



The City of Bismarck
Employees' Pension Plan

Actuarial Valuation

January 1, 2009



Gallagher Benefit Services, Inc.



Gallagher Benefit Services, Inc.



The City of Bismarck Employees' Pension Plan

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THE CITY OF BISMARCK EMPLOYEES' PENSION PLAN

ACTUARIAL CERTIFICATION

January 1, 2009 to December 31, 2009

In our opinion, the following report presents fairly the January 1, 2009 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. The assumptions were modified effective January 1, 2006 to reflect the results of an Experience Study for the period from January 1, 1998 through December 31, 2004. 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, A.S.A., M.A.A.A., E.A.
Enrollment Number 08-05012

6/16/2009

Date



Benjamin M. Holle, E.A.
Enrollment Number 08-07400

6/16/2009

Date



THE CITY OF BISMARCK EMPLOYEES' PENSION PLAN

COMMENTARY

In this report we present the results of the January 1, 2009 Actuarial Valuation of the City of Bismarck Employees' Pension Plan. As of January 1, 2009 the period for amortizing the Unfunded Actuarial Accrued Liability (UAAL) was reset to 30 years. There were no other changes in actuarial assumptions or plan provisions since the last report. This report reflects no Cost of Living Adjustment (COLA) for retirees effective January 1, 2009.

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 \$2,010,653 (12.6% of covered payroll) is recommended for the 2009 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 with an additional \$819,791 per year for the five year period beginning January 1, 2005. As of January 1, 2009 there is one more year of additional contributions. The expected contribution for 2009 on this basis is \$2,476,822 (15.5% of payroll).

Contribution Requirements

The valuation results are shown on page 3 in a comparison between 2008 and 2009. The 2008 calculation, developed in the first column, shows an UAAL of \$1,083,189 and with a City payment of \$2,369,583 for 2008 and \$2,476,822 for 2009 plus future contributions of 10.4% of covered payroll, an amortization period of 1 year.

The calculation for 2009 shows an UAAL of \$15,624,542 and, with a City payment of \$2,476,822 for 2009, an infinite amortization period. This means that the current level of City contributions is not sufficient to cover the interest payment on the UAAL. Therefore there would be no expected UAAL reduction. The large increase in the UAAL is primarily due to a negative 21.0% rate of return on assets during 2008.

Funding Ratio

On a plan assumptions basis, plan assets cover 97% of the Present Value of Accumulated Plan Benefits. More detail is contained on page 20. Last year plan assets covered 131% of the Present Value of Accumulated Plan Benefits.

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.

GASB No. 50 does not impact the information contained in these exhibits. However it may require some minor changes to the Comprehensive Annual Financial Report.

THE CITY OF BISMARCK EMPLOYEES' PENSION PLAN

SUMMARY OF RESULTS

	1/1/08	1/1/09	Percent Change
1. Number of Participants			
(a) Active	354	375	5.9%
(b) Terminated vested	27	32	18.5%
(c) Retired	<u>127</u>	<u>126</u>	(0.8%)
(d) Total Participants	508	533	4.9%
2. Annual covered salaries for Participants under age 62	\$ 14,901,848	\$ 15,932,987	6.9%
3. Actuarial Accrued Liability			
(a) Active Participants	\$ 37,014,788	\$ 40,555,181	9.6%
(b) Terminated vested Participants	1,003,080	1,402,514	39.8%
(c) Retired Participants	<u>17,290,016</u>	<u>17,357,689</u>	0.4%
(d) Total Actuarial Accrued Liability = (a)+(b)+(c)	\$ 55,307,884	\$ 59,315,384	7.2%
4. Actuarial Value of Assets	\$ <u>54,224,695</u>	\$ <u>43,690,842</u>	(19.4%)
5. Unfunded Actuarial Accrued Liability = (3)(d)-(4)	\$ 1,083,189	\$ 15,624,542	1,342.5%
6. Expected annual financial support by City	\$ 2,369,583 ¹	\$ 2,476,822 ¹	4.5%
7. Annual Required Contribution	\$ 1,090,182	\$ 2,010,653	84.4%
8. Amortization period at expected level of funding	1 year ²	Infinite ³	N/A

¹ 10.4% of salary with an additional \$819,791 each year for the five-year period beginning January 1, 2005 to be contributed toward payment of the unfunded liability.

² Amortization period based on \$2,369,583 contribution for 2008, increased to \$2,476,822 for 2009, and \$1,706,742 in 2010, and increasing due to total salary growth at the rate of 3.0% annually thereafter (without further contributions of \$819,791 per year).

³ Amortization period based on \$2,476,822 contribution for 2009, and \$1,706,742 in 2010, and increasing due to total salary growth at the rate of 3.0% annually thereafter (without further contributions of \$819,791 per year).



Gallagher Benefit Services, Inc.

THE CITY OF BISMARCK EMPLOYEES' PENSION PLAN

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 1 st through December 31 st (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).

THE CITY OF BISMARCK EMPLOYEES' PENSION PLAN

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)).

THE CITY OF BISMARCK EMPLOYEES' PENSION PLAN

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).

THE CITY OF BISMARCK EMPLOYEES' PENSION PLAN

EXHIBIT 2

Census Summary and Reconciliation

	1/1/08	1/1/09	Percent Change
Active Participants			
▪ Number of Participants			
– Fully vested	256	255	(0.4%)
– Non-vested	<u>98</u>	<u>120</u>	22.4%
– Total	354	375	5.9%
▪ Average age	47.6	47.2	(0.8%)
▪ Average service	13.5	13.1	(3.0%)
▪ Average salary	\$ 41,806	\$ 43,031	2.9%
Terminated Vested Participants			
▪ Number of Participants	27	32	18.5%
▪ Average age	48.1	49.4	2.7%
▪ Average years since termination	5.4	5.4	0.0%
▪ Average monthly benefit at Normal Retirement	\$ 643.26	\$ 693.40	7.8%
Retired Participants			
▪ Number of Participants	127	126	(0.8%)
▪ Average age	73.5	73.3	(0.3%)
▪ Average years since retirement	10.6	10.6	0.0%
▪ Average monthly benefit	\$ 1,262.36	\$ 1,293.92	2.5%

THE CITY OF BISMARCK EMPLOYEES' PENSION PLAN

EXHIBIT 3 Participant Reconciliation

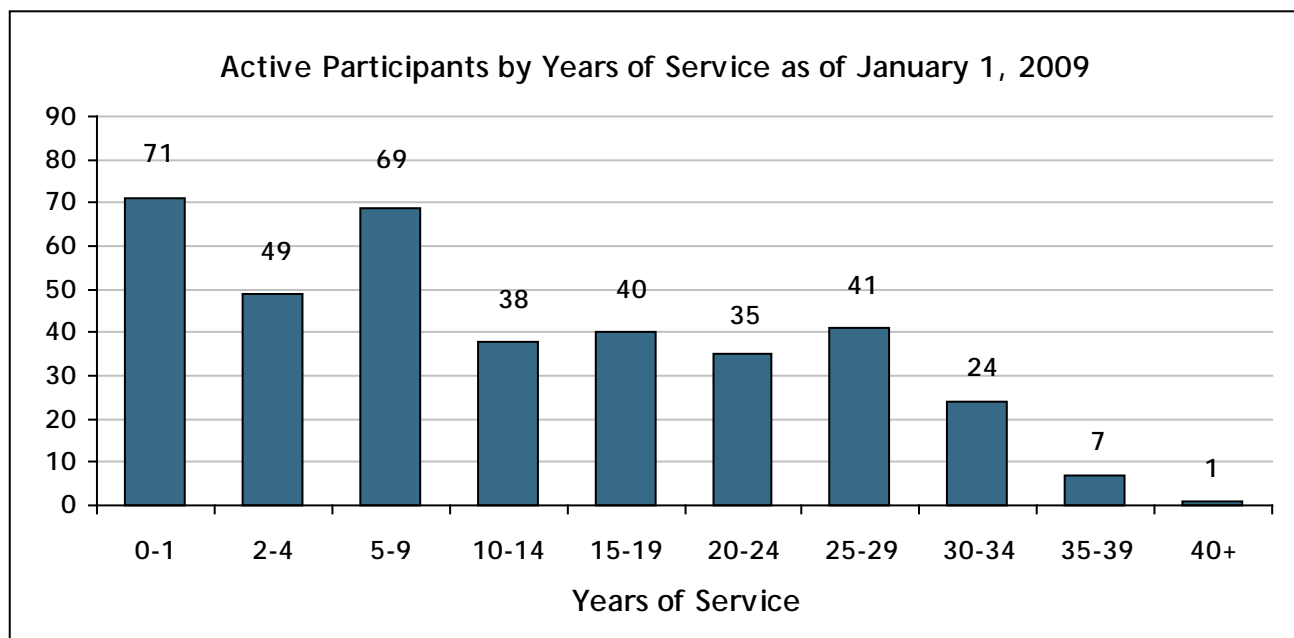
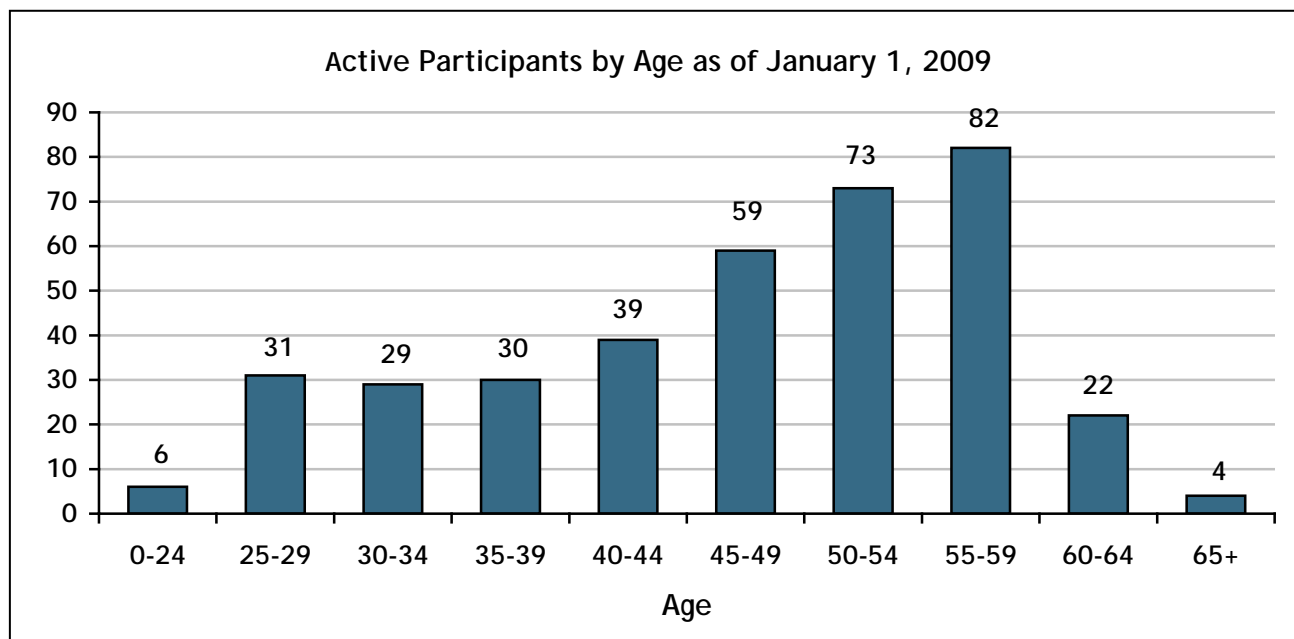
The following information provides the reconciliation from January 1, 2008 to January 1, 2009 of Plan Participants.

	Active	Terminated Vested	Retired	Disabled	Beneficiary	Total
1/1/2008 Participants	354	27	97	0	30	508
New Participants	42	-	-	-	-	42
Terminated vested	(6)	6	-	-	-	0
Terminated non-vested	(9)	-	-	-	-	(9)
Retired	(4)	-	4	-	-	0
Disabled	-	-	-	-	-	0
Died with beneficiary	(1)	-	(2)	-	3	0
Died without beneficiary	-	-	(1)	-	(5)	(6)
Benefit stopped	-	-	-	-	-	0
Paid-out lump sum	(2)	(1)	-	-	-	(3)
Data corrections	1	-	-	-	-	1
1/1/2009 Participants	375	32	98	0	28	533

During 2008 the total Participant count increased by 25 due to 42 new Participants and 1 data correction offset by 11 Participants that terminated employment and received a return of their employee contributions, 1 Terminated Vested Participant that received a return of contributions, and 6 Participant deaths without a beneficiary. There were 6 Participants that moved from active to terminated vested status and 4 Participants retired during the year. There were 3 Participant deaths during 2008 with continued benefits to beneficiaries.

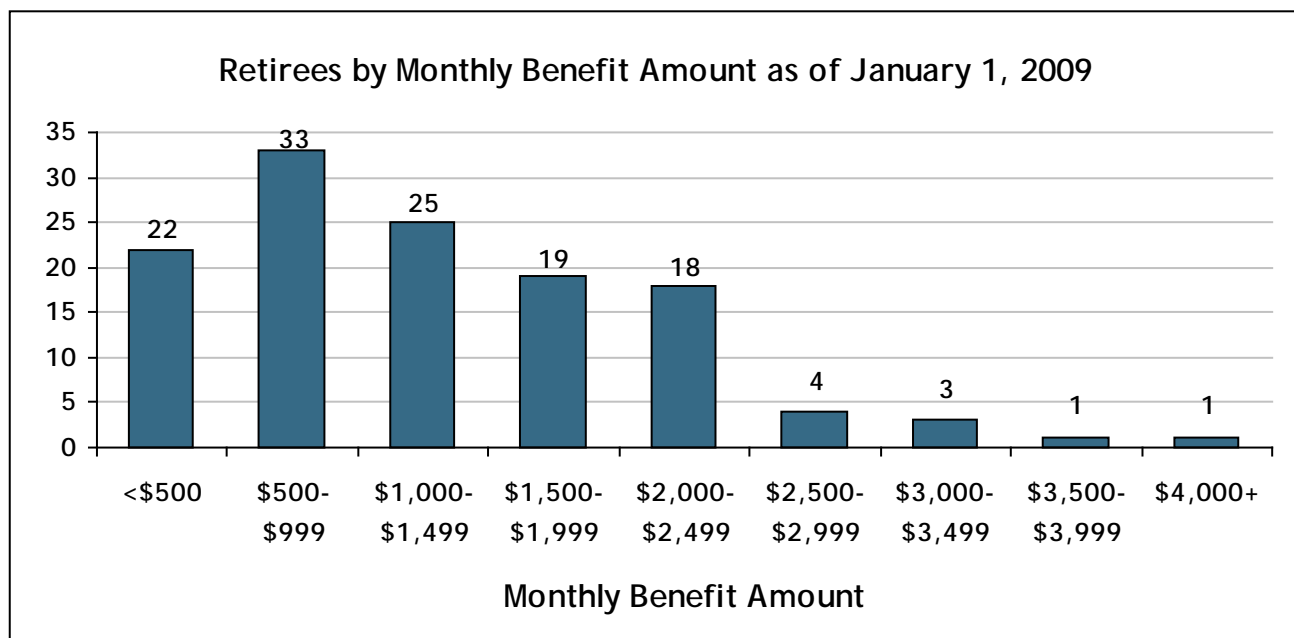
THE CITY OF BISMARCK EMPLOYEES' PENSION PLAN

EXHIBIT 4 Active Participant Data



THE CITY OF BISMARCK EMPLOYEES' PENSION PLAN

EXHIBIT 5 Retired Participant Data



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

THE CITY OF BISMARCK EMPLOYEES' PENSION PLAN

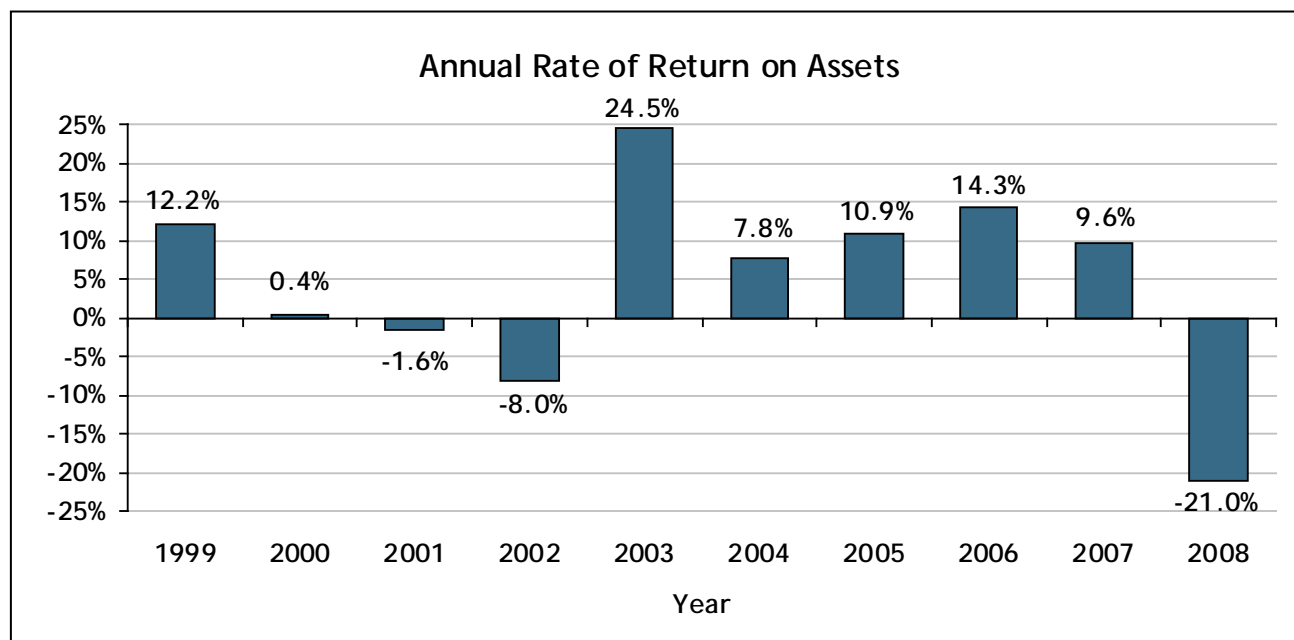
EXHIBIT 6 Reconciliation of Assets

1. Beginning Balance as of January 1, 2008		\$ 54,224,412
2. Revenue		
(a) Employer's Contribution		
(i) General Property Tax	\$ 837,713	
(ii) Mobile Home Tax	9,739	
(iii) Homestead Credit	2,818	
(iv) State Payment in Lieu of Tax	103,767	
(v) Park & Rec. Contribution	245,458	
(vi) Department Contribution	\$ 1,343,212	
(vii) Total City Contribution	2,542,707	
(b) Employee's Contribution	800,896	
(c) Investment Income (Loss)	(11,469,005)	
(d) Total Revenue		\$ (8,125,402)
3. Expenditure		
(a) Pension Benefit Payments	\$ 1,953,143	
(b) Professional & Legal Fees	2,405	
(c) Management Consulting	17,200	
(d) Administration Fees	22,712	
(e) Investment Expense	296,635	
(f) Security Lending Expense	26,617	
(g) Pension Refund	88,623	
(h) Postage	833	
(i) Total Expenditure		\$ 2,408,168
4. Net Income (Loss)		\$ (10,533,570)
5. Ending Balance as of December 31, 2008		\$ 43,690,842

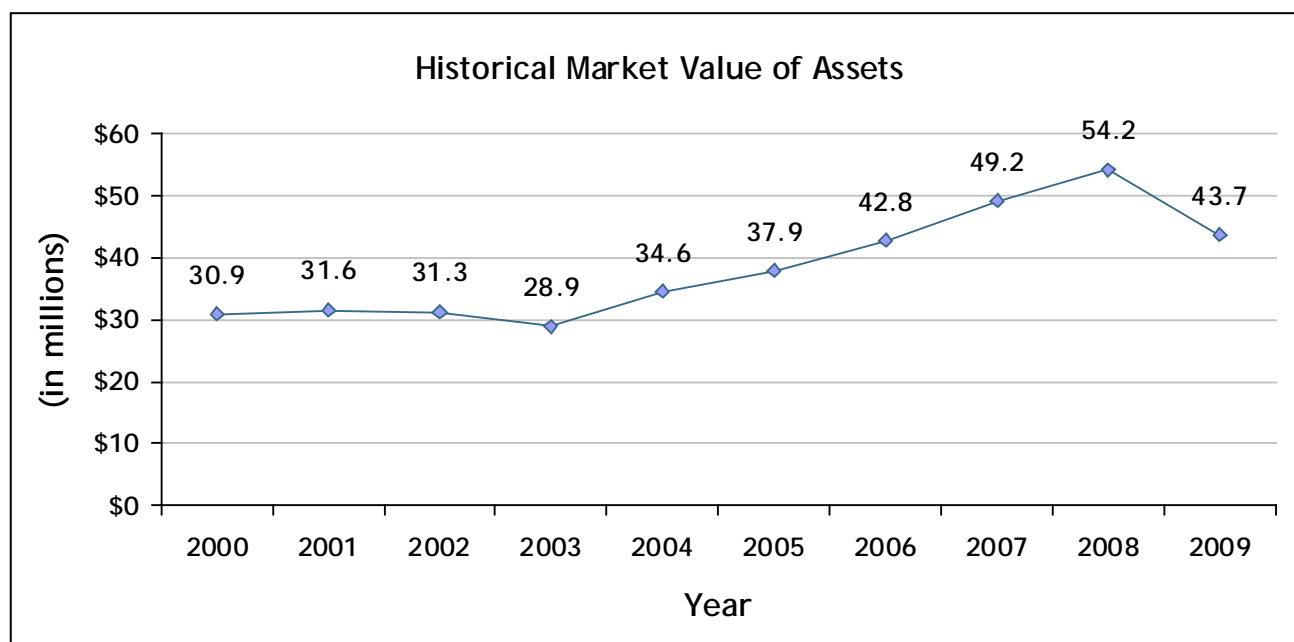
Total assets decreased \$10,533,570 during 2008. This decrease was from net cash flow (total contributions less expenditures) of \$935,435 and investment loss of \$11,469,005. Some components were rounded up or down to ensure that the totals would add correctly. The net rate of return after expenses was negative 21.0%.

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EXHIBIT 7 Historical Asset Information



Rates of return are determined after expenses. Calculations prior to 2004 exclude the employee accumulation fund (Kemper Account).



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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 Participants are assumed to retire upon attainment of age 62.

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 1/1/98 and 1/1/05 (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.

THE CITY OF BISMARCK EMPLOYEES' PENSION PLAN

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

Age	Rate of Mortality (per 1,000)		Rate of Disability (per 1,000)		Rate of Withdrawal (per 1,000)	
	Male	Female	Male	Female	Male	Female
25	0.66	0.29	0.00	0.00	40	200
30	0.80	0.35	0.00	0.00	40	50
35	0.85	0.48	0.00	0.00	30	50
40	1.07	0.71	0.00	0.00	25	40
45	1.58	0.97	0.00	0.00	20	20
50	2.58	1.43	0.00	0.00	10	20
55	4.43	2.29	0.00	0.00	0	0



Gallagher Benefit Services, Inc.

THE CITY OF BISMARCK EMPLOYEES' PENSION PLAN

EXHIBIT 9

Development of Unfunded Actuarial Accrued Liability

	1/1/09
1. Actuarial Accrued Liability	
(a) Participants receiving benefits	\$ 17,357,689
(b) Terminated vested Participants	1,402,514
(c) Active Participants	40,555,181
(d) Total Participants = (a)+(b)+(c)	\$ 59,315,384
2. Actuarial Value of Assets	43,690,842
3. Balance before adjustments = (1)(d)-(2), not less than zero	\$ 15,624,542
4. Adjustment for cost of living adjustments	0
5. Adjustment for assumption changes	0
6. Unfunded Actuarial Accrued Liability as of January 1, 2009 = (3)+(4)+(5)	\$ 15,624,542

Under the Entry Age Normal actuarial cost method, the Unfunded Actuarial Accrued Liability is redetermined 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 30 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.

THE CITY OF BISMARCK EMPLOYEES' PENSION PLAN

EXHIBIT 10

Development of Actuarial (Gain)/Loss

Development of Liability (Gain) or Loss

Actual Actuarial Liability as of January 1, 2008		\$ 55,307,884
Expected changes		
▪ Normal cost	\$ 1,695,210	
▪ Interest at 7.5%	4,275,232	
▪ Benefit payments with interest to year end	<u>(2,118,332)</u>	
▪ Total expected changes		\$ 3,852,110
Expected Actuarial Liability as of January 1, 2009		\$ 59,159,994
Actual Actuarial Liability as of January 1, 2009		<u>59,315,384</u>
Actuarial Liability (gain) or loss		<u>\$ 155,390</u>

Breakdown of Actuarial Liability (gain) or loss by source

Participant experience different than assumed for retirement, termination, death, disability and other amounts	\$ (38,098)
Inactive mortality	(56,342)
Salary increases other than expected	236,681
New entrants	13,149
Assumption changes	N/A
Cost of living adjustment	N/A
Actuarial Liability (gain) or loss	<u>\$ 155,390</u>

Development of Asset (Gain) or Loss

Market Value of Assets as of January 1, 2008	\$ 54,224,412
▪ Interest at 7.5%	4,066,831
▪ Actual contributions with interest to year-end	3,468,988
▪ Actual benefit payments with interest to year-end	(2,118,332)
▪ Actual expenses with interest to year-end	<u>(380,142)</u>
Expected value of assets as of January 1, 2009	\$ 59,261,757
Actual value of assets as of January 1, 2009	<u>43,690,842</u>
Asset (gain) or loss	<u>\$ 15,570,915</u>

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 2008, an actuarial liability loss of \$155,390 and an asset loss of \$15,570,915 resulted in an increase in UAAL of about \$15,730,000 more than expected.

THE CITY OF BISMARCK EMPLOYEES' PENSION PLAN

EXHIBIT 11

Recommended Amortization Schedule

Year	Unfunded Liability at Beginning of Year	Annual Amortization Payment	Unfunded Liability at End of Year
2009	\$ 15,624,542	\$ 904,940	\$ 15,823,572
2010	15,823,572	932,088	16,008,345
2011	16,008,345	960,051	16,176,916
2012	16,176,916	988,853	16,327,168
2013	16,327,168	1,018,518	16,456,798
2014	16,456,798	1,049,074	16,563,304
2015	16,563,304	1,080,546	16,643,965
2016	16,643,965	1,112,962	16,695,828
2017	16,695,828	1,146,351	16,715,687
2018	16,715,687	1,180,742	16,700,066
2019	16,700,066	1,216,164	16,645,195
2020	16,645,195	1,252,649	16,546,987
2021	16,546,987	1,290,228	16,401,016
2022	16,401,016	1,328,935	16,202,487
2023	16,202,487	1,368,803	15,946,209
2024	15,946,209	1,409,867	15,626,568
2025	15,626,568	1,452,163	15,237,485
2026	15,237,485	1,495,728	14,772,388
2027	14,772,388	1,540,600	14,224,172
2028	14,224,172	1,586,818	13,585,155
2029	13,585,155	1,634,423	12,847,038
2030	12,847,038	1,683,455	12,000,851
2031	12,000,851	1,733,959	11,036,909
2032	11,036,909	1,785,978	9,944,751
2033	9,944,751	1,839,557	8,713,083
2034	8,713,083	1,894,744	7,329,715
2035	7,329,715	1,951,586	5,781,488
2036	5,781,488	2,010,134	4,054,206
2037	4,054,206	2,070,438	2,132,551
2038	2,132,551	2,132,551	0

The Annual Amortization Payment is determined by amortizing the Unfunded Actuarial Accrued Liability (UAAL) over 30 years as a level percentage of total payroll. Total payroll is assumed to increase at 3% per year. Therefore, the UAAL of \$15,624,542 as of January 1, 2009 is scheduled to be fully amortized over a 30-year period with payments increasing from \$904,940 in 2009 by 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 with an additional \$819,791 per year for the five year period beginning January 1, 2005. As of January 1, 2009 there is one more year of additional contributions.

The annual City contribution of 10.4% of salary plus an additional \$819,791 during 2009 will not be enough to amortize the UAAL over 30 years or any other period of time. Please see Exhibit 13 for more details.

THE CITY OF BISMARCK EMPLOYEES' PENSION PLAN

EXHIBIT 12

Development of Annual Required Contribution

Annual Required Contribution (Dollar Amounts)

	2008	2009
1. Total Normal Cost	\$ 1,695,210	\$ 1,829,688
2. Expected employee contribution	<u>(745,092)</u>	<u>(796,649)</u>
3. City Normal Cost	\$ 950,118	\$ 1,033,039
4. Amortization of Unfunded Actuarial Accrued Liability	<u>100,660</u>	<u>904,940</u>
5. Total Annual Required Contribution	\$ 1,050,778	\$ 1,937,979
6. Interest to mid-year at 7.5%	<u>39,404</u>	<u>72,674</u>
7. Recommended contribution, mid-year = (5)+(6)	\$ 1,090,182	\$ 2,010,653

Annual Required Contribution (As a Percent of Payroll)

	2008	2009
1. Total Normal Cost	11.3%	11.5%
2. Expected employee contribution	<u>(5.0%)</u>	<u>(5.0%)</u>
3. City Normal Cost	6.3%	6.5%
4. Amortization of Unfunded Actuarial Accrued Liability	<u>0.7%</u>	<u>5.7%</u>
5. Total Annual Required Contribution	7.0%	12.2%
6. Interest to mid-year at 7.5%	<u>0.3%</u>	<u>0.4%</u>
7. Recommended contribution, mid-year = (5)+(6)	7.3%	12.6%

Percent of Payroll results are based on total expected covered payroll of \$14,901,848 in 2008 and \$15,932,987 in 2009. The expected city contribution of 10.4% of covered payroll plus an additional \$819,791 is more than the 2009 Annual Required Contribution of 12.6%.

THE CITY OF BISMARCK EMPLOYEES' PENSION PLAN

EXHIBIT 13

10.4% of Payroll Funding Amortization Schedule

Year	Unfunded Liability at Beginning of Year	End of Year Annual Amortization Payment	Unfunded Liability at End of Year
2009	\$ 15,624,542	\$ 1,457,733	\$ 15,338,650
2010	15,338,650	625,416	15,863,633
2011	15,863,633	644,178	16,409,227
2012	16,409,227	663,503	16,976,416
2013	16,976,416	683,409	17,566,238
2014	17,566,238	703,911	18,179,796
2015	18,179,796	725,028	18,818,252
2016	18,818,252	746,779	19,482,842
2017	19,482,842	769,182	20,174,873
2018	20,174,873	792,258	20,895,730
2019	20,895,730	816,026	21,646,885
2020	21,646,885	840,506	22,429,895
2021	22,429,895	865,722	23,246,415
2022	23,246,415	891,693	24,098,203
2023	24,098,203	918,444	24,987,124
2024	24,987,124	945,997	25,915,161
2025	25,915,161	974,377	26,884,421
2026	26,884,421	1,003,609	27,897,144
2027	27,897,144	1,033,717	28,955,713
2028	28,955,713	1,064,728	30,062,664
2029	30,062,664	1,096,670	31,220,693
2030	31,220,693	1,129,570	32,432,675
2031	32,432,675	1,163,457	33,701,668
2032	33,701,668	1,198,361	35,030,932
2033	35,030,932	1,234,312	36,423,940
2034	36,423,940	1,271,341	37,884,395
2035	37,884,395	1,309,481	39,416,243
2036	39,416,243	1,348,766	41,023,695
2037	41,023,695	1,389,229	42,711,243
2038	42,711,243	1,430,906	44,483,681

The City commission has approved that the City contribution will be 10.4% of salary with an additional \$819,791 per year for the five year period beginning January 1, 2005. As of January 1, 2009 there is one more year of additional contributions.

The expected contribution for 2009 on this basis is \$2,476,822 (15.5% of payroll). 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 plus an additional \$819,791 during 2009 will not amortize the UAAL over 30 years or any other period of time.



Gallagher Benefit Services, Inc.

THE CITY OF BISMARCK EMPLOYEES' PENSION PLAN

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)

	1/1/08	1/1/09
Vested accrued benefits		
▪ Participants currently receiving payments	\$ 17,290,016	\$ 17,357,689
▪ Other Participants	<u>23,974,117</u>	<u>27,610,209</u>
Total vested accrued benefits	\$ 41,264,133	\$ 44,967,898
Non-vested accrued benefits	<u>171,442</u>	<u>215,363</u>
Total accrued benefits	\$ 41,435,575	\$ 45,183,261

Statement of Changes in Accumulated Plan Benefits

Beginning value, January 1, 2008	\$ 41,435,575
Increases (Decreases)	
▪ Cost of living adjustment	\$ 0
▪ Change in actuarial assumptions	0
▪ Benefits accumulated and (gain)/loss	2,681,784
▪ Increase for interest due to decrease in discount period	3,107,668
▪ Benefits paid	<u>(2,041,766)</u>
▪ Net increase (decrease)	\$ 3,747,686
Ending Value, January 1, 2009	\$ 45,183,261

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, 2009, the Market Value of Assets was \$43,690,842. The table below outlines the funding ratios.

Funding Ratio (Assets/PVAB)	
Vested accrued benefits	97%
Total accrued benefits	97%

THE CITY OF BISMARCK EMPLOYEES' PENSION PLAN

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]
1/1/2001	\$ 31,609,400	\$ 31,609,400	\$ 0	100.0%	\$ 10,507,761	0.0%
1/1/2002	31,269,380	34,499,048	3,229,668	90.6%	11,114,003	29.1%
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%

Schedule of Employer Contributions

Year Ended	Annual Required Contribution (a)	Employer Contribution (b)	Percentage Contributed (b / a)
12/31/2001	\$ 423,579	\$ 371,374	87.7%
12/31/2002	746,951	449,657	60.2%
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	-	-

THE CITY OF BISMARCK EMPLOYEES' PENSION PLAN

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.

	2008 Plan Year	2009 Plan Year
Annual Required Contribution (ARC)	\$ 1,050,778	\$ 1,937,979
Interest on Net Pension Obligation (asset)	(182,100)	(290,730)
Adjustment to Annual Required Contribution - Beginning of Year NPO amortized as a level percent of pay over a closed 20 year period beginning 1/1/2002 and a closed 30 year period beginning 1/1/2009 ¹	<u>225,632</u>	<u>224,513</u>
Annual Pension Cost	\$ 1,094,310	\$ 1,871,762
Contributions Made	<u>2,542,707</u>	<u>*</u>
Increase (decrease) in Net Pension Obligation (asset)	\$(1,448,397)	\$ *
Net Pension Obligation (asset) beginning of year	<u>(2,428,005)</u>	<u>(3,876,402)</u>
Net Pension Obligation (asset) end of year	\$(3,876,402)	\$ *

¹ The 2008 Amortization Factor is 10.76. The 2009 Amortization Factor is 17.27.

* 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.