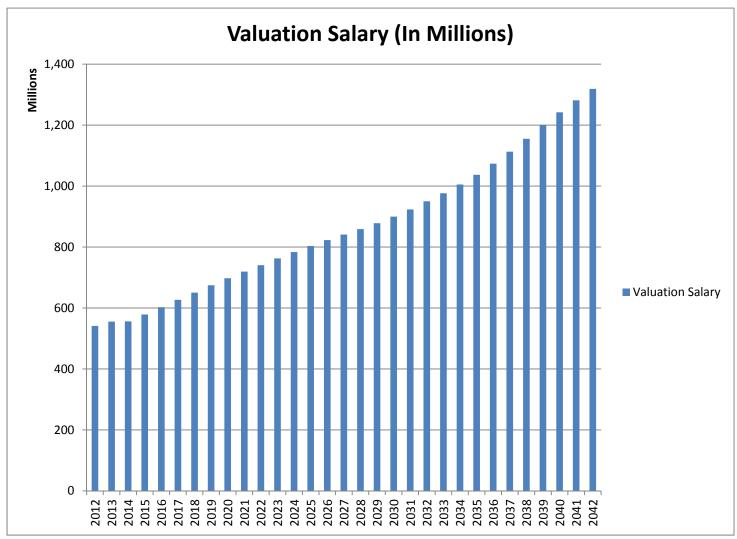
- 8.5% investment return on the Fair Value of Assets in all future years.
- The Actuarial Value of Assets is the Market Value of Assets.
- Actuarial assumptions and methods as described in Section 6. All future demographic experience is assumed to be exactly realized.
- The actuarially calculated contribution is contributed each year.
- Projections assume a 0% increase in the total active member population. All new future members are expected to enter the plan after 12 months of continuous service and contribution rates are determined as a percent of total payroll.

Section 4.2



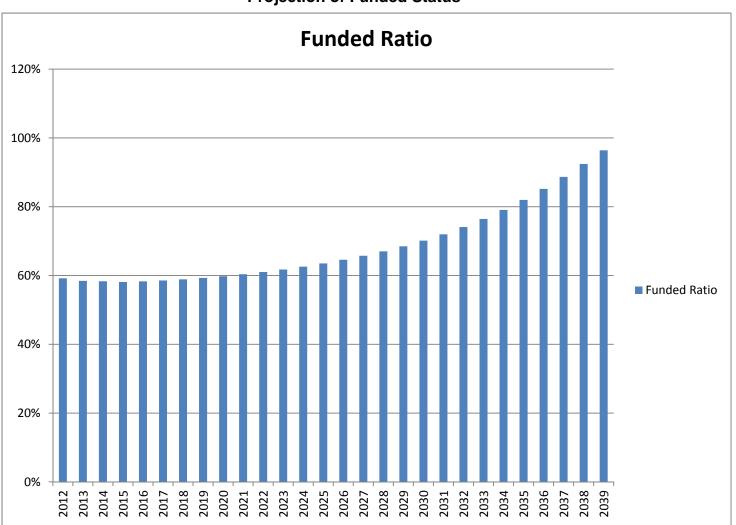
Membership Projection Projected Member Count

Section 4.2 (cont'd)



Membership Projection Projected Current and New Member Payroll

Section 4.3



Projection of Funded Status

Section 5

Member Data

Section 5.1

Retirement Plan for CTA Employees Summary of Membership Data as of January 1, 2012 (\$ in thousands)

Active Employees

Item	Male	Female	Total
	0.070	0.070	0.754
Number of Members	6,079	2,672	8,751
Annual Salaries ²	\$395,584	\$145,770	\$541,354
Average Age ¹	47.82	46.46	47.41
Average Service ¹	14.46	12.43	13.84

Terminated Vested Employees

ltem	Ма	ale	Ferr	ale	Tota	l
Number of Members		65		19		84
Annual Accrued Benefit	\$	1,612	\$	507	\$	2,119
Average Age		55.34		54.46		55.14

Retirees and Beneficiaries

Item	Male		Female		Total	
Number of Members		6.569		1.905		8,474
Annual Retirement Benefit	\$	175,684	\$	34,456	\$	210,140
Average Age		69.22		70.75		69.57

Disabled Retirees

Item	Ма	le	Ferr	nale	Tot	al
Number of Members		570		374		944
Annual Disability Benefit	\$	8,822	\$	5,088	\$	13,910
Average Age		63.57		62.23		63.04

¹ Active statistics include all participants who are actively employed which includes 10 participants who are on leave and 38 participants who have opted out of participating in the Plan and are only entitled to a return of their contributions.

² The salary information for the 38 participants who have opted out of participating in the Plan is not included.

Section 5.2

Retirement Plan for CTA Employees Active Membership Data as of January 1, 2012 <u>Number of Participants</u>

				Yea	ars of Sei	vice				
Age	Under 5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	Over 40	Total
Under 25	15	1	-	-	-	-	-	-	-	16
25-29	166	92	7	-	-	-	-	-	-	265
30-34	182	356	141	2	-	-	-	-	-	681
35-39	169	346	343	92	2	-	-	-	-	952
40-44	165	405	506	315	131	3	-	-	-	1,525
45-49	120	309	475	366	364	108	-	-	-	1,742
50-54	105	272	441	277	339	190	43	-	-	1,667
55-59	71	158	242	188	225	131	84	37	1	1,137
60-64	35	93	126	107	114	56	35	15	20	601
Over 65	6	25	32	27	31	12	14	6	12	165
Total	1,034	2,057	2,313	1,374	1,206	500	176	58	33	8,751

Section 5.3

Retirement Plan for CTA Employees Retiree and Beneficiary Census Data as of January 1, 2012 <u>Number and Average Annual Allowance</u>

Age Last Birthday	Number	Α	nnual Allowance	Aver	age Allowance
Retired Annuitants					
Under 50	23	\$	881,723	\$	38,336
50-54	208	\$	7,955,714	\$	38,249
55-59	782	\$	27,346,068	\$	34,969
60-64	1,702	\$	51,389,727	\$ \$ \$ \$ \$	30,194
65-69	1,985	\$	53,036,869	\$	26,719
70-74	1,357	\$	32,817,697	\$	24,184
75-79	781	\$	15,555,100	\$	19,917
Over 79	856	\$	13,423,038	\$	15,681
Total	7,694	\$	202,405,936	\$	26,307
Surviving Spouses					
Under 50	8	\$	95,600	\$	11,950
50-54	20	\$	276,670	\$	13,834
55-59	32	\$	383,974	\$	11,999
60-64	65	\$	1,042,880	\$ \$ \$ \$ \$	16,044
65-69	103	\$	1,152,528	\$	11,190
70-74	108	\$	1,082,534	\$	10,023
75-79	116	\$	1,147,034	\$	9,888
Over 79	328	\$	2,552,867	\$	7,783
Total	780	\$	7,734,087	\$	9,915
Disability Allowances					
Under 50	79	\$	1,276,612	\$	16,160
50-54	103	\$	1,718,849	\$	16,688
55-59	134	\$	2,246,366	\$	16,764
60-64	224	\$	3,326,085	\$	14,849
65-69	196	\$	2,780,758	\$ \$ \$	14,188
70-74	126	\$	1,569,598	\$	12,457
75-79	63	\$	792,591	\$	12,581
Over 79	<u>19</u>	\$	<u>199,113</u>	\$	10,480
Total	944	\$	13,909,972	\$	14,735

Section 5.4

Retirement Plan for CTA Employees Terminated Vested Employee Data as of January 1, 2012 <u>Number and Average Accrued Benefit</u>

Age Last Birthday	Number	Annual	Accrued Benefit	Average A	Accrued Benefit
Terminated Vested					
Under 35	0	\$	-	\$	-
35-39	1	\$	15,592	\$	15,592
40-44	2	\$	31,379	\$	15,690
45-49	14	\$	448,293	\$	32,021
50-54	23	\$	654,049	\$	28,437
55-59	26	\$	696,460	\$	26,787
60-64	18	\$	272,919	\$	15,162
65-69	0	\$	-	\$	-
Over 70	<u>0</u>	\$	-	\$	-
Total	84	\$	2,118,692	\$	25,223

Section 6

Basis of the Actuarial Valuation

Section 6.1

Summary of Plan and Contribution Provisions

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. Exempt non-vested employees may opt out of the plan. Chicago Transit Authority Board members are not included.

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:

	Contribution Percentage			
Dates	Authority	Employees		
July 1, 1997 until January 18, 2008	6%	3%		
January 18 and thereafter	12%	6%		

For years through 2040, the amount paid by the Authority with respect to debt service on bonds issued for contribution to the Retirement Plan shall be treated as a credit against the amount of required contribution up to an amount not to exceed six percent of compensation paid by the Authority in the following year.

Minimum contributions as set forth elsewhere in this report may also apply.

Normal Retirement—The normal retirement age is 65. For employees retiring on or after January 1, 2001 the annual normal retirement pension is equal to the sum of (a) and (b) below, but not greater than 70.0% 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
- (b) 2.15% of average annual compensation for each year (and fraction of completed calendar months) of continuous service after June 1, 1949.

Average annual compensation is equal to the highest average compensation over any four 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.

Section 6.1(cont'd)

Summary of Plan and Contribution Provisions

Early Retirement:

Employees hired before January 18, 2008: An employee may retire early after attaining age 55 and completing at least three 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. Employees hired after September 5, 2001 may retire early with unreduced benefits after attaining age 55 and completing at least 25 years of service.

Employees hired on and after January 18, 2008: An employee may retire with unreduced benefits upon attainment of age 64 with 25 years of service. An employee may retire with a benefit reduced as described above upon attainment of age 55 with 10 years of continuous service.

Disability Allowance:

An employee is eligible for a disability allowance if he becomes disabled after completing 10 years of service, or if his disability after completing five 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.

Section 6.1(cont'd)

Summary of Plan and Contribution Provisions

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:

Age	Service	Age + Service	Death Benefit
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

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.

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 6.1(cont'd)

Summary of Plan and Contribution Provisions

Ad hoc increases in retiree benefits:

As part of the Arbitration Award ruling of November 13, 2003, the following ad hoc increases were given to retirees in payment status as of January 1, 2000:

- (a) \$75 per month for members retired before January 1,1980
- (b) \$50 per month for members who retired on or after January 1, 1980, but before January 1, 1991
- (c) \$40 per month for members who retired on or after January 1, 1991, but before January 1, 2000

As part of an Arbitration Award ruling of June 26, 2007, another ad hoc adjustment was made for participants.

Contribution Requirements Under P.A. 95-0708

Beginning January 18, 2008, the Authority shall make contributions to the Retirement Plan in an amount equal to 12 percent of compensation and participating employees shall make contributions in an amount equal to six percent of compensation. For years through 2040, the amount paid by the Authority with respect to debt service on bonds issued for contribution to the Retirement Plan shall be treated as a credit against the amount of required contribution, up to an amount not to exceed six percent of compensation paid by the Authority in the following year.

If the funded ratio is projected to decline below 60 percent in any year before 2040 using reasonable actuarial assumptions and the projected unit credit funding method, the contribution shall be increased so that the funded ratio is not projected to drop below 60 percent. If the funded ratio actually drops below 60 percent in any year before 2040, the contribution shall be increased so that the funded ratio is projected to reach 60 percent within 10 years. The increase in contributions shall be effective as of the January 1 following the determination, or 30 days following the determination, whichever is later. One-third of the increase in contributions shall be paid by participating employees and two-thirds by the Authority.

Beginning in 2040, the minimum contribution for each fiscal year shall be predetermined each year as the amount required to bring the total assets of the Retirement Plan up to 90 percent of the total actuarial liabilities by the end of 2059, using the projected unit credit funding actuarial cost method and reasonable actuarial assumptions. Participating employees shall be responsible for one-third of the required contribution and the Authority shall be responsible for two-thirds of the required contribution.

Beginning in 2060, the minimum contribution for each year shall be an amount needed to maintain the total assets of the Retirement Plan at 90 percent of the total actuarial liabilities of the Plan and the contribution shall be funded one-third by participating employees and two-thirds by the Authority.

Section 6.2

Description of Actuarial Methods and Valuation Procedures

A. Actuarial Cost Method

Liabilities and contributions shown in this report are computed using the **Projected Unit Credit Cost Method** of funding.

Sometimes called a "funding method," this is a particular technique used by actuaries for establishing the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily the annual contribution to the plan is comprised of (1) the normal cost and (2) an amortization payment on the unfunded actuarial accrued liability.

Under the Projected Unit Credit Cost Method, the **Normal Cost** for the given year is computed as the present value of the unit of benefit attributable to that year for each active Member. The Normal Cost for the Plan is determined by summing individual results for each active Member.

The **Actuarial Accrued Liability** under this method at any point in time is the total present value of benefit accrued to date for all Active and Inactive members, along with the total present value of the current benefit amounts for Retired members and beneficiaries.

The **Unfunded Actuarial Accrued Liability** is the excess of the Actuarial Accrued Liability over the Actuarial Value of Plan Assets actually on hand on the valuation date. The Unfunded Actuarial Accrued Liability is amortized as a level dollar amount over a fixed period of 30 years.

Under this method experience gains or losses, i.e. decreases or increases in accrued liabilities attributable to deviations in experience from the actuarial assumptions, adjust the Unfunded Actuarial Accrued Liability.

Section 6.2 (cont'd)

Description of Actuarial Methods and Valuation Procedures

B. Asset Valuation Method

The actuarial value of assets equals the market value of assets.

C. Valuation Procedures

No actuarial liability is included for members who terminated non-vested prior to the valuation date, except those due a refund of contributions.

The compensation amounts used in the projection of benefits and liabilities were January 1, 2012, rates of pay provided by staff of the Retirement Board of Trustees.

No termination or retirement benefits were projected to be greater than the dollar limitation required by the Internal Revenue Code Section 415 for governmental plans.

Annual increases in salary were limited to the dollar amount defined under Internal Revenue Code Section 401(a)(17) for affected members.

Section 6.3

Summary of Actuarial Assumptions and Changes in Assumptions

Rate of Covered Pay: The rate of covered pay for participants has been estimated at \$541,353,693 for 2012. The following adjustments were made to the actual covered earnings for 2011 supplied by the Authority:

- (a) No earnings or a fractional year of earnings were submitted for employees with a work status date in 2011 who were hired during 2010. We have annualized the 2011 earnings and assumed minimum earnings of \$25,000 per year for this group.
- (b) For employees on layoff, extended leave of absence, or inactive status, we have assumed minimum earnings of \$25,000 per year.
- (c) For employees whose 2011 earnings were less than \$20,000, we have assumed an annual rate of \$25,000 per year.
- (d) For all employees, 2012 salary was assumed to increase 1.50% from 2011.

Retiree Benefits: The benefit amounts received for retirees were compared to information received from the Authority for the prior valuation.

Earnings on Plan Assets: 8.50% per annum, compounded annually.

Salary Inflation:	2012-2014:	1.50%
	2015 and after:	4.00%

Compensation Increases: According to the following table, compounded annually, assumed end of year (includes inflation):

Years of	Year-over-year Compe	ensation Increases
 Service	2012-14	2015 and after
1	1.50%	15.00%
2	1.50%	13.00%
3	1.50%	11.00%
4	1.50%	9.00%
>=5	1.50%	5.00%

Mortality:

- (a) Active Members The 1994 Group Annuity Mortality Table for males and females multiplied by 90 percent.
- (b) *Retirees & Survivors* The 1994 Group Annuity Mortality Table for males and females.
- (c) *Disabled Employees* The 1994 Group Annuity Mortality Table for males and females multiplied by 110 percent.

Section 6.3 (cont'd)

Summary of Actuarial Assumptions and Changes in Assumptions

Withdrawals from Service: According to the following table shown for illustrative ages:

Age	Rates of Termination for Reasons Other than Death or Disability
25	7.50%
30	5.60%
35	4.60%
40	3.40%
45	2.90%
50	2.40%
55 & Older	0.50%

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

In addition, active headcount was assumed to remain flat for all years in the future.

Recovery from disability without returning to work: Disabled members are assumed to recover according to the following table as shown for illustrative ages:

Sample Attained	Disabled Recovery ¹		
Ages	Men	Women	
30	0.412%	0.461%	
35	0.406%	0.447%	
40	0.382%	0.422%	
45	0.326%	0.393%	
50	0.216%	0.343%	
55	0.013%	0.248%	
60	0.000%	0.012%	
65	0.000%	0.000%	
70	0.000%	0.000%	
75	0.000%	0.000%	
80	0.000%	0.000%	

1. Disability recovery after verification of the ability to return to work in the same position as determined by the Plan's Disability manager.

Section 6.3 (cont'd)

Summary of Actuarial Assumptions and Changes in Assumptions

Disability Allowance: According to the following table as shown for illustrative ages:

Age	Rate of Disability
25	0.10%
30	0.10%
35	0.20%
40	0.30%
45	0.40%
50	0.50%
55	0.60%
60	0.70%
65 & older	0.78%

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

Section 6.3 (cont'd)

Summary of Actuarial Assumptions and Changes in Assumptions

Service Retirements^{1,2}:

Age	Pre 9/5/2001 Hires Probability of Retirement				Post 1/18/2008 Hires Probability of Retirement	
	Service<25	Service>25	Service<25	Service>25	Service<25	Service>25
55	1.50%	25.00%	1.50%	25.00%	1.50%	1.50%
56	1.50%	27.50%	1.50%	27.50%	1.50%	1.50%
57	2.00%	30.00%	2.00%	30.00%	2.00%	2.00%
58	2.00%	32.50%	2.00%	32.50%	2.00%	2.00%
59	2.00%	35.00%	2.00%	35.00%	2.00%	2.00%
60	2.50%	37.50%	2.50%	37.50%	2.50%	2.50%
61	4.00%	40.00%	4.00%	40.00%	4.00%	4.00%
62	15.00%	42.50%	15.00%	42.50%	20.00%	20.00%
63	15.00%	45.00%	15.00%	45.00%	15.00%	15.00%
64	20.00%	47.50%	20.00%	47.50%	15.00%	15.00%
65	30.00%	50.00%	30.00%	50.00%	60.00%	60.00%
66	30.00%	50.00%	30.00%	50.00%	25.00%	25.00%
67	30.00%	60.00%	30.00%	60.00%	25.00%	25.00%
68	50.00%	70.00%	50.00%	70.00%	25.00%	25.00%
69	50.00%	80.00%	50.00%	80.00%	25.00%	25.00%
70	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

1. Rates apply only for members with greater than 10 years of service. Members with less than 10 years of service are assumed to defer retirement until eligible for retiree healthcare benefits. For all ages 55 and above, 10% is added to the rate at 10 years of service.

2. 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.

Spouse Data: 75% of employees eligible at retirement are assumed to be married, 50% of those married are assumed to elect a spouse option (Option A–50%) and the average equivalency factor to convert their accrued pension to a spouse option (Option A–50%) is assumed to be 85%. A wife is assumed to be 3 years younger than her husband. Actual dependent coverage data was used for participants retired as of the valuation date.

Section 6.3 (cont'd)

Summary of Actuarial Assumptions and Changes in Assumptions

Miscellaneous and Technical Assumptions:

Pay Increase Timing:	End of (Fiscal) year.
Decrement Timing:	Decrements of all types are assumed to occur mid-year.
Eligibility Testing:	Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.
Benefit Service:	Exact fractional service from date of participation is used to determine the amount of benefit payable.
Decrement Relativity:	Decrement rates are used directly based on assumptions, without adjustment for multiple decrement table effects.
Decrement Operation:	Disability and turnover do not operate after 25 years of service.

GLOSSARY OF TERMS

Actuarial Accrued Liability	Total accumulated cost to fund pension benefits arising from service in all prior years.
Actuarial Cost Method	Technique used to assign or allocate, in a systematic and consistent manner, the expected cost of a pension plan for a group of plan members to the years of service that give rise to that cost.
Actuarial Present Value of Future Benefits	Amount which, together with future interest, is expected to be sufficient to pay all future benefits.
Actuarial Valuation	Study of probable amounts of future pension benefits and the necessary amount of contributions to fund those benefits.
Actuary	Person who performs mathematical calculations pertaining to pension and insurance benefits based on specific procedures and assumptions.
Annual Required Contribution	Disclosure measure of annual pension cost.
GASB 25	Governmental Accounting Standards Board Statement Number 25 which specifies how the Annual Required Contribution (ARC) is to be calculated.
Maturity Ratio	The ratio of the actuarial accrued liability for members who are no longer active to the total actuarial accrued liability. A ratio of over 50% indicates a mature plan. The higher the maturity ratio, the more volatile the contribution rate will be from year to year given actuarial gains and losses.
Normal Cost	That portion of the actuarial present value of benefits assigned to a particular year in respect to an individual participant or the plan as a whole.
Unfunded Actuarial Accrued Liability (UAAL)	The portion of the actuarial accrued liability not offset by plan assets.
Vested Benefits	Benefits which are unconditionally guaranteed regardless of employment status.