The City of Bismarck Employees' Pension Plan

Actuarial Valuation

January 1, 2015

Arthur J. Gallagher & Co.

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The City of Bismarck Employees' Pension Plan

Table of Contents

ACTUARIAL CERTIFICATION
January 1, 2015 to December 31, 2015

In our opinion, the following report presents fairly the January 1, 2015 Actuarial Valuation of The City of Bismarck Employees’ Pension Plan in accordance with Generally Accepted Actuarial Principles and Practices.

Our Actuarial Valuation has been conducted with reliance upon Participant information and financial information provided to us by the City of Bismarck. The accuracy of the information in this report is dependent on the quality and completeness of the information provided to us. We have reviewed the information provided to us for general reasonableness. The valuation was performed on the basis of the Participant data, Plan Provisions, actuarial assumptions, and actuarial methods stated in this report.

The actuarial assumptions used in this report were selected by the City of Bismarck, with the agreement of Gallagher Benefit Services, Inc. In our opinion, the actuarial assumptions used (a) each, and in the aggregate, are reasonably related to the experience of the plan and to reasonable expectations, and (b) in the aggregate, represent our best estimate of anticipated experience under the plan.

To the best of our knowledge, the information contained in this report is complete and accurate.

Douglas A. Anderson, EA, ASA, MAAA
Enrollment Number 14-05012

5/27/2015
Date

Benjamin M. Holle, EA
Enrollment Number 14-07400

5/27/2015
Date

COMMENTARY

In this report we present the results of the January 1, 2015 Actuarial Valuation of the City of Bismarck Employees' Pension Plan. There were no changes in actuarial assumptions or plan provisions since the January 1, 2014 report. This report reflects a 3% Cost of Living Adjustment (COLA) for retirees effective January 1, 2015.

Annual Required Contribution

We recommend that the City contribution be at least equal to the Annual Required Contribution developed under the Entry Age Normal actuarial cost method. On this basis, a contribution of $1,205,086 (5.5% of covered payroll) is recommended for the 2015 plan year. The calculation of this contribution is illustrated in Exhibit 12.

Expected City Contribution

The City commission has approved that the City contribution will be 10.4% of salary. The expected contribution for 2015 on this basis is $2,272,492 (10.4% of payroll).

Contribution Requirements

The valuation results are shown on page 3 in a comparison between 2014 and 2015. The 2014 calculation, developed in the first column, shows an UAAL of ($961,433) and, with an actual City payment of $2,181,183 in 2014 and expected payment of $2,272,492 in 2015 plus future contributions of 10.4% of covered payroll, an amortization period of 0 years.

The calculation for 2015 shows an UAAL of $966,992 and, with an expected City payment of $2,272,492 for 2015, an amortization period of 1 year.

Funding Ratio

Plan assets cover 125% of the Present Value of Accumulated Plan Benefits. More detail is contained on page 20. Last year plan assets covered 130% of the Present Value of Accumulated Plan Benefits. The Present Value of Accumulated Plan benefits is the value of benefits based only on salaries and service as of the valuation date and does not reflect the value of any future benefit accruals.

GASB No. 25 and No. 27

Information required by Statements No. 25 and No. 27 of the Governmental Accounting Standards Board is summarized on pages 21 and 22. Gallagher is currently evaluating the requirements of GASB No. 67 and No. 68 and will report on those requirements separately.

SUMMARY OF RESULTS

	1/1/14	1/1/15	Percent Change
1. Number of Participants			
(a) Active	409	431	5.4%
(b) Terminated vested	54	58	7.4%
(c) Retired	157	173	10.2%
(d) Total Participants = (a)+(b)+(c)	620	662	6.8%
2. Annual covered salaries for Participants under the assumed retirement age	$ 20,372,796	$ 21,850,884	7.3%
3. Actuarial Accrued Liability			
(a) Active Participants	$ 46,627,703	$ 47,990,942	2.9%
(b) Terminated vested Participants	3,341,864	3,106,200	(7.1%)
(c) Retired Participants	25,855,991	31,144,175	20.5%
(d) Total Actuarial Accrued Liability = (a)+(b)+(c)	$ 75,825,558	$ 82,241,317	8.5%
4. Actuarial Value of Assets	$ 76,786,991	$ 81,274,325	5.8%
5. Unfunded Actuarial Accrued Liability = (3)(d)-(4)	$ (961,433)	$ 966,992	200.6%
6. Actual 2013/Expected 2014 annual financial support by City	$ 2,181,183	$ 2,272,492	4.2%
7. Annual Required Contribution	$ 981,273	$ 1,205,086	22.8%
8. Amortization period at expected level of funding	0 years[1]	1 year[2]	100.0%

[1] Amortization period based on City Contributions of $2,181,183 in 2014, $2,272,492 in 2015, and increasing due to total salary growth at the rate of 3.0% annually thereafter.

[2] Amortization period based on $2,272,492 contribution for 2015, and increasing due to total salary growth at the rate of 3.0% annually thereafter.

Input Information

Arthur J. Gallagher & Co.

EXHIBIT 1
Summary of Plan Provisions

The following summary has been prepared for valuation purposes only. It outlines the Provisions found in Chapter 9-07 (City Employees' Pension) necessary to perform the Actuarial Valuation, as interpreted by Gallagher Benefit Services Inc.

Definitions

Actuarial Equivalence Factors: In calculating the actuarial equivalence of one form of benefit to another, the interest rate to be used shall be 7.0% and the mortality table to be used shall be the "applicable mortality table" as defined by Section 417(e)(3) of the Code (9-07-10).

Average Basic Monthly Compensation: The average of the monthly base compensation of a Participant over the highest 36 month period of employment. Monthly base compensation excludes overtime, bonuses, severance payments, and other remuneration in excess of base compensation (9-07-15(1)).

Effective Date of the Plan: January 1, 1966.

Early Retirement Date: Participants who have completed 60 consecutive months of contributing service and have attained age 50 are eligible for a monthly pension benefit (9-07-15(2)).

Membership Fee: Every full-time employee of the City of Bismarck except police officers and fire fighters shall be assessed and required to pay an amount of 5.0% of their basic salary (9-07-01).

Normal Form of Benefit: Married Participants receive a Joint & Two-Thirds to Survivor annuity. Single Participants receive a Life Only annuity.

Normal Retirement Date: Participants who have attained age 62 are eligible for a monthly pension benefit (9-07-15(1)).

Plan Year: January 1st through December 31st (9-07-08).

Recognized Service: Full and fractional years of contributing service during which the employee contributed to the fund (9-07-23). Military service will be included as part of the period of service with the City provided that the period does not exceed 5 years and the employee pays into the fund 5.0% of the lesser of the last full year's salary paid by the City or military salary for each year of military service (9-07-05).

EXHIBIT 1 (Continued)
Summary of Plan Provisions

Plan Provisions

Eligibility:

Every full-time employee, other than members of the Police Department who are sworn officers, members of the firefighter's relief association, and employees who perform fire suppression duties. (9-07-11).

Normal Retirement Benefit:

Participants serving until the Normal Retirement Date are eligible for a monthly pension benefit computed by multiplying his or her highest 36 months of Average Basic Monthly Compensation times 1.75% times his or her number of full and fractional years of Recognized Service prior to January 1, 2005 plus 2.25% times his or her number of full and fractional years of Recognized Service after December 31, 2004. (9-07-15(1)).

Early Retirement Benefit:

The monthly pension benefit shall be equal to the Normal Retirement Benefit actuarially reduced for payments commencing prior to age 62 (9-07-15(2)). The reduction factors are as follows:

Age	Factor	Age	Factor
50	.4287	57	.6841
51	.4567	58	.7353
52	.4870	59	.7918
53	.5199	60	.8542
54	.5557	61	.9233
55	.5947	62	1.000
56	.6373		

Termination Benefit:

After 60 consecutive months of contributing service and termination of employment, a Participant may elect a deferred retirement benefit to commence at an elected age 50 to 62. The Participant's deferred benefit shall equal the Normal Retirement Benefit (based on service and compensation to the date of termination) actuarially reduced for early commencement (9-07-15(3)).

EXHIBIT 1 (Continued)
Summary of Plan Provisions

Death Benefit:	The surviving spouse (while unmarried) receives 2/3 of the actuarially reduced pension to which the Participant would have been entitled, but not less than $65 per month provided the Participant served at least 60 consecutive months of contributing service (9-07-15(4)). The surviving spouse has the option to elect a refund of contributions in lieu of the above-mentioned benefit (9-07-15(5)). If there is no surviving spouse, the Participant's contributions are paid to the Participant's estate (9-07-15(6)).
Refund of Contributions:	Any Participant who has contributed to the plan and terminates employment before being entitled to a pension shall be entitled to a refund of all contributions made by him to the pension system with accumulated interest. Interest of 5% per year will be credited on such contributions made after July 1, 1972. Interest of 2.5% per year will be credited on such contributions made prior to July 1, 1972. Any Participant electing a refund of contributions forfeits all rights to any other form of benefit under this plan (9-07-14).
Cost of Living Adjustments:	Persons receiving pension payments shall be eligible for cost of living adjustments in an amount determined by the Board of Trustees. The adjustment may not exceed the lesser of the City employees' salary adjustment or 3% (9-07-16).

EXHIBIT 2
Census Summary and Reconciliation

	1/1/14	1/1/15	Percent Change
Active Participants			
▪ Number of Participants			
– Fully vested	276	271	(1.8%)
– Non-vested	133	160	20.3%
– Total	409	431	5.4%
▪ Average age	47.7	46.9	(1.7%)
▪ Average service	12.8	12.0	(6.3%)
▪ Average salary	$ 47,680	$ 48,509	1.7%
Terminated Vested Participants			
▪ Number of Participants	54	58	7.4%
▪ Average age	48.8	47.8	(2.0%)
▪ Average years since termination	4.6	5.1	10.9%
▪ Average monthly benefit at Normal Retirement	$ 837.88	$ 788.20	(5.9%)
Retired Participants			
▪ Number of Participants	157	173	10.2%
▪ Average age	72.9	72.5	(0.5%)
▪ Average years since retirement	10.0	9.7	(3.0%)
▪ Average monthly benefit	$ 1,507.11	$ 1,634.92	8.5%

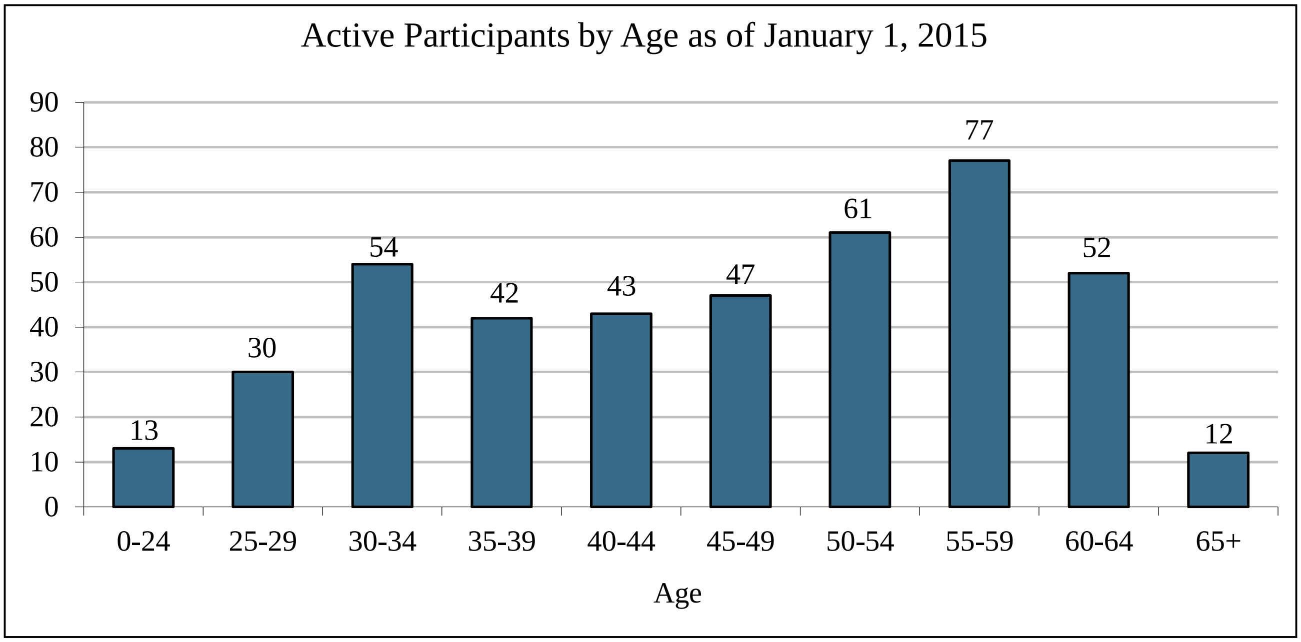
EXHIBIT 3
Participant Reconciliation

The following information provides the reconciliation from January 1, 2014 to January 1, 2015 of Plan Participants.

	Active	Terminated Vested	Retired	Disabled	Beneficiary	Total
1/1/2014 Participants	409	54	127	0	30	620
New Participants	81	-	-	-	-	81
Rehired	1	(1)	-	-	-	-
Terminated vested	(12)	12	-	-	-	-
Terminated non-vested	(35)	-	-	-	-	(35)
Retired	(14)	(4)	17	-	1	-
Disabled	-	-	-	-	-	-
Died with beneficiary	-	-	(1)	-	1	-
Died without beneficiary	-	-	-	-	(2)	(2)
Benefit stopped	-	-	-	-	-	-
Paid-out lump sum	-	(3)	-	-	-	(3)
Data corrections	1	-	-	-	-	1
1/1/2015 Participants	431	58	143	0	30	662

During 2014, the total Participant count increased by 42 due to 82 new Participants offset by 35 Participants that terminated employment and received a return of their employee contributions, 2 Participant deaths with no beneficiary and 3 deferred vested Participants who were paid lump sums. There were 18 Participants that retired, 12 Participants that moved from active to terminated vested status and 1 Participant death during 2014 with immediate benefits to a beneficiary. 1 terminated vested participant was rehired, and there was 1 data correction for an active participant hired prior to 2014.

EXHIBIT 4
Active Participant Data



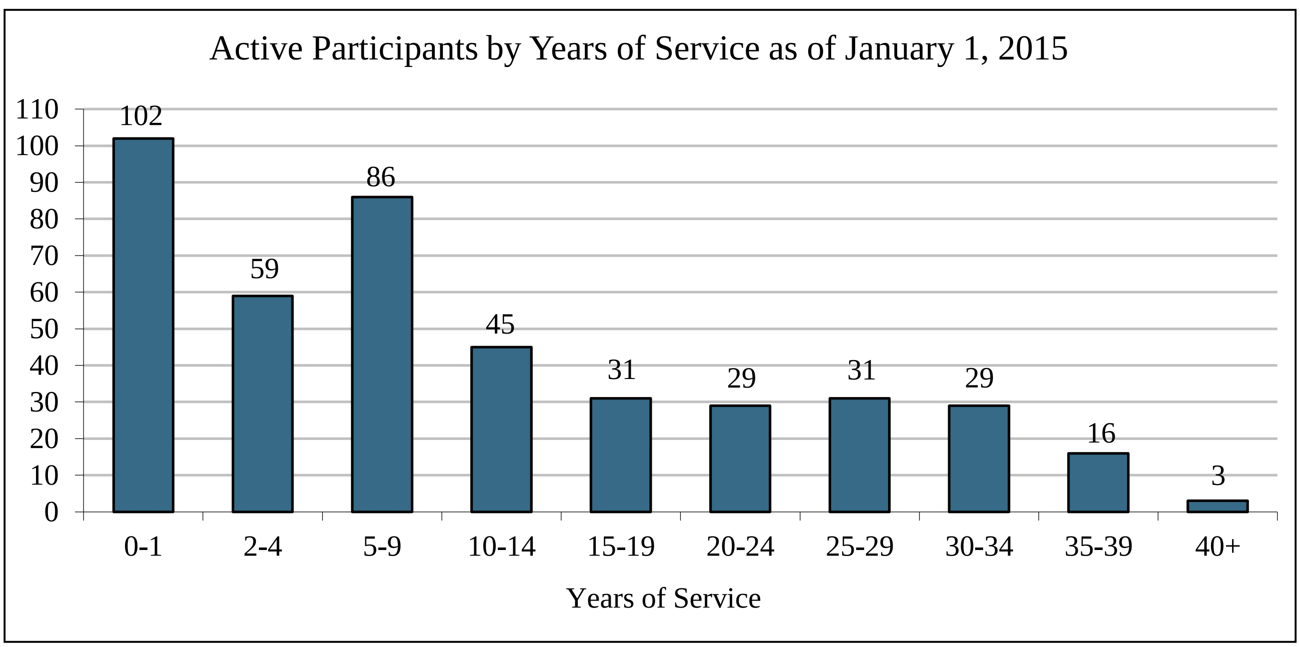
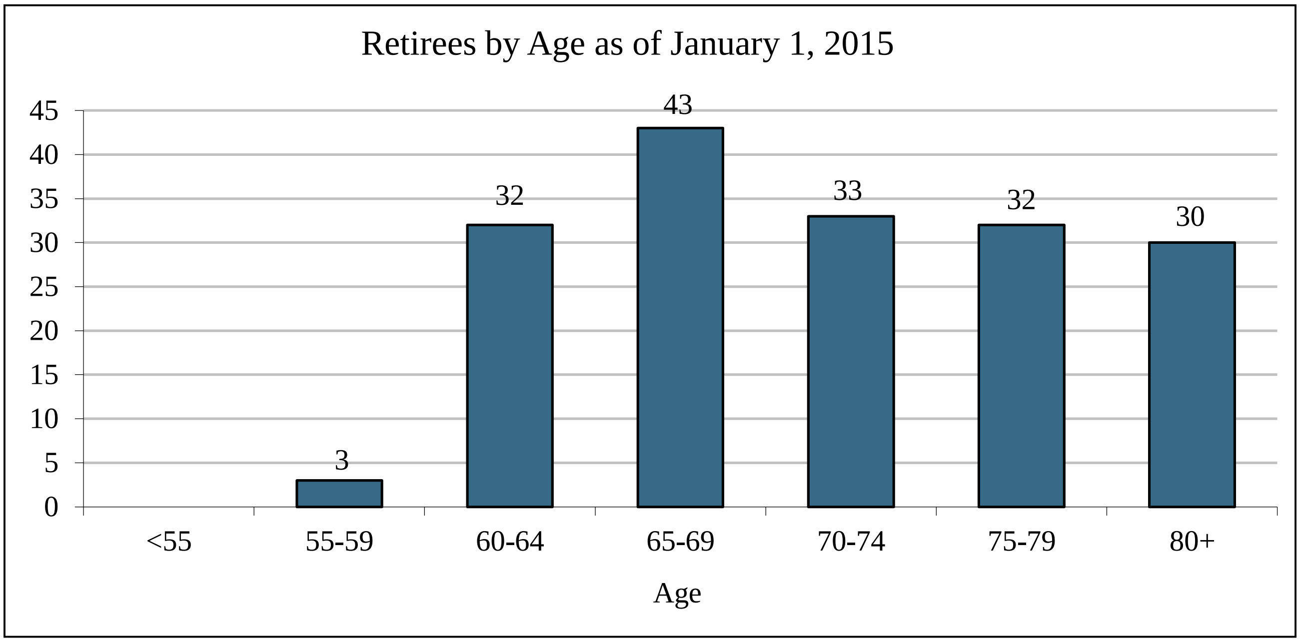


EXHIBIT 5
Retired Participant Data



Retirees include those on service retirement, disability retirement and beneficiaries with survivor benefits.

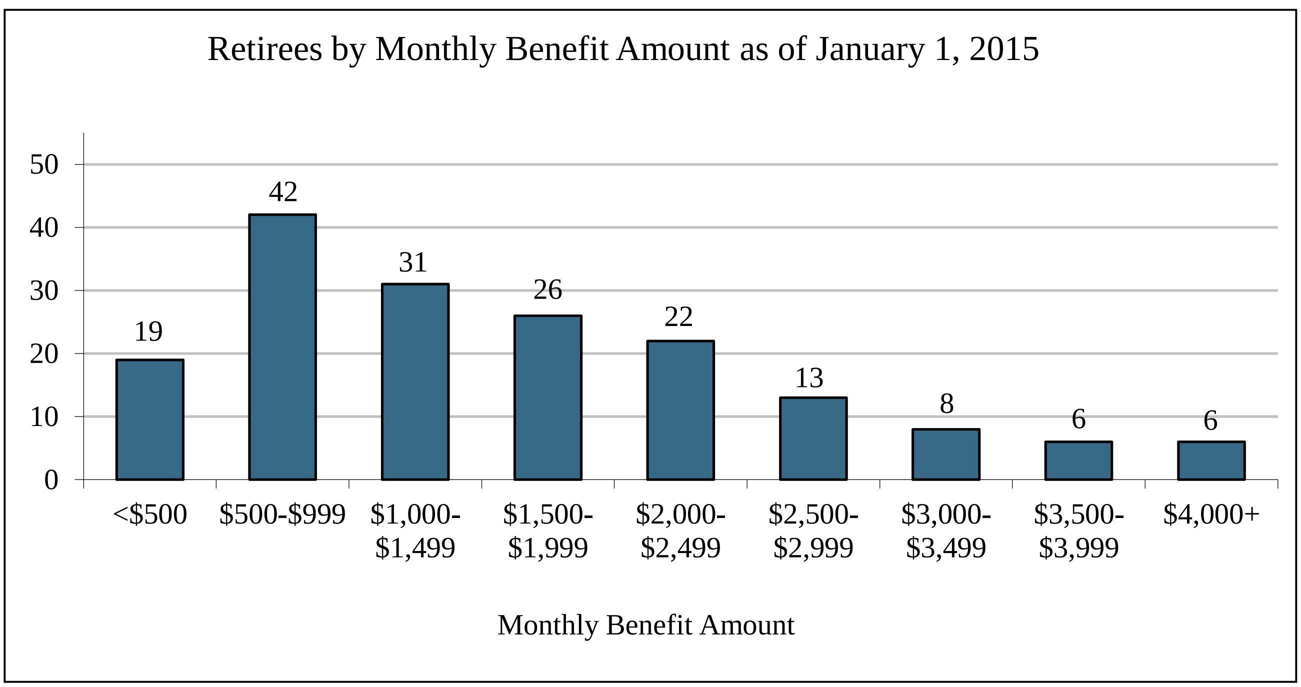
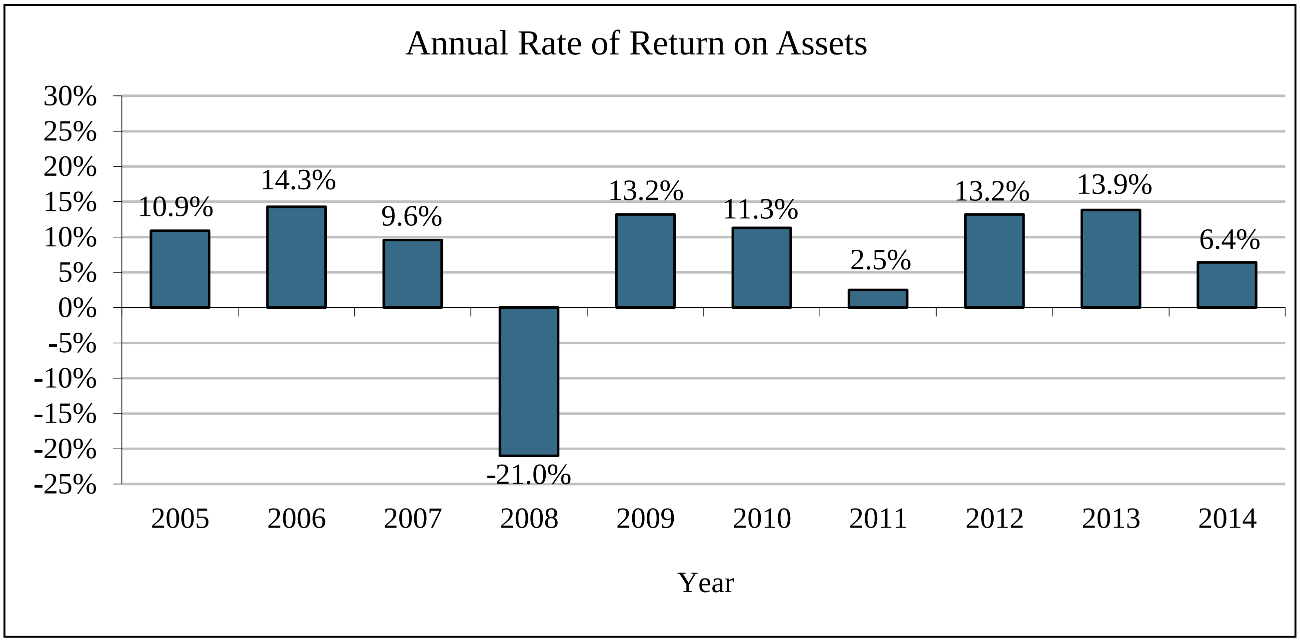


EXHIBIT 6
Reconciliation of Assets

1. Beginning Balance as of January 1, 2014			$	76,786,991
2. Revenue				
(a) Employer's Contribution				
(i) Park & Rec. Contribution	$	231,612		
(ii) Department Contribution		1,949,571		
(iii) Total City Contribution	$	2,181,183		
(b) Employee's Contribution		1,059,009		
(c) Investment Income (Loss)		4,893,235		
(d) Total Revenue			$	8,133,427
3. Expenditure				
(a) Pension Benefit Payments	$	3,104,160		
(b) Professional & Legal Fees		2,823		
(c) Management Consulting		25,595		
(d) Administration Fees		36,721		
(e) Investment Expense		327,717		
(f) Pension Refund		147,904		
(g) Postage		1,173		
(h) Total Expenditure			$	3,646,093
4. Net Income (Loss)			$	4,487,334
5. Ending Balance as of December 31, 2014			$	81,274,325

Total assets increased $4,487,334 during 2014. This increase was from net cash flow (total contributions less expenditures) of ($405,901), and an investment income of $4,893,235. Some components were rounded up or down to ensure that the totals would add correctly. The net rate of return after expenses was 6.4%.

EXHIBIT 7
Historical Asset Information



Rates of return are determined after expenses.

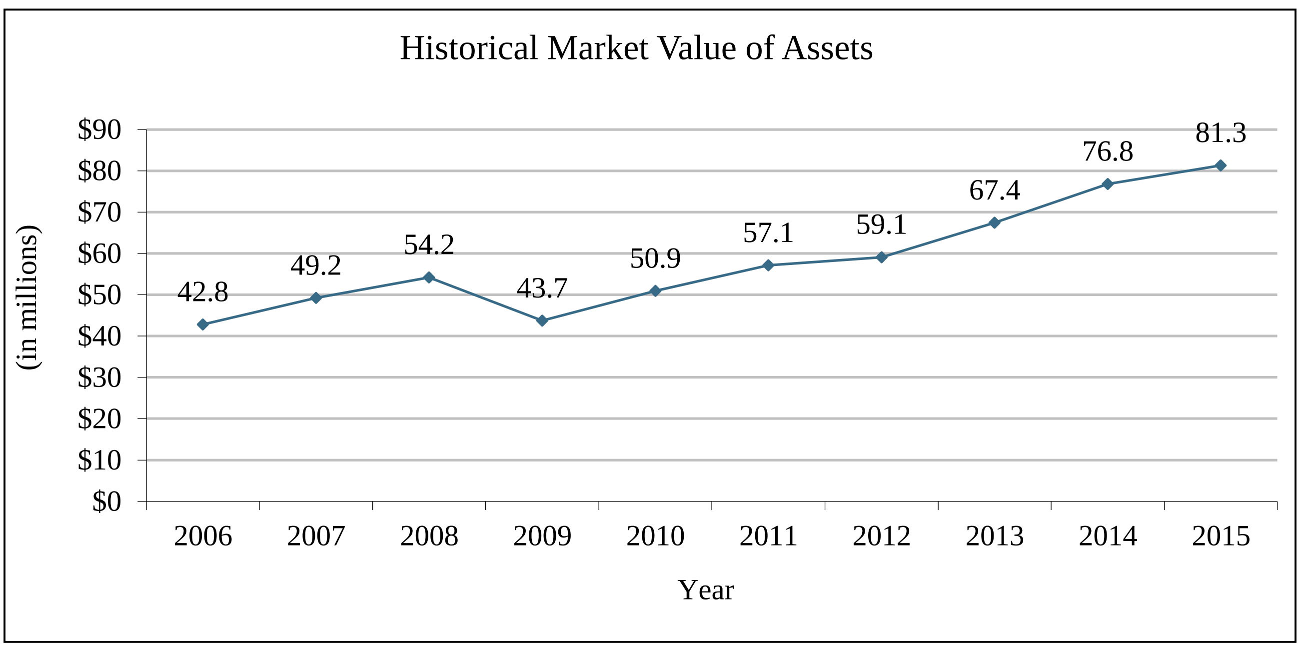


EXHIBIT 8
Actuarial Assumptions and Cost Methods

Economic Assumptions

Investment Return: The Fund is assumed to earn 7.5% per year after expenses.

Salary Scale: Active Participant Salaries are assumed to increase at rates according to the following table:

Years of Service	Rate
0-9	5.0%
10+	4.0%

Inflation: The amortization of the Unfunded Actuarial Accrued Liability is determined as a level percent of payroll using a 3% total payroll growth assumption.

Demographic Assumptions

Retirement: Active Participant retirement rates are based on plan experience between 1/1/05 and 12/31/11 (See Illustrations on Page 14).

Mortality: Mortality rates are based on the 1994 Group Annuity Mortality Table (See Illustrations on Page 14).

Disability: None.

Withdrawal: Active Participant termination rates are based on plan experience between 1/1/05 and 12/31/11 (See Illustrations on Page 14).

Spouse Age: Male Participants are assumed to be 3 years older than female spouses. Female Participants are assumed to be 3 years younger than male spouses.

Marriage Rate: 85% of Participants are assumed to be married.

EXHIBIT 8 (Continued)
Actuarial Assumptions and Cost Methods

Cost Methods

Form of Benefit: Married Participants receive their benefit in the form of a Joint and Two Thirds to Survivor annuity. Single Participants receive their benefit in the form of a Life Only annuity.

Actuarial Asset Value: The Actuarial Value of Assets is equal to the Market Value of Assets reserved for employee pension benefits.

Expenses: Plan expenses are paid from plan assets.

Funding Method: The contribution requirement is determined using the Entry Age Normal actuarial cost method.

Illustrations

	Rate of Mortality (per 1,000)	
Age	Male	Female
25	0.66	0.29
30	0.80	0.35
35	0.85	0.48
40	1.07	0.71
45	1.58	0.97
50	2.58	1.43
55	4.43	2.29

	Rate of Disability (per 1,000)	
Age	Male	Female
25	0.00	0.00
30	0.00	0.00
35	0.00	0.00
40	0.00	0.00
45	0.00	0.00
50	0.00	0.00
55	0.00	0.00

	Rate of Withdrawal (per 1,000)	
Age	Male	Female
20-24	80	200
25-29	80	150
30-34	80	150
35-39	80	80
40-44	25	80
45-49	20	60
50-54	10	30
55+	0	0

	Rate of Retirement (per 1,000)	
Age	Male	Female
62-65	200	200
66	400	400
67	600	600
68	800	800
69+	1,000	1,000

Contribution Information

Arthur J. Gallagher & Co.

EXHIBIT 9
Development of Unfunded Actuarial Accrued Liability

		1/1/15
1. Actuarial Accrued Liability		
(a) Participants receiving benefits	$	30,391,000
(b) Terminated vested Participants		3,106,200
(c) Active Participants		47,990,942
(d) Total Participants = (a)+(b)+(c)	$	81,488,142
2. Adjustment for cost of living adjustments		753,175
3. Adjustment for assumption changes		0
4. Actuarial Accrued Liability after adjustments = (1)(d)+(2)+(3), not less than zero	$	82,241,317
5. Actuarial Value of Assets		81,274,325
6. Unfunded Actuarial Accrued Liability as of January 1, 2015 = (4)-(5)	$	966,992

Under the Entry Age Normal actuarial cost method, the Unfunded Actuarial Accrued Liability is recalculated each year. The Actuarial Accrued Liability is valued using participant data, plan provisions and assumptions as of the valuation date. Past demographic or economic experience different than assumed is called an actuarial gain or loss and is reflected in the Unfunded Actuarial Accrued Liability. A breakdown of actuarial gains and losses from the past year is shown on the next page.

The Unfunded Actuarial Accrued Liability is amortized over a fixed period of time. The amortization period was reset at 30 years as of January 1, 2009. Therefore, there are 24 years remaining in the amortization period. The resulting amortization payment is a component of the Annual Required Contribution.

The Unfunded Actuarial Accrued Liability is scheduled to be reduced to $0 over the amortization period. However, this schedule is met only if all assumptions are met and the actual employer contribution equals the Annual Required Contribution each year. If assumptions are not met, an actuarial gain or loss will either decrease or increase the UAAL. Also, if the employer contribution exceeds the recommended contribution, the UAAL will be reduced more rapidly. Alternatively, if the employer contribution is less than the recommended contribution, the UAAL will reduce more slowly or even increase.

EXHIBIT 10
Development of Actuarial (Gain)/Loss

Development of Liability (Gain) or Loss

Actual Actuarial Liability as of January 1, 2014		$ 75,825,558
Expected changes		
▪ Normal cost	$ 2,025,734	
▪ Interest at 7.5%	5,838,847	
▪ Cost of living adjustment	753,175	
▪ Benefit payments with interest to year end	(3,374,016)	
▪ Total expected changes		$ 5,243,740
Expected Actuarial Liability as of January 1, 2015		$ 81,069,298
Actual Actuarial Liability as of January 1, 2015		82,241,317
Actuarial Liability (gain) or loss		$ 1,172,019

Breakdown of Actuarial Liability (gain) or loss by source	
▪ Participant experience different than assumed for death, retirement, termination, disability and other amounts	$ 345,137
▪ Inactive mortality	298,392
▪ Salary increases other than expected	524,396
▪ New entrants	4,094
▪ Assumption changes	N/A
Actuarial Liability (gain) or loss	$ 1,172,019

Development of Asset (Gain) or Loss

Market Value of Assets as of January 1, 2014	$ 76,786,991
▪ Interest at 7.5%	5,759,024
▪ Actual contributions with interest to year-end	3,361,699
▪ Actual benefit payments with interest to year-end	(3,374,016)
▪ Actual expenses with interest to year-end	(408,805)
Expected value of assets as of January 1, 2015	$ 82,124,893
Actual value of assets as of January 1, 2015	81,274,325
Asset (gain) or loss	$ 850,568

A (gain)/loss occurs when actual demographic or economic experience is different from the valuation assumptions. For example, if salary increases are greater (lower) than expected the liability will go up (down). During 2014, an actuarial liability loss of $1,172,019 and an asset loss of $850,568 resulted in an increase in UAAL of $2,022,587 more than expected.

EXHIBIT 11
Recommended Amortization Schedule

Year	Unfunded Liability at Beginning of Year	Annual Amortization Payment	Unfunded Liability at End of Year
2015	$ 966,992	$ 63,088	$ 971,697
2016	971,697	64,981	974,720
2017	974,720	66,930	975,874
2018	975,874	68,938	974,956
2019	974,956	71,006	971,746
2020	971,746	73,136	966,006
2021	966,006	75,330	957,477
2022	957,477	77,590	945,879
2023	945,879	79,918	930,908
2024	930,908	82,316	912,236
2025	912,236	84,785	889,510
2026	889,510	87,329	862,345
2027	862,345	89,949	830,326
2028	830,326	92,647	793,005
2029	793,005	95,426	749,897
2030	749,897	98,289	700,479
2031	700,479	101,238	644,184
2032	644,184	104,275	580,402
2033	580,402	107,403	508,474
2034	508,474	110,625	427,688
2035	427,688	113,944	337,275
2036	337,275	117,362	236,406
2037	236,406	120,883	124,187
2038	124,187	124,187	0

The Annual Amortization Payment is determined by amortizing the Unfunded Actuarial Accrued Liability (UAAL) over 24 years as a level percentage of total payroll. Total payroll is assumed to increase at 3% per year.

This schedule is in accordance with Governmental Accounting Standards Board No. 27 guidelines. The City commission has approved that the City contribution will be 10.4% of salary. Please see Exhibit 13 for more details.

EXHIBIT 12
Development of Annual Required Contribution

Annual Required Contribution (Dollar Amounts)

	2014	2015
1. Total Normal Cost	$ 2,025,734	$ 2,190,985
2. Expected employee contribution	(1,018,640)	(1,092,544)
3. City Normal Cost	$ 1,007,094	$ 1,098,441
4. Amortization of Unfunded Actuarial Accrued Liability	(61,289)	63,088
5. Total Annual Required Contribution	$ 945,805	$ 1,161,529
6. Interest to mid-year at 7.5%	35,468	43,557
7. Recommended contribution, mid-year = (5)+(6)	$ 981,273	$ 1,205,086

Annual Required Contribution (As a Percent of Payroll)

	2014	2015
1. Total Normal Cost	9.9%	10.0%
2. Expected employee contribution	(5.0%)	(5.0%)
3. City Normal Cost	4.9%	5.0%
4. Amortization of Unfunded Actuarial Accrued Liability	(0.3%)	0.3%
5. Total Annual Required Contribution	4.6%	5.3%
6. Interest to mid-year at 7.5%	0.2%	0.2%
7. Recommended contribution, mid-year = (5)+(6)	4.8%	5.5%

Percent of Payroll results are based on total expected covered payroll of $20,372,796 in 2014 and $21,850,884 in 2015. The expected city contribution of 10.4% of covered payroll is more than the 2015 Annual Required Contribution of 5.5%.

EXHIBIT 13
10.4% of Payroll Funding Amortization Schedule

Year	Unfunded Liability B.O.Y.	Amortization Payment E.O.Y.	Unfunded Liability E.O.Y.
2015	$ 966,992	$ 966,992	$ 0

The City commission has approved that the City contribution will be 10.4% of salary. The expected contribution for 2015 on this basis is $2,272,492. The Annual Amortization Payment shown above represents the total expected City contribution available to reduce the UAAL at the end of that year after a reduction for payment of the annual City normal cost.

As shown above, a City contribution of 10.4% of salary per year will amortize the UAAL over 1 year.

Accounting Information

Arthur J. Gallagher & Co.

EXHIBIT 14
Statement of Accumulated Plan Benefits

A measure of the degree of progress made in funding any plan is a comparison between the Accumulated Benefit Liability and the assets accumulated to date. The Accumulated Benefit Liability measures the present value of future benefit payments. However, benefit payments are based only on service and salaries earned as of the valuation date. This liability amount is less than the Actuarial Accrued Liability used to determine the Annual Required Contribution, because the AAL anticipates future salary increases for active participants. The liabilities are determined using the regular valuation assumptions. The table below shows the actuarial present value of the Accumulated Benefit Liability.

Actuarial Present Value of Accumulated Plan Benefits (PVAB)

	1/1/14	1/1/15
Vested accrued benefits		
▪ Participants currently receiving payments	$ 25,855,991	$ 31,144,175
▪ Other Participants	33,120,304	33,780,391
Total vested accrued benefits	$ 58,976,295	$ 64,924,566
Non-vested accrued benefits	98,884	144,023
Total accrued benefits	$ 59,075,179	$ 65,068,589

Statement of Changes in Accumulated Plan Benefits

Beginning value, January 1, 2014	$	59,075,179
Increases (Decreases)		
▪ Cost of living adjustment	$	753,175
▪ Change in actuarial assumptions		0
▪ Benefits accumulated and (gain)/loss		4,181,408
▪ Increase for interest due to decrease in discount period		4,310,891
▪ Benefits paid		(3,252,064)
▪ Net increase (decrease)	$	5,993,410
Ending Value, January 1, 2015	$	65,068,589

The ratio of assets to the above liabilities (known as the Funding Ratio) represents the degree to which Accumulated Benefit liability has been funded. As of January 1, 2015, the Market Value of Assets was $81,274,325. The table below outlines the funding ratios.

Funding Ratio (Assets/PVAB)	
Vested accrued benefits	125%
Total accrued benefits	125%

EXHIBIT 15
GASB Statement No. 25

Statement No. 25 requires disclosure of supplementary information in the form of two schedules, the Schedule of Funding Progress and the Schedule of Employer Contributions. The schedules are shown below.

Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded Actuarial Accrued Liability (UAAL) (b – a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b – a) / c]
1/1/2003	$ 28,324,967	$ 32,464,523	$ 4,139,556	87.2%	$ 11,806,729	35.1%
1/1/2004	34,646,791	39,088,399	4,441,608	88.6%	12,441,844	35.7%
1/1/2005	37,922,220	42,856,344	4,934,124	88.5%	12,765,077	38.7%
1/1/2006	42,836,388	48,871,708	6,035,320	87.7%	13,106,843	46.0%
1/1/2007	49,153,640	50,825,581	1,671,941	96.7%	13,892,759	12.0%
1/1/2008	54,224,695	55,307,884	1,083,189	98.0%	14,901,848	7.3%
1/1/2009	43,690,842	59,315,384	15,624,542	73.7%	15,932,987	98.1%
1/1/2010	50,883,840	64,117,376	13,233,536	79.4%	17,134,528	77.2%
1/1/2011	57,154,675	68,666,067	11,511,392	83.2%	17,408,878	66.1%
1/1/2012	59,103,632	67,314,169	8,210,537	87.8%	18,776,386	43.7%
1/1/2013	67,402,366	72,650,145	5,247,779	92.8%	19,393,833	27.1%
1/1/2014	76,786,991	75,825,558	(961,433)	101.3%	20,372,796	N/A
1/1/2015	81,274,325	82,241,317	966,992	98.8%	21,850,884	4.4%

Schedule of Employer Contributions

Year Ended	Annual Required Contribution (a)	Employer Contribution (b)	Percentage Contributed (b / a)
12/31/2003	$ 1,531,586	$ 906,670	59.2%
12/31/2004	1,267,143	1,678,601	132.5%
12/31/2005	1,414,021	2,113,743	149.5%
12/31/2006	1,233,248	2,147,360	174.1%
12/31/2007	1,068,130	2,182,902	204.4%
12/31/2008	1,090,182	2,542,707	233.2%
12/31/2009	2,010,653	2,649,359	131.8%
12/31/2010	1,958,692	1,862,086	95.1%
12/31/2011	1,904,777	2,076,309	109.0%
12/31/2012	1,423,866	2,234,521	156.9%
12/31/2013	1,299,110	2,259,647	173.9%
12/31/2014	981,273	2,181,183	222.3%
12/31/2015	1,205,086	TBD	TBD

EXHIBIT 16
GASB Statement No. 27

The GASB Statement No. 27 annual pension expense is defined as the Annual Required Contribution (ARC) plus one year's interest on the Net Pension Obligation (NPO) offset by an adjustment to the Annual Required Contribution (ARC). The NPO is defined as the cumulative difference, including interest, for the years prior to the transition date between (a) the employer's required contributions in accordance with the plan's actuarially determined funding requirements and (b) the contributions made by the employer in relation to the required contributions. The adjustment to the Annual Required Contribution is necessary to amortize past contribution deficiencies or excess contributions of the employer.

	2014 Plan Year	2015 Plan Year
Annual Required Contribution (ARC)	$ 945,805	$ 1,161,529
Interest on Net Pension Obligation (asset)	(527,126)	(625,711)
Adjustment to Annual Required Contribution - Beginning of Year NPO amortized as a level percent of pay over a closed 30 year period beginning 1/1/2009[1]	448,037	544,263
Annual Pension Cost	$ 866,716	$ 1,080,081
Contributions Made	2,181,183	*
Increase (decrease) in Net Pension Obligation (asset)	$ (1,314,467)	$ *
Net Pension Obligation (asset) beginning of year	(7,028,349)	(8,342,816)
Net Pension Obligation (asset) end of year	$ (8,342,816)	$ *

[1]The 2014 Amortization Factor is 15.69. The 2015 Amortization Factor is 15.33.

* To be determined at end of year.

The Net Pension Obligation at transition (January 1, 2007) is the cumulative difference, including interest, between (a) the employer's required contributions in accordance with the plan's actuarially determined funding requirements and (b) the contributions made by the employer in relation to the required contributions. The cumulative difference was based on plan records dating back to January 1, 2001. Since the Unfunded Actuarial Accrued Liability as of that date was $0, all actuarially determined required contributions prior to that date are assumed to have been made.