Gabriel Roeder Smith & Company
Consultants & Actuaries

DENVER EMPLOYEES RETIREMENT PLAN

ACTUARIAL VALUATION REPORT

AS OF JANUARY 1, 2011

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August 23, 2011

Board of Trustees
Denver Employees Retirement Plan
777 Pearl St
Denver, CO 80203

Re: Denver Employees Retirement Plan Actuarial Valuation as of January 1, 2011

Dear Board Members:

The results of the January 1, 2011 Annual Actuarial Valuation of the Denver Employees Retirement Plan (DERP) are presented in this report. The purpose of the valuation is to measure the Plan's funding progress and to determine the employer contribution rate for the next fiscal year.

This report was prepared at the request of the DERP Board and is intended to be used by those designated by the Board. This report may be provided to parties other than DERP only in its entirety and only with the permission of DERP.

Regarding the contribution rate for the next fiscal year (2011), there is an increase in the Total Computed Contribution Rate for the Pension and Medical Plans, as shown on pages 8 and 9 of the valuation report. This is primarily due to continued recognition of the 2008 asset losses and the loss of $25.9M in the Actuarial Accrued Liability in the Pension Plan. The Total Computed Contribution Rate (Pension and Medical) has increased from 15.03% for 2010 to 16.51% for 2011. The Total Contribution Amount (Pension and Medical) has increased from $76.1M for 2010 to $85.4M for 2011. Receiving this contribution is actuarially necessary to help improve and stabilize the funded status of the Pension and Retiree Medical Plans.

The valuation was based upon information, furnished by DERP, concerning Plan benefits, financial transactions, active members, terminated members, retirees and beneficiaries. We checked for internal and year-to-year consistency, but did not otherwise audit the data. These calculations may be subject to certain provisions of the agreement between DHHA and DERP. This letter and these calculations are not intended as legal or accounting advice, and we would recommend review by legal counsel for the compliance of these calculations with all relevant agreements.

The valuation results summarized in this report involve actuarial calculations that require assumptions about future events for the Pension Plan, Retiree Medical Plan, and Denver Health and Hospital Authority (DHHA). We believe that the assumptions and methods used in this report are reasonable and appropriate for the purpose for which they have been used. However, other assumptions and methods could also be reasonable and could result in materially different results. In addition, because it is not possible or practical to consider every possible contingency, we may use summary information, estimates or simplifications of calculations to facilitate the modeling of future events. We may also exclude factors or data that are deemed to be immaterial.

If there is other information that you need in order to make an informed decision regarding the matters discussed in this report, please contact us.

We certify that the information contained in this report is accurate and fairly presents the actuarial position of DERP as of the valuation date. All calculations have been made in conformity with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board.

The actuaries submitting this statement are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report. Both are experienced in performing valuations for public retirement systems.

Respectfully submitted,

Leslie L. Thompson

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Diane L. Hunt

Diane L. Hunt, FSA, FCA, EA, MAAA
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SECTION A

INTRODUCTION

Pension Plan - Executive Summary

($ in Millions)

Valuation Date:	January 1, 2011	January 1, 2010
Fiscal Year Ending:	December 31, 2011	December 31, 2010
Actuarial Information:		
· Normal Cost %	9.69%	9.61%
· Actuarial Accrued Liability (AAL)	$2,284.76	$2,176.24
· Unfunded Actuarial Accrued Liability (UAAL)	$341.88	$252.68
· Funded Ratio	85.04%	88.39%
· UAAL as % of Covered Payroll	66.08%	49.93%
· Equivalent Single Amortization Period	30 years	30 years
Required Contributions:		
· Normal Cost	$50.13	$48.65
· Amortization of the Unfunded Liability	$28.12	$20.78
· Total Contribution Amount*	$78.25	$69.43
· Percentage of Covered Payroll	15.12%	13.72%
Assets:		
· Market Value	$1,725.68	$1,585.36
· Actuarial Value	$1,942.87	$1,923.56
· Return on Market Value	13.89%	13.74%
· Return on Actuarial Value	4.98%	3.39%
· Ratio – Actuarial Value to Market Value	112.59%	121.33%
Membership:		
· Number of:		
- Active Members	8,403	8,604
- Retirees and Beneficiaries	7,606	7,423
- Inactive, Non-retired Members**	4,712	4,773
- DROP Participants	0	0
- Total	20,721	20,800
· Covered Payroll	$517.40	$506.05

Highlights/Changes:

- No changes to benefit provisions.
- Contribution increase primarily due to continued recognition of the 2008 asset losses and losses in Actuarial Accrued Liability.
- The aggregate experience loss was $82.2 million.

* These results are on a baseline basis. Baseline results are net of the DHHA supplement. The 2011 Total Contribution Amount including the DHHA supplement is $80,218,294 (15.50% of payroll), and for 2010 is $71,399,079 (14.11% of payroll).

** The number of Inactive, Non-retired Members includes 1,369 Non-vested Inactive Members as of January 1, 2011, and 1,447 Non-vested Inactive Members as of January 1, 2010, who are not vested in any benefit other than their accumulated contributions.

Retiree Medical Plan - Executive Summary

($ in Millions)

Valuation Date:	January 1, 2011	January 1, 2010
Fiscal Year Ending:	December 31, 2011	December 31, 2010
Actuarial Information:		
· Normal Cost %	0.51%	0.48%
· Actuarial Accrued Liability (AAL)	$143.11	$141.64
· Unfunded Actuarial Accrued Liability (UAAL)	$55.50	$51.23
· Funded Ratio	61.22%	63.83%
· UAAL as % of Covered Payroll	10.73%	10.12%
· Equivalent Single Amortization Period	30 years	30 years
Required Contributions:		
· Normal Cost	$2.63	$2.42
· Amortization of the Unfunded Liability	$4.56	$4.21
· Total Contribution Amount*	$7.19	$6.64
· Percentage of Covered Payroll	1.39%	1.31%
Assets:		
· Market Value	$76.46	$73.73
· Actuarial Value	$87.61	$90.41
· Return on Market Value	13.66%	13.59%
· Return on Actuarial Value	4.66%	3.23%
· Ratio – Actuarial Value to Market Value	114.58%	122.64%

Highlights/Changes:

· No changes to benefit provisions.

· The aggregate experience loss was $2.7 million.

* These results are on a baseline basis. Baseline results are net of the DHHA supplement. The 2011 Total Contribution Amount including the DHHA supplement is $7,187,545 (1.39% of payroll), and for 2010 is $6,636,604 (1.31% of payroll).

Discussion

Actuarial Valuation

Valuations are prepared annually, as of January 1 of each year, the first day of DERP's fiscal year. Valuations are prepared for the Pension and Retiree Medical Plans. Normal Cost is separately calculated for the Hospital and Non-Hospital employee groups, in order to determine the DHHA supplemental contribution amount (see Section I).

The primary purposes of the valuation report are to measure the plan's liabilities, to determine the required contribution rate and to analyze changes in DERP's actuarial position.

In addition, the report provides information in connection with Governmental Accounting Standards Board Statement Nos. 25 and 43 (GASB 25 and GASB 43), and it provides summaries of the member data, financial data, plan provisions, and actuarial assumptions and methods.

Financing Objectives

DERP is supported by member contributions, employer contributions, and net earnings on the investments of the fund. The member and employer contribution rates are set by law. Employer rates increased from 8.5% to 9.5% effective January 1, 2011. Member rates increased from 4.5% to 5.5% effective January 1, 2011.

The combined member and employer contributions are intended to be sufficient to pay the normal cost and to amortize the Unfunded Actuarial Accrued Liability (UAAL) over a period of 30 years from the valuation date.

Contribution Requirement

The Total Computed Contribution required for the Pension Plan for the fiscal year ending December 31, 2011 is $78,246,395, 15.12% of covered payroll ($80,218,294, 15.50% of covered payroll including the DHHA Supplement). This compares with a Total Computed Contribution for the fiscal year ending December 31, 2010 of $69,429,321, 13.72% of covered payroll ($71,399,079, 14.11% of covered payroll including the DHHA Supplement).

The main reason for the contribution increase for the Pension Plan was the continued recognition of the 2008 asset losses in the Actuarial Value of Assets, and the Actuarial Accrued Liability losses.

The Total Computed Contribution required for the Retiree Medical Plan for the fiscal year ending December 31, 2011 is $7,190,871, 1.39% of covered payroll ($7,187,545, 1.39% of covered payroll including the DHHA Supplement). This compares with a Total Computed Contribution for the fiscal year ending December 31, 2010 of $6,635,690, 1.31% of covered payroll ($6,636,604, 1.31% of covered payroll including the DHHA Supplement).

The main reason for the contribution increase for the Retiree Medical Plan was the continued recognition of the 2008 asset losses in the Actuarial Value of Assets.

The increase in projected payroll of less than wage inflation from 2010 to 2011 also contributed, mathematically, to the increase in the computed total contributions when expressed as a percentage of covered payroll for both the Pension Plan and the Retiree Medical Plan.

Funded Status

As of the valuation date, the Unfunded Actuarial Accrued Liability (UAAL) for the Pension Plan is $341.88 million, and the funded ratio (the ratio of the Actuarial Value of Assets to the Actuarial Accrued Liability) is 85.04%. At the time of last year's valuation, the UAAL was $252.68 million, and the funded ratio was 88.39%. See Section D for a history of the funded ratios.

As of the valuation date, the Unfunded Actuarial Accrued Liability (UAAL) for the Retiree Medical Plan is $55.50 million, and the funded ratio (the ratio of the Actuarial Value of Assets to the Actuarial Accrued Liability) is 61.22%. At the time of last year's valuation, the UAAL was $51.23 million, and the funded ratio was 63.83%. See Section D for a history of the funded ratios.

Gains and Losses

The Pension Plan experienced a total aggregate loss of $82,239,800 which includes an investment loss of $56,387,300 (based on the Actuarial Value of Assets) and a non-investment loss of $25,852,500. One of the main reasons for the non-investment losses was due to actual experience compared to the salary increase assumption. For the 2010 plan year, salaries were assumed to stay the same as the prior year. However, some salaries increased and therefore a loss of $11,214,300 was realized.

The Retiree Medical Plan experienced a total aggregate loss of $2,726,300, which includes an investment loss of $2,858,300 (based on the Actuarial Value of Assets) and a non-investment gain of $132,000.

Valuation Assets

The funding policy for both the Pension Plan and the Retiree Medical Plan includes smoothing returns. Smoothing assets creates a more stable contribution rate. The 2010 return on the Actuarial Value of Assets for the Pension Plan was 4.98%, while the return on the Pension Plan on a Market Value basis was 13.89%. The 2010 return on the Actuarial Value of Assets for the Retiree Medical Plan was 4.66%, while the return on the Retiree Medical Plan on a Market Value basis was 13.66%.

The Actuarial Value of Assets exceeds the Market Value of Assets by $217.19 million for the Pension Plan and the Actuarial Value of Assets exceeds the Market Value of Assets by $11.15 million for the Retiree Medical Plan as of the valuation date (see Section C).

An adjustment to the Employer Contribution for the Retiree Medical Plan was made for fiscal year 2010 to correct for an over-allocation of contributions to the Retiree Medical Plan in some prior years.

Relationship of Actuarial Value of Assets to Market Value of Assets

If Market Value had been the basis for the valuation, the funded ratios would have been 75.53%, for the Pension Plan and 53.43% for the Retiree Medical Plan.

Benefit Provisions

This valuation reflects the benefits as summarized in Section G of this report. There have been no changes in benefit provisions from the prior valuation.

Actuarial Assumptions and Methods

In determining costs and liabilities, actuaries use assumptions about the future, such as rates of salary increase, probabilities of retirement, termination, death and disability, and an investment return assumption. The Retirement Board sets the actuarial assumptions and methods taking into account recommendations made by the plan's actuary and other advisors.

We believe the assumptions are internally consistent and are reasonable, based on the actual experience of DERP. These actuarial assumptions and methods comply with the parameters for disclosure in GASB No. 25.

The results of the actuarial valuation are dependent on the actuarial assumptions used. Actual results can, and almost certainly will, differ as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities, calculated contribution rates, and amortization periods.

In addition to the actuarial assumptions, the actuary also makes use of an Actuarial Cost Method to allocate costs to particular years. DERP uses the Projected Unit Credit method. This method determines an accrued liability based on projected compensation, and uses service to the valuation date. The unfunded accrued liability is then amortized over an open period of 30 years.

There have been no changes to actuarial assumptions or methods from the last valuation.

Member Data

The number of active members decreased by 2.34% from 8,604 to 8,403 and average pay for active members increased from $58,815 to $61,573, a 4.7% increase. Average age of active members is 46.2, compared to 45.7 last year. Average years of service is 11.7, compared to 11.2 last year. There are also 4,712 inactive vested members, which includes 1,369 members vested in member contributions only.

The number of members in payment status increased by 183, from 7,423 to 7,606. This number includes service retirees, disability retirees and beneficiaries receiving benefits. The average annual service retiree benefit is $18,237 and there are 1.1 active members for each retiree/beneficiary.

GASB No. 25 Disclosure

Governmental Accounting Standards Board (GASB) Statement No. 25 governs reporting for government-sponsored retirement plans.

For Section D, the Annual Required Contribution (ARC) is defined to be the sum of (a) the employer's normal cost, and (b) the amount needed to amortize the UAAL as a level dollar amount over 30 years.

Effective January 1, 2008, valuation results presented are those provided by GRS. Results prior to that date were provided by the former actuary.

GASB No. 43

Governmental Accounting Standards Board (GASB) Statement No. 43 governs financial reporting for postemployment benefits other than pension plans.

SECTION B

FUNDING RESULTS

Pension Plan
Principal Valuation Results
as of January 1*

Valuation Date	**2011**	**2010**
Covered Group		
A. Number of Participants:		
Actives Members	8,403	8,604
Vested Inactive Members**	4,712	4,773
Retirees and Beneficiaries	7,606	7,423
Total	20,721	20,800
Covered Annual Payroll	$517,398,105	$506,045,186

Development of Contribution Rate For Fiscal Year Ending	**2011**	**2010**
B. Normal Cost %	9.69%	9.61%
C. Unfunded Actuarial Accrued Liabilities (UAAL):		
Actuarial Accrued Liability	$2,284,756,118	$2,176,242,736
Actuarial Value of Assets	$1,942,871,295	$1,923,560,713
UAAL	$341,884,823	$252,682,023
% of Payroll required to amortize UAAL	5.43%	4.11%
D. Total Computed Contribution Rate	15.12%	13.72%

* Separate figures for DHHA are provided in Section I of this report

** The number of Vested Inactive Members includes 1,369 Inactive Members as of January 1, 2011, and 1,447 Inactive Members as of January 1, 2010, who are only vested in their contribution account.

Retiree Medical Plan
Principal Valuation Results
as of January 1*

Development of Contribution Rate For Fiscal Year Ending	**2011**	**2010**
A. Normal Cost %	0.51%	0.48%
B. Unfunded Actuarial Accrued Liabilities (UAAL):		
Actuarial Accrued Liability	$143,112,474	$141,642,522
Actuarial Value of Assets	$87,609,491	$90,414,800
UAAL	$55,502,983	$51,227,722
% of Payroll required to amortize UAAL	0.88%	0.83%
C. Total Computed Contribution Rate	1.39%	1.31%

* Separate figures for DHHA are provided in Section I of this report

Pension Plan
Actuarial Liabilities
as of January 1, 2011

	Actuarial Present Value of Future Benefits (1)	Portion Covered by Future Normal Cost Contributions (2)	Actuarial Accrued Liabilities (1) - (2)
Active members:			
Retirement	$1,050,477,822	$359,787,369	$690,690,453
Disability	45,907,582	15,255,718	30,651,864
Death	25,685,241	8,710,147	16,975,094
Termination	110,749,993	36,060,812	74,689,181
Vested inactive members	129,821,083	0	129,821,083
DROP participant - account balances	98,884,382	0	98,884,382
Retirees and Beneficiaries	1,243,044,061	0	1,243,044,061
Total	$2,704,570,164	$419,814,046	$2,284,756,118
Actuarial Value of Assets	$1,942,871,295	$0	$1,942,871,295
Liabilities to be covered by Future Contributions	$761,698,869	$419,814,046	$341,884,823

Retiree Medical Plan
Actuarial Liabilities
as of January 1, 2011

	Actuarial Present Value of Future Benefits (1)	Portion Covered by Future Normal Cost Contributions (2)	Actuarial Accrued Liabilities (1) - (2)
Active members:			
Retirement	$51,473,654	$16,432,766	$35,040,888
Disability	3,096,600	987,545	2,109,055
Death	1,372,889	449,267	923,622
Termination	4,111,536	1,320,678	2,790,858
Vested inactive members	7,310,323	0	7,310,323
DROP participants	0	0	0
Retirees and Beneficiaries	94,937,728	0	94,937,728
Total	$162,302,730	$19,190,256	$143,112,474
Actuarial Value of Assets	$87,609,491	$0	$87,609,491
Liabilities to be covered by Future Contributions	$74,693,239	$19,190,256	$55,502,983

Pension Plan
Actuarial Balance Sheet as of January 1
Assets and Present Value of Expected Future Contributions

	2011	2010
A. Actuarial Value of Assets		
1. Net assets from system financial statements	$1,725,680,001	$1,585,359,939
2. Adjustment for Valuation Assets*	217,191,294	338,200,774
3. Actuarial Value of Assets	$1,942,871,295	$1,923,560,713
B. Actuarial Present Value of Expected Future Contributions		
1. For Normal Costs	$419,814,046	$414,326,607
2. For Unfunded Actuarial Accrued Liability	341,884,823	252,682,023
3. Total	$761,698,869	$667,008,630
C. Total Present and Expected Future Resources (equals Present Value of Benefits)	$2,704,570,164	$2,590,569,343

*See page 21

Retiree Medical Plan
Actuarial Balance Sheet as of January 1
Assets and Present Value of Expected Future Contributions

	2011	2010
A. Actuarial Value of Assets		
1. Net assets from system financial statements	$76,463,028	$73,726,724
2. Adjustment for Valuation Assets*	11,146,463	16,688,076
3. Actuarial Value of Assets	$87,609,491	$90,414,800
B. Actuarial Present Value of Expected Future Contributions		
1. For Normal Costs	$19,190,256	$18,068,254
2. For Unfunded Actuarial Accrued Liability	55,502,983	51,227,722
3. Total	$74,693,239	$69,295,976
C. Total Present and Expected Future Resources (equals Present Value of Benefits)	$162,302,730	$159,710,776

*See page 22

Pension Plan
Reconciliation of Actuarial Accrued Liability as of January 1
(rounded to the nearest $100)

1. Actuarial Accrued Liability (AAL) as of January 1, 2010:		$	2,176,242,700
2. Development of expected AAL as of January 1, 2011:			
a. Normal cost (NC) for plan year		$	50,616,600
b. Actual benefit payments paid during plan year (BP)			138,058,300
c. Interest on AAL and NC less interest on BP to December 31, 2010			170,102,600
d. Expected AAL as of January 1, 2011 (1.+2.a.-2.b.+2.c.)		$	2,258,903,600
3. Changes in AAL due to:			
a. Actual experience versus demographic assumptions (Gain)/Loss:			
i. Salary increases (Higher than expected)	11,214,300		
ii. Retirement (Fewer than expected)	3,314,800		
iii. Mortality - pre and post (Fewer deaths than expected)	5,448,200		
iv. Vested termination (Fewer than expected)	1,031,700		
v. Non vested termination (Fewer than expected)	1,278,400		
vi. Disability (More than expected)	112,300		
vii. Data reconciliation (Changes in data)	795,700	*	
viii. Other plan experience	1,591,400		
ix. Benefit payments	-		
x. New entrants	1,065,700		
Total change due to experience		$	25,852,500
b. Change in actuarial assumptions			-
c. Plan improvements			-
d. Total (3.a.+ 3.b.+ 3.c.)		$	25,852,500
4. Actuarial Accrued Liability as of January 1, 2011 (2.d.+3.e.)		$	2,284,756,100

*Includes impact of changes to dates of birth for some members

Retiree Medical Plan
Reconciliation of Actuarial Accrued Liability
as of January 1

(rounded to the nearest $100)

1. Actuarial Accrued Liability (AAL) as of January 1, 2010:		$ 141,642,500
2. Development of expected AAL as of January 1, 2011:		
a. Normal cost (NC) for plan year		$ 2,422,300
b. Actual benefit payments paid during plan year (BP)		11,738,100
c. Interest on AAL and NC less interest on BP to December 31, 2010		10,917,800
d. Expected AAL as of January 1, 2011 (1.+2.a.-2.b.+2.c.)		$ 143,244,500
3. Changes in AAL due to:		
a. Actual experience versus demographic assumptions (Gain)/Loss:		
i. Salary increases	$ -	
ii. Retirement (Fewer than expected)	(68,100)	
iii. Mortality - pre and post (More deaths than expected)	(3,627,900)	
iv. Vested termination (Fewer than expected)	90,300	
v. Non-vested termination and benefit opt-outs	(184,100)	
vi. Disability (More than expected)	260,400	
vii. Data reconciliation (Changes in data)	1,355,000 *	
viii. Other plan experience	1,951,200	
ix. New entrants	91,200	
Total change due to experience		(132,000)
b. Change in actuarial assumptions		-
c. Plan improvements		-
d. Total (3.a.+ 3.b.+ 3.c.)		$ (132,000)
4. Actuarial Accrued Liability as of January 1, 2011 (2.d.+3.e.)		$ 143,112,500

*Includes impact of changes to dates of birth for some members

SECTION C

PLAN ASSETS

Pension Plan
Statement of Plan Assets
(Assets at Market or Fair Value)

Item	December 31 2010	December 31 2009
A. Assets:		
1. Cash and Cash Equivalents (Operating Cash)	$38,482,887	$41,764,871
2. Securities Lending Collateral	139,713,408	198,805,582
3. Capital Assets	3,803,014	2,718,818
4. Prepaid items	1,597,229	0
B. Receivables:		
1. Contributions	$0	$749,122
2. Unsettled Securities Sold	432,595	290,676
3. Interest and Dividends	2,384,346	5,113,428
4. Total Receivables	$2,816,941	$6,153,226
C. Investments:		
1. U.S. Government Obligations	$200,747,699	$136,330,873
2. Domestic Fixed Income	212,065,561	306,330,306
3. Domestic Equities	579,254,229	590,532,996
4. International Equities	383,494,349	328,469,222
5. Real Estate	118,516,320	103,093,612
6. Other Investments	163,399,598	82,383,923
7. Absolute Return	28,983,095	0
8. Total Investments	$1,686,460,851	$1,547,140,932
D. Liabilities:		
1. Unsettled Securities Purchased	($557,910)	($5,046,069)
2. Securities Lending Obligations	(145,149,088)	(204,279,442)
3. Accounts Payable	(1,487,331)	(1,897,979)
4. Total Liabilities	($147,194,329)	($211,223,490)
E. Total Market Value of Assets Available for Benefits	$1,725,680,001	$1,585,359,939
F. Allocation of Investments:		
1. U.S. Government Obligations	11.90%	8.81%
2. Domestic Fixed Income	12.57%	19.80%
3. Domestic Equities	34.35%	38.17%
4. International Equities	22.74%	21.23%
5. Real Estate	7.03%	6.66%
6. Other Investments	9.69%	5.33%
7. Absolute Return	1.72%	0.00%
8. Total Investments	100.00%	100.00%

Retiree Medical Plan
Statement of Plan Assets
(Assets at Market or Fair Value)

Item	December 31 2010	December 31 2009
A. Assets:		
1. Cash and Cash Equivalents (Operating Cash)	$1,705,135	$1,942,264
2. Securities Lending Collateral	6,190,551	9,245,399
3. Capital Assets	168,508	126,438
4. Prepaid Items	70,771	0
B. Receivables:		
1. Contributions	$0	$34,838
2. Unsettled Securities Sold	19,168	13,518
3. Interest and Dividends	105,647	237,798
4. Total Receivables	$124,815	$286,154
C. Investments:		
1. U.S. Government Obligations	$8,894,915	$6,340,029
2. Domestic Fixed Income	9,396,397	14,245,806
3. Domestic Equities	25,666,133	27,462,573
4. International Equities	16,992,223	15,275,370
5. Real Estate	5,251,331	4,794,339
6. Other Investments	7,240,061	3,831,242
7. Absolute Return	1,284,210	0
8. Total Investments	$74,725,270	$71,949,359
D. Liabilities:		
1. Unsettled Securities Purchased	($24,720)	($234,666)
2. Securities Lending Obligations	(6,431,400)	(9,499,959)
3. Accounts Payable	(65,902)	(88,265)
4. Total Liabilities	($6,522,022)	($9,822,890)
E. Total Market Value of Assets Available for Benefits	$76,463,028	$73,726,724
F. Allocation of Investments:		
1. U.S. Government Obligations	11.90%	8.81%
2. Domestic Fixed Income	12.57%	19.80%
3. Domestic Equities	34.35%	38.17%
4. International Equities	22.74%	21.23%
5. Real Estate	7.03%	6.66%
6. Other Investments	9.69%	5.32%
7. Absolute Return	1.72%	0.00%
8. Total Investments	100.00%	100.00%

Pension Plan
Reconciliation of Plan Assets

Item	December 31 2010	December 31 2009
A. Market Value of Assets at Beginning of Year	$1,585,359,939	$1,455,545,132
B. Revenues and Expenditures:		
1. Contributions:		
a. Employee Contributions	$21,139,754	$12,849,520
b. Employer Contributions	42,228,203	43,127,064
c. Purchased Service Credit	-	-
d. Total	$63,367,957	$55,976,584
2. Investment Income:		
a. Interest, Dividends, and Other Income	$224,087,787	$204,227,887
b. Net Securities Lending Income	434,237	840,762
c. Investment Expenses	(6,955,911)	(7,050,007)
d. Net Investment Income	$217,566,113	$198,018,642
3. Benefits and Refunds:		
a. Refunds	($666,009)	($430,252)
b. Regular Monthly Benefits	(130,079,425)	(115,199,061)
c. DROP and DROP II Benefits	(7,312,897)	(5,992,795)
d. Partial Lump-Sum Benefits Paid	-	-
e. Total	($138,058,331)	($121,622,108)
4. Administrative and Miscellaneous Expenses	($2,555,677)	($2,558,311)
5. Transfers	$0	$0
C. Market Value of Assets at End of Year	$1,725,680,001	$1,585,359,939

Retiree Medical Plan
Reconciliation of Plan Assets

Item	December 31 2010	December 31 2009
A. Market Value of Assets at Beginning of Year	$73,726,724	$69,776,382
B. Revenues and Expenditures:		
1. Contributions:		
a. Employee Contributions	$1,950,508	$1,291,670
b. Employer Contributions	2,924,858	4,551,097
c. Purchased Service Credit	-	-
d. Total	$4,875,366	$5,842,767
2. Investment Income:		
a. Interest, Dividends, and Other Income	$10,007,214	$9,545,439
b. Net Securities Lending Income	19,629	39,851
c. Investment Expenses	(312,417)	(333,048)
d. Net Investment Income	$9,714,426	$9,252,242
3. Benefits and Refunds:		
a. Refunds	($30,120)	($20,304)
b. Regular Monthly Benefits	(11,708,006)	(11,003,408)
c. Partial Lump-Sum Benefits Paid	-	-
d. Total	($11,738,126)	($11,023,712)
4. Administrative and Miscellaneous Expenses	($115,362)	($120,955)
5. Transfers	$0	$0
C. Market Value of Assets at End of Year	$76,463,028	$73,726,724

Pension Plan
Development of Actuarial Value of Assets

	Year Ending – December 31	2010	2009
A.	**Actuarial Value of Assets (AVA) Beginning of Year**	**$1,923,560,713**	**$1,924,991,121**
B.	Market Value (MV) End of Year	1,725,680,001	1,585,359,939
C.	Market Value Beginning of Year	1,585,359,939	1,455,545,132
D.	Increases During the Year:		
	D1. Member Contributions	$21,139,754	$12,849,520
	D2. Employer Contributions	42,228,203	43,127,064
	D3. Expected Return	150,854,457	151,323,620
	D4. Total Increases	$214,222,414	$207,300,204
E.	Decreases During the Year:		
	E1. Retirement Benefits	($137,392,322)	($121,191,856)
	E2. Refund of Member Accounts	(666,009)	(430,252)
	E3. Member Balance Transfers	0	0
	E4. Expenses	(2,555,677)	(2,558,311)
	E5. Total Decreases	($140,614,008)	($124,180,419)
F.	Projected Actuarial Value of Assets (A. + D.4. + E.5.)	$1,997,169,119	$2,008,110,906
G.	Difference in Projected AVA and MV (B.-F.)	($271,489,118)	($422,750,967)
H.	Appreciation/(Depreciation) recognized:		
	20% of G.	($54,297,824)	($84,550,193)
I.	**Actuarial Value of Assets End of Year (F. + H.)**	**$1,942,871,295**	**$1,923,560,713**
J.	Unrecognized Difference in AVA and MV (B.-I.)	($217,191,294)	($338,200,774)
K.	**Actuarial Rate of Return**	**4.98%**	**3.39%**
L.	**Market Value Rate of Return**	**13.89%**	**13.74%**
M.	**Ratio of Actuarial Value of Assets to Market Value**	**113%**	**121%**

The Actuarial Value of Assets recognizes 20% of the difference between the projected actuarial value and the market value at the valuation date. Effective January 1, 2009, this value is no longer constrained to a range of 80% to 120% of the market value of assets as of the valuation date. This method has the effect of smoothing volatility in investment returns. Returns are measured net of all administrative and investment expenses.

Retiree Medical Plan
Development of Actuarial Value of Assets

	Year Ending – December 31	2010	2009
A.	**Actuarial Value of Assets (AVA) Beginning of Year**	**$90,414,800**	**$92,682,144**
B.	Market Value (MV) End of Year	76,463,028	73,726,724
C.	Market Value Beginning of Year	73,726,724	69,776,382
D.	Increases During the Year:		
	D1. Member Contributions	$1,950,508	$1,291,670
	D2. Employer Contributions	2,924,858	4,551,097
	D3. Refund of Member Accounts	0	0
	D4. Expected Return	6,959,429	7,206,575
	D5. Total Increases	$11,834,795	$13,049,342
E.	Decreases During the Year:		
	E1. Retirement Benefits	($11,708,006)	($11,003,408)
	E2. Refund of Member Accounts	(30,120)	(20,304)
	E3. Member Balance Transfers	0	0
	E4. Expenses	(115,362)	(120,955)
	E5. Total Decreases	($11,853,488)	($11,144,667)
F.	Projected Actuarial Value of Assets (A. + D.5. + E.5.)	$90,396,107	$94,586,819
G.	Difference in Projected AVA and MV (B.-F.)	($13,933,079)	($20,860,095)
H.	Appreciation/(Depreciation) recognized:		
	20% of G.	($2,786,616)	($4,172,019)
I.	**Actuarial Value of Assets End of Year (F. + H.)**	**$87,609,491**	**$90,414,800**
J.	Unrecognized Difference in AVA and MV (B.-I.)	($11,146,463)	($16,688,076)
K.	**Actuarial Rate of Return**	**4.66%**	**3.23%**
L.	**Market Value Rate of Return**	**13.66%**	**13.59%**
M.	**Ratio of Actuarial Value of Assets to Market Value**	**115%**	**123%**

The Actuarial Value of Assets recognizes 20% of the difference between the projected actuarial value and the market value at the valuation date. Effective January 1, 2009, this value is no longer constrained to a range of 80% to 120% of the market value of assets as of the valuation date. This method has the effect of smoothing volatility in investment returns. Returns are measured net of all administrative and investment expenses.

Pension Plan
History of Investment Return Rates

Plan Year Ending December 31 of	Market	Actuarial
(1)	(2)	(3)
2001	(5.80%)	6.30%
2002	(8.65%)	3.50%
2003	19.35%	6.10%
2004	11.10%	7.10%
2005	9.28%	7.50%
2006	13.72%	8.68%
2007	10.57%	9.10%
2008	(26.17%)	1.74%
2009	13.74%	3.39%
2010	13.89%	4.98%
Average annual returns:		
Last five years:	3.76%	5.54%
Last ten years:	4.13%	5.82%

Retiree Medical Plan
History of Investment Return Rates

Plan Year Ending December 31 of	Market	Actuarial
(1)	(2)	(3)
2001	(5.74%)	6.40%
2002	(8.68%)	3.80%
2003	19.29%	6.10%
2004	11.03%	7.00%
2005	9.24%	7.40%
2006	13.72%	8.58%
2007	10.60%	9.04%
2008	(26.06%)	1.74%
2009	13.59%	3.23%
2010	13.66%	4.66%
Average annual returns:		
Last five years:	3.72%	5.41%
Last ten years:	4.11%	5.77%

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The above rates are based on the retirement plan’s financial information reported to the actuary. They may differ from figures that the investment consultant reports, in part because of differences in the handling of administrative and investment expenses, and in part because of differences in the handling of cash flows. Figures prior to 2007 were provided by the previous actuary and DERP.

Pension Plan**
History of Cash Flow in Trust Fund

Plan Year Ending December 31	Total Contributions	Benefits and Refunds	Administrative Expenses	Transfers and Other	Net Investment Return*	Market Value of Assets at End of Year
2000						$1,488,342,575
2001	$43,990,992	($57,770,905)	($1,918,365)	-	($85,618,821)	1,387,025,476
2002	47,338,877	(62,334,251)	(1,955,993)	-	(117,388,491)	1,252,685,618
2003	45,899,111	(67,889,993)	(2,098,088)	-	242,309,261	1,470,905,909
2004	44,864,380	(76,437,075)	(2,211,322)	-	163,674,788	1,600,796,680
2005	48,595,153	(86,212,631)	(2,464,874)	-	149,237,500	1,709,951,828
2006	49,245,410	(95,645,656)	(2,618,710)	-	234,113,308	1,895,046,180
2007	52,934,416	(105,316,959)	(2,469,185)	-	199,977,322	2,040,171,774
2008	57,167,418	(115,583,559)	(2,839,820)	-	(523,370,681)	1,455,545,132
2009	55,976,584	(121,622,108)	(2,558,311)	-	198,018,642	1,585,359,939
2010	63,367,957	(138,058,331)	(2,555,677)	-	217,566,113	1,725,680,001

Retiree Medical Plan**
History of Cash Flow in Trust Fund

Plan Year Ending December 31	Total Contributions	Benefits and Refunds	Administrative Expenses	Transfers and Other	Net Investment Return*	Market Value of Assets at End of Year
2000						$85,267,950
2001	$6,213,943	($5,672,171)	($110,628)	-	($4,910,543)	80,788,551
2002	3,556,073	(6,561,307)	(112,517)	-	(6,766,350)	70,904,450
2003	4,567,891	(7,588,370)	(117,418)	-	13,503,048	81,269,601
2004	3,928,526	(8,419,647)	(120,227)	-	8,832,033	85,490,236
2005	4,568,782	(9,209,929)	(129,711)	-	7,812,975	88,532,353
2006	5,263,707	(9,943,879)	(133,977)	-	11,955,835	95,674,039
2007	5,802,249	(10,632,418)	(123,382)	-	10,012,367	100,732,855
2008	5,437,137	(10,846,558)	(138,364)	-	(25,408,688)	69,776,382
2009	5,842,767	(11,023,712)	(120,955)	-	9,252,242	73,726,724
2010	4,875,366	(11,738,126)	(115,362)	-	9,714,426	76,463,028

*Net of Investment Expense
**Figures prior to 2007 were provided by the previous actuary.

SECTION D

ACCOUNTING DISCLOSURES

Pension Plan
Schedule of Funding Progress*
($ in millions)

Valuation Date January 1	Actuarial Value of Assets	Actuarial Accrued Liability (AAL)	Unfunded AAL (UAAL) [(3) - (2)]	Funded Ratio [(2)/(3)]	Covered Payroll	UAAL as a Percentage of Covered Payroll [(4)/(6)]
(1)	(2)	(3)	(4)	(5)	(6)	(7)
2004	$1,572.94	$1,604.53	$31.59	98.03%	$506.52	6.24%
2005	1,651.09	1,665.54	14.45	99.13%	495.17	2.92%
2006	1,735.21	1,782.50	47.30	97.35%	495.29	9.55%
2007	1,837.48	1,862.77	25.30	98.64%	499.46	5.06%
2008	1,950.01	1,985.65	35.64	98.21%	545.84	6.53%
2009	1,924.99	2,095.89	170.90	91.85%	564.99	30.25%
2010	1,923.56	2,176.24	252.68	88.39%	506.05	49.93%
2011	1,942.87	2,284.76	341.88	85.04%	517.40	66.08%

Retiree Medical Plan
Schedule of Funding Progress*
($ in millions)

Valuation Date January 1	Actuarial Value of Assets	Actuarial Accrued Liability (AAL)	Unfunded AAL (UAAL) [(3) - (2)]	Funded Ratio [(2)/(3)]	Covered Payroll	UAAL as a Percentage of Covered Payroll [(4)/(6)]
(1)	(2)	(3)	(4)	(5)	(6)	(7)
2004	$87.11	$105.48	$18.37	82.59%	$506.52	3.63%
2005	88.53	116.57	28.04	75.95%	495.17	5.66%
2006	90.23	123.78	33.55	72.90%	495.29	6.77%
2007	93.09	127.13	34.04	73.22%	499.46	6.82%
2008	96.46	128.61	32.15	75.00%	545.84	5.89%
2009	92.68	134.00	41.32	69.17%	564.99	7.31%
2010	90.41	141.64	51.23	63.83%	506.05	10.12%
2011	87.61	143.11	55.50	61.22%	517.40	10.73%

*Figures prior to 2008 were provided by the previous actuary.

Pension Plan
Schedule of Employer Contributions*

Year Beginning January 1:	GASB NO. 25 Annual Required Contribution (ARC)		Contributions *		Percentage of GASB ARC Contributed
	% of Payroll[5]	Amount	% of Payroll[5]	Amount[1]	[(5)/(3)]
(1)	(2)	(3)	(4)	(5)	(6)
2005[2]	7.68%	$38,039,016	7.54%	$37,347,133	98.18%
2006	8.54%	42,277,066	7.63%	37,809,048	89.43%
2007	7.93%	39,623,830	8.20%	40,955,026	103.36%
2008	7.64%	41,699,683	8.13%	44,362,545	106.39%
2009	9.63%	54,392,610	7.63%	43,127,064	79.29%
2010[3]	9.68%	48,995,846	8.34%	42,228,203	86.19%
2011[4]	10.05%	52,000,472	N/A	N/A	N/A

Retiree Medical Plan
Schedule of Employer Contributions*

Year Beginning January 1:	GASB NO. 25 Annual Required Contribution (ARC)		Contributions *		Percentage of GASB ARC Contributed
	% of Payroll[5]	Amount	% of Payroll[5]	Amount[1]	[(5)/(3)]
(1)	(2)	(3)	(4)	(5)	(6)
2005[2]	0.61%	$3,032,638	0.71%	$3,530,326	116.41%
2006	0.82%	4,081,627	0.82%	4,075,768	99.86%
2007	0.79%	3,929,333	0.90%	4,504,640	114.64%
2008	0.83%	4,532,574	0.78%	4,253,783	93.85%
2009	0.91%	5,156,984	0.81%	4,551,097	88.25%
2010[3]	0.85%	4,290,712	0.58%	2,924,858	68.17%
2011[4]	0.96%	4,965,060	N/A	N/A	N/A

* Figures prior to 2008 were provided by the previous actuary.
1 Employers made contributions based on the legally required rates.
2 Beginning on January 1, 2005, the employers and employees contributed 8.50% and 2.50%, respectively.
3 Beginning on January 1, 2010, the employers and employees contributed 8.50% and 4.50%, respectively.
4 Beginning on January 1, 2011, the employers and employees contributed 9.50% and 5.50%, respectively.
5 Estimated Payroll

Notes to Required Supplementary Information
(As Required by GASB Statement No. 25)

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

Valuation Date	January 1, 2011
Actuarial Cost Method	Projected Unit Credit
Amortization Method	Level Dollar, Open
Equivalent Single Amortization Period	30 years
Valuation Asset Method	Smoothed Market
Actuarial Assumptions:	
Investment Rate of Return *	8.00%
Projected Salary Increase *	3.00% to 6.30%
** Includes Price Inflation at*	3.00%
Cost-of-Living Adjustments	Ad-Hoc Only

SECTION E

PARTICIPANT DATA

Retirees, Beneficiaries and Disabled Reconciliation

Valuation Date January 1	No. Added to Rolls	No. Removed from Rolls	Rolls End of Year No.	Rolls End of Year Annual Benefits
2007			6,396	$97,109,973
2008	477	-259	6,614	$101,802,055
2009	474	-215	6,873	$109,243,231
2010	733	-183	7,423	$124,695,435
2011	410	-227	7,606	$130,319,793

Age and Service Distribution
January 1, 2011

Nearest Whole Age	Whole Years of Service at Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	Number	Active Payroll
Less than 20									$ -
20-24	81	2						83	2,696,199
25-29	413	58	2					473	19,631,648
30-34	476	204	95	1				776	36,650,552
35-39	406	248	269	58	1			982	52,803,239
40-44	347	258	371	274	47	2		1,299	75,791,443
45-49	243	186	336	274	174	57	7	1,277	78,755,103
50-54	258	173	289	288	223	158	85	1,474	93,758,720
55-59	156	137	241	228	162	105	149	1,178	78,074,731
60-64	90	79	176	129	95	30	60	659	44,440,962
65-69	20	36	43	34	17	8	15	173	12,606,324
70 & Over	2	4	7	9	2	1	4	29	2,246,858
Totals	**2,492**	**1,385**	**1,829**	**1,295**	**721**	**361**	**320**	**8,403**	**$ 497,455,779**

Historical Summary of Active Member Data*

	Active Members		Covered Payroll		Average Payroll		Average	
1-Jan	Number	% Increase	$ Amount	% Increase	$ Amount	% Increase	Age	Service
2001	10,821		$501,841,985		$46,377			
2002	10,098	(6.7%)	503,694,300	0.4%	49,881	7.6%	43.1	9.6
2003	9,537	(5.6%)	491,635,701	(2.4%)	51,550	3.3%	43.7	10.0
2004	8,868	(7.0%)	467,911,855	(4.8%)	52,764	2.4%	44.1	10.4
2005	8,634	(2.6%)	460,341,857	(1.6%)	53,317	1.0%	44.8	10.9
2006	8,732	1.1%	475,500,445	3.3%	54,455	2.1%	45.3	11.2
2007	8,988	2.9%	489,447,759	2.9%	54,456	0.0%	45.4	11.2
2008	9,304	3.5%	543,728,238	11.1%	58,440	7.3%	45.4	11.0
2009	9,323	0.2%	564,986,660	3.9%	60,601	3.7%	45.5	11.0
2010	8,604	(7.7%)	506,045,186	(10.4%)	58,815	(2.9%)	45.7	11.2
2011	8,403	(2.3%)	517,398,105	2.2%	61,573	4.7%	46.2	11.7

* This schedule does not include participants in DROP and DROP II.

Summary of Membership Data by Category

	January 1	
	2011	**2010**
Active Members:		
Number	8,403	8,604
Average age (years)	46.2	45.7
Average service (years)	11.7	11.2
Average payroll	$61,573	$58,815
Total payroll supplied, annualized	$517,398,105	$506,045,186
Vested Inactive Members:		
Number	3,343	3,326
Average age (years)	49.86	49.45
Total annual deferred benefits	$18,164,193	$17,561,726
Average annual deferred benefit	$5,434	$5,280
Nonvested Inactive Members:		
Number	1,369	1,447
Average age (years)	44.57	42.17
Contribution Account Balance	$1,376,945	$997,925
Service Retirees:		
Number	6,296	6,166
Average age (years)	69.27	69.08
Total annual benefits	$114,821,783	$110,229,195
Average annual benefit	$18,237	$17,877
Disability Retirees:		
Number	338	328
Average age (years)	62.97	62.52
Total annual benefits	$5,006,449	$4,696,720
Average annual benefit	$14,812	$14,319
Beneficiaries:		
Number	972	929
Average age (years)	68.59	68.57
Total annual benefits	$10,491,561	$9,769,520
Average annual benefit	$10,794	$10,516

Membership Data Reconciliation

	Actives	Disability	Terminated Vested	Terminated Nonvested	Retiree	DROP and DROP II	Beneficiary	Total
GRS Counts as of January 1, 2010	8,604	328	3,326	1,447	6,166	0	929	**20,800**
Actives	**51**		(13)	(36)	(2)			
Disability	(22)	**27**	(5)					
Terminated Vested	(171)		**171**					
Terminated Nonvested	(99)			**99**				
Retiree	(162)	(8)	(128)		**298**			
DROP and DROP II						**0**		
Beneficiary							**0**	
Terminated Annuity (Legal Reasons)							(6)	
Terminated Annuity (Refund)	(164)			(306)				
Dropped Records			(1)					
Deceased	(17)	(11)	(8)		(176)		(32)	
New Beneficiaries							81	
New Actives	383	2	1					
Data Correction				165	10			
Continuing	**7,969**	**309**	**3,171**	**1,105**	**5,988**	**0**	**891**	**19,433**
GRS Counts as of January 1, 2011	**8,403**	**338**	**3,343**	**1,369**	**6,296**	**0**	**972**	**20,721**

SECTION F

METHODS & ASSUMPTIONS

Valuation Methods-Liabilities

Actuarial Cost Method **- The Projected Unit Credit (PUC) Cost Method** was used in the valuation.

The Projected Unit Credit Cost Method develops a normal cost and an accrued liability based on the benefit accrued as of the valuation date.

The normal cost is the present value of the benefits that accrue during the year. The benefit accrued during the year is the retirement benefit based on pay projected to a member's retirement date, based on service accrued as of the valuation date. The actuarial accrued liability is the present value of benefits allocated to service prior to the valuation date.

Finally, for all funding methods, the total present value of benefits is equal to the accrued liability plus the present value of future normal costs.

Financing of Unfunded Actuarial Accrued Liabilities - Unfunded Actuarial Accrued Liabilities (full funding credit if assets exceed liabilities) were amortized by level (principal & interest combined) dollar contributions over a reasonable period of future years.

Deferred Retirement Option Plan (DROP) and DROP II – The DROPs are closed and no new members are assumed to enter either of the two DROPs. For members who were in DROP and remained employed upon their exit from the DROP program, their accrued liability is calculated as the value of their deferred benefit based on compensation and service earned before their DROP participation plus the value of their additional benefit earned based on compensation and service accrued after their DROP participation ended, as well as their accrued DROP balance. Further detail describing the DROPs can be found in the Plan Provisions, Section G of this report.

Valuation Methods-Assets

***Actuarial Value of Assets* –** The Actuarial Value of Assets recognizes 20% of the difference between the projected actuarial value and the market value at the valuation date. Effective January 1, 2009, this value is no longer constrained to a range of 80% to 120% of the market value of assets as of the valuation date. This method has the effect of smoothing volatility in investment returns. Returns are measured net of all administrative and investment expenses.

Development of Amortization Payment

Determination of UAAL Contribution Rate

The unfunded accrued liability as of January 1, 2011 is calculated as of the beginning of the fiscal year for which contributions are being made.

The unfunded accrued liability is amortized over the appropriate period to determine the amortization payment. This payment is divided by the projected fiscal year payroll to determine the amortization payment as a percentage of active member payroll.

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Valuation Assumptions

The actuarial assumptions used in the valuation are shown in this Section. Both the economic and demographic assumptions were based on an Experience Study performed as of January 1, 2008, and adopted for the January 1, 2008 valuation report. In 2010, the DHHA assumptions were studied and new DHHA assumptions adopted for the January 1, 2010 valuation report.

Changes to Actuarial Assumptions

There have been no changes to the actuarial assumptions as of the valuation date.

Economic Assumptions

The investment return rate assumed in the valuations is 8.00% per year, compounded annually (net of investment and administrative expenses).

The **Wage Inflation Rate** assumed in this valuation was 3.00% per year. The Wage Inflation Rate is defined to be the portion of total pay increases for an individual that are due to macroeconomic forces including productivity and labor market conditions. The wage inflation rate does not include pay changes rated to individual merit and seniority effects.

The assumed **real rate of return** over wage inflation is defined to be the portion of total investment return that is more than the assumed total wage growth rate. Considering other economic assumptions, the 8.00% investment return rate translates to an assumed real rate of return over wage inflation of 5.00%.

Pay increase assumptions for individual active members are shown for sample ages on the following page. Part of the assumption for each age is for merit and/or seniority increase, and the other 3.00% recognizes wage inflation, productivity increases, and other macroeconomic forces.

The rates of salary increase used for individual members are in accordance with the following table. This assumption is used to project a member's current salary to the salaries upon which benefits will be based.

	% Increase in Salary for the Year		
Sample Ages	**Merit and Seniority**	**Base (Economic)***	**Increase for the Year**
20	3.30%	3.00%	6.30%
25	3.30%	3.00%	6.30%
30	3.00%	3.00%	6.00%
35	2.20%	3.00%	5.20%
40	1.70%	3.00%	4.70%
45	1.20%	3.00%	4.20%
50	0.70%	3.00%	3.70%
55	0.00%	3.00%	3.00%
60	0.00%	3.00%	3.00%
65	0.00%	3.00%	3.00%

** Includes 3.00% for price inflation*

Demographic Assumptions

The post-employment and beneficiary mortality table was 100% of the 1994 Group Annuity Mortality Table. This table shows the probability of dying after leaving employment either as a vested terminated member, a retiree or a beneficiary of a deceased member.

	% Dying Within Next Year Non-Disabled	
Ages	**Men**	**Women**
50	0.26%	0.14%
55	0.44%	0.23%
60	0.80%	0.44%
65	1.45%	0.86%
70	2.37%	1.37%
75	3.72%	2.27%
80	6.20%	3.94%

The active mortality table was 65% of the 1994 Group Annuity Mortality Table. This table for active members shows the probability of dying before retirement or termination of employment.

	% Dying Within Next Year Non-Disabled	
Ages	**Men**	**Women**
20	0.03%	0.02%
25	0.04%	0.02%
30	0.05%	0.02%
35	0.06%	0.03%
40	0.07%	0.05%
45	0.10%	0.06%
50	0.17%	0.09%

The disabled mortality table for disabled retirees below shows the probability of dying at sample attained ages:

	% Dying Within Next Year Disabled	
Ages	**Men**	**Women**
50	3.16%	3.16%
55	3.78%	3.78%
60	4.25%	4.25%
65	5.12%	5.12%
70	6.75%	6.75%
75	8.28%	8.28%
80	10.77%	10.77%

The rates of retirement used to measure the probability of eligible members retiring during the next year are as follows:

Non Hospital		
	Percent of Eligible Active Members Retiring Within Next Year	
Ages	Early Retirement	Normal Retirement
55	2.50%	N/A
56	3.00%	N/A
57	3.50%	N/A
58	4.00%	N/A
59	4.50%	N/A
60	5.00%	N/A
61	7.50%	N/A
62	10.00%	N/A
63	12.50%	N/A
64	12.50%	N/A
65	N/A	20.00%
66	N/A	15.00%
67	N/A	15.00%
68	N/A	15.00%
69	N/A	15.00%
70	N/A	100.00%

Hospital		
	Percent of Eligible Active Members Retiring Within Next Year	
Ages	Early Retirement	Normal Retirement
55	2.50%	N/A
56	3.00%	N/A
57	3.50%	N/A
58	4.00%	N/A
59	4.50%	N/A
60	5.00%	N/A
61	7.50%	N/A
62	10.00%	N/A
63	12.50%	N/A
64	12.50%	N/A
65	N/A	20.00%
66	N/A	15.00%
67	N/A	15.00%
68	N/A	15.00%
69	N/A	15.00%
70	N/A	15.00%
71	N/A	15.00%
72	N/A	15.00%
73	N/A	15.00%
74	N/A	15.00%
75	N/A	100.00%

	Percent of Eligible Active Members Retiring Within Next Year
Ages	**Rule of 75 Retirement**
NAR*	20.00%
NAR+1	10.00%
NAR+2	10.00%
NAR+3	10.00%
NAR+4	10.00%
NAR+5	10.00%
NAR+6	10.00%
NAR+7	10.00%
NAR+8	40.00%
NAR+9	40.00%
NAR+10	40.00%

*NAR, Normal Age at Retirement, is defined as the first age at which a member is eligible to retire under the Rule of 75 with a minimum age of 55 (Refer to Section G). Rates beyond NAR+8 in the table above continue at 40.00% until member reaches age 70 for Non-Hospital employees and age 75 for Hospital employees. After attainment of those ages, the retirement rate assumption is 100.00%.

Rates of separation from active membership are shown below (rates do not apply to members eligible to retire and do not include separation on account of death or disability).

Non Hospital		
	Select Period	
	% of Active Members Separating Within Next Year	
Years of Service	**Men**	**Women**
1	17.75%	20.89%
2	15.26%	18.01%
3	13.12%	15.53%
4	11.28%	13.39%
5	9.70%	11.55%
6	8.34%	9.96%
7	7.17%	8.59%
8	6.17%	7.41%
9	5.30%	6.39%

Non Hospital		
	Ultimate Rates	
	% of Active Members Separating Within Next Year*	
Ages	Men	Women
25	13.89%	14.26%
30	10.33%	11.75%
35	7.69%	9.30%
40	5.67%	7.17%
45	4.07%	5.35%
50	2.78%	3.81%
55	1.72%	2.49%
60	0.83%	1.37%
64	0.22%	0.58%

*Members with 10 or more years of service

Hospital		
	% of Active Members Separating Within Next Year	
	Men	Women
25	18.14%	17.51%
30	14.84%	15.41%
35	12.92%	11.91%
40	10.72%	8.40%
45	7.97%	5.60%
50	4.40%	5.60%
55	1.10%	5.60%
60	1.10%	5.60%
64	1.10%	5.60%

For inactive members, the assumed age at retirement is age 65. If an inactive member is not vested, the liability valued is equal to their employee contributions plus interest.

Rates are not applied after the member is eligible for reduced or unreduced retirement benefits.

Rates of disability among active members are shown below for selected ages (10% of the disabilities are assumed to be duty-related and 90% are assumed to be non-duty related):

Ages	% Becoming Disabled Within Next Year	
	Duty	Non-Duty
20	0.00%	0.02%
25	0.00%	0.02%
30	0.00%	0.02%
35	0.00%	0.03%
40	0.01%	0.06%
45	0.01%	0.12%
50	0.03%	0.24%
55	0.04%	0.40%
60	0.07%	0.60%
65	0.10%	0.90%

Miscellaneous and Technical Assumptions

Administrative & Investment Expenses	The investment return assumption is intended to be the return net of investment and administrative expenses.
Benefit Service	Exact fractional service is used to determine the amount of benefit payable.
COLA	None assumed.
Covered Payroll	Annual payroll projected forward with one year's salary increase.
Decrement Operation	All decrements other than withdrawal are in force during retirement eligibility.
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.
Incidence of Contributions	Contributions are assumed to be received continuously throughout the year based upon the computed percent of payroll shown in this report, and the actual payroll payable at the time contributions are made.

Marriage Assumption	75% of males and 60% of females are assumed to be married for purposes of death-in-service benefits and 75% of males and 60% of females are assumed to be married for purposes of retiree medical benefits. Male spouses are assumed to be the same age as female spouses for active member valuation purposes.
Normal Form of Benefit	A straight life annuity is the normal form of benefit.
Pay Increase Timing	Beginning of year. This is equivalent to assuming that reported pays represent annualized rates of pay on the valuation date.
Service Credit Accruals	It is assumed that members accrue one year of service credit per year.
Split of Member and Employer Contributions	The member and employer contributions are split between the pension and medical funds based on their respective ratios to the Total Computed Contribution Rate developed in the previous year's actuarial valuation.
Terminal Pay	For members hired prior to January 1, 2010, unused sick and vacation hours are converted into pay at retirement, death, disability or termination. That converted amount is included in the Final Average Compensation (FAC). The valuation accounts for this by assuming the FAC will be increased by 5.00% for active retirement benefits and increased by 2.25% for active ordinary death and termination benefits for members hired prior to January 1, 2010.
Retiree Medical Election Percentage	It is assumed that 85% of members who retire elect medical benefits, 30% of members who terminate elect medical benefits, 80% of beneficiaries elect medical benefits, and 80% of members who leave as disabled members elect retiree medical benefits.

SECTION G

PLAN PROVISIONS

Plan Provisions

A. Ordinances	Amended and Restated under Denver Municipal Code Section 18-391 through 18-430.7. Most recently amended under Ordinance No. 636-10, adopted November 2010.
B. Effective Date	January 1, 1963
C. Plan Year	January 1 through December 31
D. Type of Plan	Qualified, 401(a) governmental defined benefit retirement plan; for GASB purposes it is a multi-employer cost sharing plan.
E. Eligibility Requirements	Elected Officials, Appointed Officials, and Employees as defined in Denver Municipal Code Sections 18-402 and 18-406.
F. Credited Service	Service measured in completed calendar months from date of employment to date of retirement or prior termination.
G. Compensation	*Gross pay, compensation and salary* shall mean that amount of remuneration, including wages, salaries, other amounts received for personal services actually rendered in the course of employment with the employer, and other amounts actually included or that could be included in gross income of and due to an employee, including employees on disability leave as provided for in division 4 of article V of chapter 18 of the Denver Municipal Code, or otherwise, from the employer in the full amount as calculated before any reductions or deductions are made for any purpose, including reductions or deductions by reason of sections 125, 132(f)(4) or 457 of the Internal Revenue Code, but not including distributions made from a plan of the employer designed to be eligible under section 457. Employer provided fringe benefits receiving special tax benefits, such as premiums for group term life insurance (to the extent excludible from gross income), shall be excluded from the definition of compensation. The calendar year shall be the limitation year (determination period) for purposes of section 415 of the Internal Revenue Code.
H. Final Average Compensation (FAC)	Average monthly rate of compensation during the highest 36 successive calendar months of covered service.
I. Normal Retirement	1. Eligibility: Attainment of age 65, or attainment of age 55 with age plus credited service equal to 75 (Rule of 75). 2. Benefit: 1.5% (2.0% if hired before September 1, 2004) of FAC times credited service. 3. Normal Form: straight life annuity.

J. Early Retirement

1. Eligibility: Attainment of age 55 and completion of 5 years.
2. Benefit: Benefit accrued to date of retirement, reduced by 3% per year from age 65 to reflect commencement of benefit at an earlier age.

K. Temporary Early Retirement

Pending approval of a disability application, a retirement benefit is available to an active, vested member who is at least age 55. This benefit is designed to provide income to the member during the process of fulfilling the disability application requirements. There is a three year limit on this retirement benefit.

L. Deferred Retirement

1. Eligibility: Any vested employee who terminates service for any reason other than retirement, disability, or death and leaves their accumulated contributions on deposit in the trust fund.
2. Benefit: Based on the formula in effect at the time of separation from service. Payment may commence any month after the member's 55th birthday.

M. Service Connected Disability

1. Eligibility: Any employee who becomes totally and permanently disabled as defined in Denver Municipal Code Section 18-408(d) which arises out of and in the course of the member's employment with the employer.
2. Benefit: Based on the greater of 20 years of service or actual service plus 10 years. Total credited service cannot exceed the credited service the member would have earned at age 65.

N. Non-Service Connected Disability

1. Eligibility: Any vested employee who becomes totally and permanently disabled as defined in Denver Municipal Code Section 18-408(e) which does not occur as a result of a service connected disability.
2. Benefit: The higher of 75% of the amount calculated for a service-connected disability or the amount calculated for an early retirement.

O. Death in the Line of Duty

The active member's surviving spouse is awarded the retirement benefit the member would have been entitled at their normal retirement date based on the higher of 15 years of service or actual credited service plus 5 years. Total credited service cannot exceed the credited service the member would have earned at age 65. If there is no surviving spouse but the member has children under age 21, then the benefit shall be paid until the youngest child becomes age 21. If there is no surviving spouse and no children under age 21, then the benefit shall be paid to a designated beneficiary.

P. Other Pre-Retirement Death

The active member's surviving spouse is awarded 75% of the benefit that would have been entitled had the death been service connected. If an active member who has attained the age of fifty-five (55) dies prior to the actual retirement date, the member shall be deemed to have retired on the first day of the month following the month in which death occurs and the surviving spouse will receive an annuity as if the member had elected the 100% joint and survivor option if this will result in a greater benefit to the spouse than the above provision.

Q. Post-Retirement Death

1. For Normal Retirement (with at least 5 years of service), Disability Retirement (after age 65), and for Temporary Early Retirement (pending approval of disability) the lump-sum death benefit is $5,000.
2. For Disability Retirement before age 65, the death benefit is 150% of the member's annualized average monthly salary, limited to $50,000. This benefit reduces to $5,000 upon the disabled member reaching age 65.
3. For Early Retirement the lump-sum at age: 64 is $4,750; 63 is $4,500; 62 is $4,250; 61 is $4,000; 60 is $3,750; 59 is $3,500; 58 is $3,250; 57 is $3,000; 56 is $2,750; 55 is $2,500.

R. Optional Forms

Joint and Survivor Option - Any employee retiring under the normal retirement provision may elect a joint and survivor benefit. The member's benefit is actuarially reduced based on their election: 100%, 75%, or 50%. Once the benefit commences this election cannot be changed. If the spouse or designated beneficiary predeceases the member, the benefit paid to the member shall be increased to the full single straight life annuity as if no joint and survivor benefit had been selected.

S. Medical Benefits

Retiree Medical Plan Benefits – Participants and their surviving spouses or dependents receiving retirement benefits are eligible to elect to receive plan-provided retiree medical coverage and a plan-provided subsidy (benefit) to help provide for the payment of health insurance premiums. The Plan contributes $6.25 per month for each year of service for members who are Medicare eligible. The Plan contributes $12.50 per month for each year of service for members not eligible for Medicare. In the event of the election of a Joint and Survivor option, the benefit is calculated based on the age of the member. If the member predeceases the joint and survivor beneficiary then the full benefit is transferred to the surviving spouse or dependent regardless of the joint and survivor election percentage. The monthly benefit is limited to the monthly premium amount for the coverage elected. If a member dies and leaves a beneficiary who is not a spouse or dependent, that beneficiary can elect to participate in the group health plan, but must pay the full cost. No plan contribution can be made for non-spouse or non-dependent beneficiaries.

T. Refunds	1. Eligibility: All members leaving covered employment with less than 5 years of service are eligible. Vested members (those with 5 or more years of service) may not withdraw their accumulated contributions plus interest in lieu of the deferred benefits otherwise due. 2. Benefit: The member who withdraws receives a lump-sum payment of his/her employee contributions, plus the interest credited on these contributions. Interest is credited at 3.00%.
U. Member Contributions	Increased from 4.5% of compensation to 5.5% of compensation, effective January, 2011.
V. Employer Contributions	Increased from 8.5% of compensation to 9.5% of compensation, effective January 1, 2011 for each member.
W. Cost of Living Increases	Given on an ad-hoc basis. There have been no cost of living increases since 2002.
X. Changes from Previous Valuation	There have been no changes in the plan provisions since the previous actuarial valuation.
Y. Deferred Retirement Option Plan	1. DROP – From January 1, 2001 through April 30, 2003, in lieu of immediate termination of employment and receipt of a normal retirement benefit, eligible members were permitted to continue employment for four years and have their normal retirement benefit paid into the deferred retirement option plan (DROP) account, after which time the participant either terminated employment or continued to be employed and resume regular membership with the retirement plan. 2. DROP II – From May 1, 2003 through September 1, 2003, in lieu of immediate termination of employment and receipt of a normal retirement benefit, eligible members were permitted to continue employment for five years and have their normal retirement benefit paid into the DROP II account after which time all participants terminated employment.
Z. Other Ancillary Benefits	Social Security Make-Up Benefit – For members retiring on or after January 1, 1996, an additional retirement benefit equal to the applicable percentage (per Denver Municipal Code Section 18-409(i)) of the member's estimated primary Social Security benefit multiplied by credited service with the City/DHHA during which the contributions were made to Social Security (up to a maximum of 35 years of credited service) divided by 35. This additional benefit is payable beginning on the first day of the month after the member's 62nd birthday or the member's retirement date, whichever is later, but will not be paid before retirement benefits have begun from the Plan. Members retiring under a disability form of retirement are not eligible for this benefit.

SECTION H

GLOSSARY

Glossary

Actuarial Accrued Liability (AAL)	The difference between the Actuarial Present Value of Future Benefits, and the Actuarial Present Value of Future Normal Costs. The total present value of benefits is the sum of the AAL and the Present Value of Future Normal Costs.
Actuarial Assumptions	Assumptions about future plan experience that affect costs or liabilities, such as: mortality, withdrawal, disablement, and retirement; future increases in salary; future rates of investment earnings; future investment and administrative expenses; characteristics of members not specified in the data, such as marital status; characteristics of future members; future elections made by members; and other items.
Actuarial Cost Method	A procedure for allocating the Actuarial Present Value of Future Benefits between the Actuarial Present Value of future Normal Costs and the Actuarial Accrued Liability.
Actuarial Equivalent	Of equal Actuarial Present Value, determined as of a given date and based on a given set of Actuarial Assumptions.
Actuarial Present Value	The amount of funds required to provide a payment or series of payments in the future. It is determined by discounting the future payments with an assumed interest rate and with the assumed probability each payment will be made.
Actuarial Present Value of Future Benefits	The Actuarial Present Value of amounts which are expected to be paid at various future times to active members, retired members, beneficiaries receiving benefits, and inactive, nonretired members entitled to either a refund or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would provide sufficient assets to pay all projected benefits and expenses when due.
Actuarial Valuation	The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a plan. An Actuarial Valuation for a governmental retirement system typically also includes calculations of items needed for compliance with GASB No. 25, such as the Funded Ratio and the Annual Required Contribution (ARC).
Actuarial Value of Assets	The value of the assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets or a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the actuarially required contribution (ARC). The actuarial value of assets is the asset amount used to determine the unfunded accrued liability, the funded ratio and the ARC

Glossary

Amortization Method	A method for determining the Amortization Payment. The choices are level dollar and level percentage of payroll; and open period versus closed period. Under the Level Dollar method, the Amortization Payment is one of a stream of payments, all equal, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the Amortization payment is one of a stream of increasing payments, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the stream of payments increases at the rate at which total covered payroll of all active members is assumed to increase. For an open amortization method (either level dollar or level percent of pay), the amortization period does not decline each year. Thus, at the end of a given period, an open amortization period may still have a remaining UAAL balance.
Amortization Payment	That portion of the plan contribution or ARC which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability. As a special note, it is possible that an open method level percent of pay payment may not pay off principle in early years.
Amortization Period	The period used in calculating the Amortization Payment.
Annual Required Contribution (ARC)	Under GASB 25, the employer's periodic required contributions, expressed as a dollar amount or a percentage of covered plan compensation. The ARC consists of the Employer Normal Cost and Amortization Payment. For Section D, the ARC is defined to be the sum of (a) the employer normal cost, and (b) the amount needed to amortize the UAAL as a level dollar amount over 30 years.
Closed Amortization Period	A specific number of years that is reduced by one each year, and declines to zero with the passage of time. For example if the amortization period is initially set at 30 years, it is 29 years at the end of one year, 28 years at the end of two years, etc.
Employer Normal Cost	The portion of the Normal Cost to be paid by the employer. This is equal to the Normal Cost less expected member contributions.
Equivalent Single Amortization Period	For plans that do not establish separate amortization bases (separate components of the UAAL), this is the same as the Amortization Period. For plans that do establish separate amortization bases, this is the period over which the UAAL would be amortized if all amortization bases were combined upon the current UAAL payment.

Glossary

Experience Gain/Loss	A measure of the liability difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two actuarial valuations. To the extent that actual experience differs from that assumed, Unfunded Actuarial Accrued Liabilities emerge which may be larger or smaller than projected. Gains are due to favorable experience, e.g., the assets earn more than projected, salaries do not increase as fast as assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. On the other hand, losses are the result of unfavorable experience, i.e., actual results that produce Unfunded Actuarial Accrued Liabilities which are larger than projected.
Funded Ratio	The ratio of the Actuarial Value of Assets to the Actuarial Accrued Liability.
GASB	Governmental Accounting Standards Board.
GASB No. 25 and GASB No. 27	These are the governmental accounting standards that set the accounting rules for public retirement systems and the employers that sponsor or contribute to them. Statement No. 27 sets the accounting rules for the employers that sponsor or contribute to public retirement systems, while Statement No. 25 sets the rules for the systems themselves.
Normal Cost	The annual cost assigned, under the Actuarial Cost Method, to the current plan year.
Open Amortization Period	An open amortization period is one which is used to determine the Amortization Payment but which does not change over time. In other words, if the initial period is set as 30 years, the same 30-year period is used in determining the Amortization Period each year. In theory, if an Open Amortization Period is used to amortize the Unfunded Actuarial Accrued Liability, the UAAL will never completely disappear, but will become smaller each year, either as a dollar amount or in relation to covered payroll.
Select Period for Separation Rates	A select period sets separation rates for an employee's first "select" years of service. After the employee works beyond the select period, then the ultimate separation rates are used based on the employee's age.
Unfunded Actuarial Accrued Liability	The difference between the Actuarial Accrued Liability and Actuarial Value of Assets.
Valuation Date	The date as of which the Actuarial Present Value of Future Benefits are determined. The benefits expected to be paid in the future are discounted to this date.

SECTION I

OTHER SPECIAL REQUIREMENTS

Determination of DHHA Supplemental Contributions Pension Plan

	2011	2010
Average Age for Active Members at Hospital	51.29	50.56
Number of Active Members at Hospital	921	1,013
Average Age for Active Members Non-Hospital	45.53	45.03
Number of Active Members Non-Hospital	7,482	7,591
Normal Cost for Hospital	$9,267,706	$9,568,824
Estimated Payroll for Hospital	75,263,320	79,106,733
Normal Cost as a Percent of Hospital Payroll	12.31%	12.10%
Normal Cost for Non-Hospital	$42,831,374	$41,047,759
Estimated Payroll for Non-Hospital	442,134,785	426,938,452
Normal Cost as a Percent of Non-Hospital Payroll	9.69%	9.61%
Difference in Normal Cost as a Percent of Payroll	2.62%	2.49%
Estimated Payroll for Hospital	$75,263,320	$79,106,733
Difference in Normal Cost as a Dollar Amount	1,971,899	1,969,758

Determination of DHHA Supplemental Contributions Retiree Medical Plan

	2011	2010
Average Age for Active Members at Hospital	51.29	50.56
Number of Active Members at Hospital	921	1,013
Average Age for Active Members Non-Hospital	45.53	45.03
Number of Active Members Non-Hospital	7,482	7,591
Normal Cost for Hospital	$378,649	$379,581
Estimated Payroll for Hospital	75,263,320	79,106,733
Normal Cost as a Percent of Hospital Payroll	0.50310%	0.47983%
Normal Cost for Non-Hospital	$2,243,908	$2,043,664
Estimated Payroll for Non-Hospital	442,134,785	426,938,452
Normal Cost as a Percent of Non-Hospital Payroll	0.50752%	0.47868%
Difference in Normal Cost as a Percent of Payroll	-0.004418%	0.001156%
Estimated Payroll for Hospital	$75,263,320	$79,106,733
Difference in Normal Cost as a Dollar Amount	-$3,325	$914