# The City of Bismarck Employees' Pension Plan

## Actuarial Valuation

## January 1, 2004

## (Revised - 4/6/04)

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STANTON GROUP

# THE CITY OF BISMARCK EMPLOYEES' PENSION PLAN

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**THE CITY OF BISMARCK EMPLOYEES' PENSION PLAN**

ACTUARIAL REPORT

JANUARY 1, 2004 to DECEMBER 31, 2004

In our opinion, the following report presents fairly the actuarial position of the plan in accordance with generally accepted actuarial principles and practices.

Our actuarial valuation has been conducted with reliance on participant information provided by the plan sponsor and financial information provided by the plan sponsor or trustee. The valuation was performed on the basis of the current plan provisions, actuarial cost method and actuarial assumptions stated in this report.

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.

Scott E. Syverson
Actuarial Consultant

4/7/2004
Date

Douglas A. Anderson, A.A.A., M.A.A.A., E.A.
Enrollment Number 02-05012

4/7/2004
Date

## THE CITY OF BISMARCK EMPLOYEES' PENSION PLAN

### COMMENTARY

In this report we present the results of the January 1, 2004 Actuarial Valuation of The City of Bismarck Employees' Pension Plan. There were no significant changes in plan provisions since the prior report including no benefit increases for retirees. There were no changes in actuarial cost methods or assumptions.

*Recommended Contribution*

It is recommended that the City contribution be at least equal to the contribution required under the entry age normal actuarial cost method with frozen initial liability. On this basis, a minimum contribution of $1,267,143 (10.2% of payroll) is recommended for the 2004 plan year. The calculation of this contribution is illustrated by Exhibits 8, 9, and 10.

*Expected City Contribution*

The City Commission has approved that the City contribution to the Employees' Pension Plan for the next five years will be in the amount of 10.4% of salary with an additional $819,791 to be contributed toward payment of the unfunded liability. The expected contribution for 2004 on this basis is $2,113,743 (17.0% of payroll).

*Contribution Requirements*

The valuation results are shown on page 3 in a comparison between 2003 and 2004. The 2003 calculation, developed in the first column, shows a City liability of $16,781,628, with a City payment of $664,903 for 2003 and $1,531,586 for 2004 increasing at 3.0% annually thereafter, a 17 year period to amortize that liability.

The calculation for 2004 shows a City liability of $13,953,984 and, with a City payment of $2,113,743 for 2004 and $2,152,562 for 2005 plus future contributions of 10.4% of payroll plus $819,791 per year for three additional years to be contributed toward payment of the unfunded liability, an amortization period of 11 years.

*Funding Ratio*

On a plan assumptions basis, plan assets cover 110% of the present value of accumulated benefits. More detail is contained in Exhibit 11. Last year plan assets covered 98% of the present value of accumulated benefits.

*GASB No. 5*

Information required by Statement No. 5 of the Governmental Accounting Standards Board is summarized in Exhibit 13.

## THE CITY OF BISMARCK EMPLOYEES' PENSION PLAN

### SUMMARY OF RESULTS

| | 1/1/03 | 1/1/04 |
|---|---|---|
| 1. Number of Participants | | |
| a. Active | 320 | 336 |
| b. Retired | 116 | 117 |
| c. Terminated Vested | 16 | 17 |
| d. Total Participants | 452 | 470 |
| 2. Annual Covered Salaries for Participants under Age 62 | $ 11,806,729 | $ 12,441,844 |
| 3. Present Value of Future Benefits | | |
| a. Active Participants | 37,947,464 | 41,885,556 |
| b. Retired Participants | 13,022,349 | 12,860,807 |
| c. Terminated Vested Participants | 595,881 | 617,236 |
| d. Present Value of Employee Contributions | | |
| i. Current Accumulation | 8,166,555 | 10,177,599 |
| ii. Future Contributions | 6,459,099 | 6,762,824 |
| e. Net Total Present Value (a + b + c - di - dii) | 36,940,040 | 38,423,176 |
| 4. Plan Assets | 20,158,412 | 24,469,192 |
| 5. Net Present Value to be Funded by Employer (3e - 4) | 16,781,628 | 13,953,984 |
| 6. Expected Annual Financial Support by Employer | 664,903 | 2,113,743* |
| 7. Minimum Recommended Contribution (See Exhibit 10) | $ 1,531,586 | $ 1,267,143 |
| 8. Amortization Period at Recommended Level of Funding | 17 years ** | 11 years*** |

* 10.4% of salary with an additional $819,791 each year for the next five years to be contributed toward payment of the unfunded liability.

** Amortization period based on $664,903 contribution for 2003, increased to $1,531,586 for 2004, and increasing at the rate of 3.0% annually thereafter.

*** Amortization period based on $2,113,743 contribution for 2004, increased to $2,152,562 for 2005, and increasing due to total salary growth at the rate of approximate 3.0% annually (including contribution of $819,791 per year for three years thereafter).

# THE CITY OF BISMARCK EMPLOYEES' PENSION PLAN

# *INPUT INFORMATION*

EXHIBIT 1

SUMMARY OF PRINCIPAL 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 Stanton Group.

## 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 36 month period prior to termination or retirement. 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% 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% 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).

## 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 (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)). |
| *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)).<br><br>The surviving spouse has the option to elect a refund of contributions in lieu of the above-mentioned benefit (9-07-15(5)).<br><br>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.<br><br>If a Participant elects to have all or any part of his or her contributions invested in equity variable income investments; or if a Participant's total value of his or her contributions with interest to the date benefits are to commence shall be greater than the amount used to determine the net pension amount; then the Participant shall be eligible to receive the interest earned on his or her contributions in excess of the amount determined to fund the net pension amount (9-07-22(6)). |

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

| | 1/1/03 | 1/1/04 |
|---|---|---|
| ***Active Participants*** | | |
| • Number of Participants | | |
| • Fully Vested | 227 | 233 |
| • Partially Vested | 0 | 0 |
| • Non-Vested | 93 | 103 |
| • Total | 320 | 336 |
| • Average Age | 46.1 | 46.5 |
| • Average Service | 13.0 | 13.2 |
| • Average Salary | $ 36,326 | $ 37,147 |
| ***Retired Participants*** | | |
| • Number of Participants | 116 | 117 |
| • Average Age | 72.6 | 73.1 |
| • Average Years Since Retirement | 10.7 | 11.1 |
| • Average Monthly Benefit | $ 1,033.40 | $ 1,030.91 |
| ***Terminated Vested Participants*** | | |
| • Number of Participants | 16 | 17 |
| • Average Age | 51.2 | 50.9 |
| • Average Year Since Termination | 5.9 | 5.7 |
| • Average Monthly Benefit at Normal Retirement | $ 612.89 | $ 591.60 |

**THE CITY OF BISMARCK EMPLOYEES' PENSION PLAN**

EXHIBIT 2 (continued)

CENSUS SUMMARY AND RECONCILIATION

The following information provides the reconciliation from January 1, 2003 to January 1, 2004 of plan participants.

| | Active | Terminated Vested | Retired | Disabled | Beneficiaries | Total |
|---|---|---|---|---|---|---|
| 1/1/2003 Participants | 320 | 16 | 91 | 1 | 24 | 452 |
| New Participants | 25 | - | - | - | - | 25 |
| Terminated vested | (2) | 2 | - | - | - | 0 |
| Terminated non-vested | (5) | - | - | - | - | (5) |
| Retired | (2) | (1) | 3 | - | - | 0 |
| Disabled | - | - | - | - | - | 0 |
| Died with beneficiary | - | - | (2) | - | 2 | 0 |
| Died without beneficiary | - | - | (1) | - | (1) | (2) |
| Benefit stopped | - | - | - | - | - | 0 |
| Paid-out lump sum | - | - | - | - | - | 0 |
| 1/1/2004 Participants | 336 | 17 | 91 | 1 | 25 | 470 |

**THE CITY OF BISMARCK EMPLOYEES' PENSION PLAN**

EXHIBIT 3

DISTRIBUTION OF ACTIVE PARTICIPANTS
BY AGE AND SERVICE AS OF JANUARY 1, 2004

| | Years of Credited Service | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Age | 0-1 | 1-4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40+ | Total |
| Under 25 | 2 | 2 | - | - | - | - | - | - | - | - | 4 |
| 25-29 | 7 | 5 | - | - | - | - | - | - | - | - | 12 |
| 30-34 | 3 | 13 | 5 | 3 | - | - | - | - | - | - | 24 |
| 35-39 | 4 | 10 | 10 | 7 | 3 | - | - | - | - | - | 34 |
| 40-44 | 9 | 8 | 9 | 18 | 11 | 4 | - | - | - | - | 59 |
| 45-49 | 9 | 10 | 10 | 6 | 14 | 17 | 5 | - | - | - | 71 |
| 50-54 | 9 | 3 | 11 | 8 | 10 | 19 | 15 | 4 | - | - | 79 |
| 55-59 | 1 | 8 | - | 3 | 3 | 5 | 6 | 4 | 2 | - | 32 |
| 60-64 | - | - | - | 5 | 2 | 5 | 3 | 1 | 4 | - | 20 |
| 65-69 | - | - | - | - | - | - | - | - | - | - | 0 |
| 70+ | - | - | - | - | - | - | - | 1 | - | - | 1 |
| Total | 44 | 59 | 45 | 50 | 43 | 50 | 29 | 10 | 6 | 0 | 336 |

# THE CITY OF BISMARCK EMPLOYEES' PENSION PLAN

EXHIBIT 4

DISTRIBUTION OF INACTIVE PARTICIPANTS BY
AGE AND YEARS SINCE RETIREMENT OR TERMINATION
AS OF JANUARY 1, 2004

**Retired Participants**

| | Years Since Retirement | | | | | | Average Monthly Annuity |
|---|---|---|---|---|---|---|---|
| Age | 0-1 | 2-4 | 5-9 | 10-14 | 15+ | Total | |
| Below 55 | - | - | - | - | - | - | $ N/A |
| 55-59 | 3 | - | 2 | - | - | 5 | 796.31 |
| 60-64 | 8 | 4 | 1 | - | 1 | 14 | 1,095.24 |
| 65-69 | 2 | 16 | 6 | - | 5 | 29 | 1,297.01 |
| 70-74 | 1 | - | 10 | 11 | 2 | 24 | 1,071.00 |
| 75-79 | - | 2 | 2 | 11 | 5 | 20 | 980.87 |
| 80+ | - | 2 | - | 1 | 22 | 25 | 734.69 |
| Total | 14 | 24 | 21 | 23 | 35 | 117 | $ 1,030.91 |

**Terminated Vested Participants**

| | Years Since Termination | | | | | | Average Monthly Annuity |
|---|---|---|---|---|---|---|---|
| Age | 0-1 | 2-4 | 5-9 | 10-14 | 15+ | Total | |
| Below 45 | 1 | 1 | - | - | - | 2 | $ 307.09 |
| 45-49 | - | 3 | 1 | - | - | 4 | 752.87 |
| 50-54 | 2 | 1 | 1 | 2 | - | 6 | 626.03 |
| 55-59 | 1 | - | 2 | 1 | - | 4 | 553.79 |
| 60-64 | - | - | 1 | - | - | 1 | 460.23 |
| 65+ | - | - | - | - | - | 0 | N/A |
| Total | 4 | 5 | 5 | 3 | 0 | 17 | $ 591.60 |

## THE CITY OF BISMARCK EMPLOYEES' PENSION PLAN

EXHIBIT 5

PLAN ASSETS

| | | | |
|---|---|---|---|
| A. | **Beginning Balance as of January 1, 2003** | | $ 20,156,250* |
| B. | **Revenue** | | |
| | Employer's Contribution | | |
| | General Property Tax | $ 516,907 | |
| | Mobile Home Tax | 8,463 | |
| | Homestead Credit | 1,633 | |
| | State Payment in Lieu of Tax | 60,783 | |
| | Park & Rec. Contribution | 77,117 | |
| | **Subtotal** | $ 664,903 | |
| | Employee's Contribution | 97,859 | |
| | Investment Income (Loss) | 4,862,615 | |
| | **Total Revenue** | | 5,625,377 |
| C. | **Expenditure** | | |
| | Pension Benefit Payments | $ 1,447,031 | |
| | Accounting & Audit Fees | 309 | |
| | Management Consulting | 8,290 | |
| | Legal Fees | 143 | |
| | Investment Expense | 84,959 | |
| | Postage | 611 | |
| | **Total Expenditure** | | 1,541,343 |
| D. | **Total Operating Income (Loss) (B – C)** | | $ 4,084,034 |
| E. | **Other Financing Sources (Uses)** | | |
| | Transfer from General Fund | $ 5,355 | |
| | Transfer from Special Revenue Funds | 9,449 | |
| | Transfer from Capital Projects Fund | 3,038 | |
| | Transfer from Enterprise Funds | 223,925 | |
| | Transfer to General Fund | (12,859) | |
| | **Total Other Financing Uses** | | 228,908 |
| F. | **Net Income (Loss) (D + E)** | | 4,312,942 |
| G. | **Ending Balance as of December 31, 2003 (A + F)** | | $ 24,469,192* |

* Does not include Accumulated Employee Contributions (Assets held with Kemper Financial Services for Group #K3130).

## THE CITY OF BISMARCK EMPLOYEES' PENSION PLAN

EXHIBIT 6

ACTUARIAL ASSUMPTIONS AND COST METHODS

### Economic Assumptions

| | |
|---|---|
| ***Investment Return:*** | The fund is assumed to earn 7.5% per year. |
| ***Salary Scale:*** | Active Participant salaries are assumed to increase at 4.0% per year. |
| ***Inflation:*** | The amortization of the Unfunded Liability is determined as a level percent of payroll using a 3% total payroll growth assumption. |
| ***Employee Accounts:*** | Employee contribution accounts are credited with interest at 5.0% per year. Kemper fund balances are assumed to earn 7.5% per year. |

### Demographic Assumptions

| | |
|---|---|
| ***Retirement:*** | Active Participants are assumed to retire upon attainment of age 62. |
| ***Mortality:*** | Mortality rates are based on the 1983 Group Annuity Mortality Table for Males and Females (See Illustrations Below). |
| ***Disability:*** | None. |
| ***Withdrawal:*** | Active Participant termination rates are based on Sarason's T-1 Table (See Illustrations Below). |
| ***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 6 (continued)

ACTUARIAL ASSUMPTIONS AND COST METHODS

**Actuarial 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 - Frozen Initial Liability actuarial cost method.

*Return of Contributions:* Participants are assumed to receive upon retirement the excess, if any, of their Kemper Fund Balance over the value of their employee contribution account with interest.

**Illustrations**

| | Rate of Mortality (per 1,000) | | Rate of Disability (per 1,000) | | Rate of Withdrawal (per 1,000) | |
|---|---|---|---|---|---|---|
| Age | Male | Female | Male | Female | Male | Female |
| 25 | 0.46 | 0.25 | 0 | 0 | 49 | 49 |
| 30 | 0.61 | 0.34 | 0 | 0 | 37 | 37 |
| 35 | 0.86 | 0.48 | 0 | 0 | 23 | 23 |
| 40 | 1.24 | 0.67 | 0 | 0 | 11 | 11 |
| 45 | 2.18 | 1.01 | 0 | 0 | 3 | 3 |
| 50 | 3.91 | 1.65 | 0 | 0 | 0 | 0 |
| 55 | 6.13 | 2.54 | 0 | 0 | 0 | 0 |

# THE CITY OF BISMARCK EMPLOYEES' PENSION PLAN

# *CONTRIBUTION INFORMATION*

## THE CITY OF BISMARCK EMPLOYEES' PENSION PLAN

EXHIBIT 7

DEVELOPMENT OF UNFUNDED ACTUARIAL ACCRUED LIABILITY

| | |
|---|---|
| A. Unfunded Actuarial Accrued Liability as of January 1, 2003 | $ 3,565,538 |
| B. Normal Cost due January 1, 2003 | 1,207,899 |
| C. Interest on A and B to Year End at 7.50% | 358,008 |
| D. Employer Contribution for Year | 664,903 |
| E. Interest on Contribution to Year End at 7.50% | 24,934 |
| F. Unfunded Actuarial Accrued Liability as of December 31, 2003, before adjustments (A + B + C - D - E) | 4,441,608 |
| G. Adjustments | 0 |
| H. Unfunded Actuarial Accrued Liability as of December 31, 2003, after adjustments (F + G) | $ 4,441,608 |

Under the Entry Age Normal-Frozen Initial Liability actuarial cost method, an initial unfunded accrued liability is established and amortized over a fixed period of time. The initial unfunded accrued liability for this plan was reestablished as of January 1, 2002 and the amortization period was reset at 20 years. The amortization payment is a component of the total recommended contribution.

The unfunded accrued liability is scheduled to be reduced to $0 over the amortization period. However, this schedule is met only if the actual employer contribution equals the recommended contribution each year. If the employer contribution exceeds the recommended contribution, the unfunded accrued liability will be reduced more rapidly. Alternatively, if the employer contribution is less than the recommended contribution, the unfunded accrued liability will increase.

**THE CITY OF BISMARCK EMPLOYEES' PENSION PLAN**

EXHIBIT 8

DEVELOPMENT OF NORMAL COST

| | 1/1/03 | 1/1/04 |
|---|---|---|
| **Actuarial Balance Sheet** | | |
| A. Liabilities | | |
| Actuarial Present Value of Future Benefits | | |
| 1. Participants Receiving Benefits | $ 13,022,349 | $ 12,860,807 |
| 2. Terminated Vested Participants | 595,881 | 617,236 |
| 3. Active Participants | 37,947,464 | 41,885,556 |
| 4. Total (1 + 2 + 3) | 51,565,694 | 55,363,599 |
| B. Assets | | |
| Portion Currently Funded | | |
| 1. Actuarial Value of Assets (Exhibit 5) | $ 20,158,412 | $ 24,469,192 |
| 2. Accumulated Employee Contributions with Interest (Kemper Fund Balance) | 8,166,555 | 10,177,599 |
| Portion to be Funded in Future Years | | |
| 3. Present Value of Future Employee Contributions | 6,459,099 | 6,762,824 |
| 4. Unfunded Actuarial Accrued Liability (Exhibit 7) | 3,565,538 | 4,441,608 |
| 5. Actuarial Present Value of Future Employer Normal Cost | 13,216,090 | 9,512,376 |
| 6. Total (1 + 2 + 3 + 4 + 5) | $ 51,565,694 | $ 55,363,599 |
| **Development of Normal Cost** | | |
| A. Actuarial Present Value of Future Employer Normal Cost | $ 13,216,090 | $ 9,512,376 |
| B. Actuarial Present Value of Future Earnings | 129,181,971 | 135,256,488 |
| C. Normal Cost Percentage (A ÷ B) | 10.2306% | 7.0328% |
| D. Earnings of Active Participants under Age 62 * | 11,806,729 | 12,441,844 |
| E. Normal Cost (C x D) | $ 1,207,899 | $ 875,015 |

* Earnings are annualized for Participants with less than one year of service.

## THE CITY OF BISMARCK EMPLOYEES' PENSION PLAN

EXHIBIT 9

DEVELOPMENT OF AMORTIZATION PAYMENT

**Amortization Schedule**

| Year | Unfunded Liability at Beginning of Year | Annual Amortization Payment | Unfunded Liability at End of Year |
|---|---|---|---|
| 2004 | $ 4,441,608 | $ 346,328 | $ 4,402,426 |
| 2005 | 4,402,426 | 356,718 | 4,349,136 |
| 2006 | 4,349,136 | 367,420 | 4,280,345 |
| 2007 | 4,280,345 | 378,442 | 4,194,545 |
| 2008 | 4,194,545 | 389,795 | 4,090,106 |
| 2009 | 4,090,106 | 401,489 | 3,965,263 |
| 2010 | 3,965,263 | 413,534 | 3,818,109 |
| 2011 | 3,818,109 | 425,940 | 3,646,581 |
| 2012 | 3,646,581 | 438,718 | 3,448,453 |
| 2013 | 3,448,453 | 451,880 | 3,221,316 |
| 2014 | 3,221,316 | 465,436 | 2,962,571 |
| 2015 | 2,962,571 | 479,399 | 2,669,410 |
| 2016 | 2,669,410 | 493,781 | 2,338,800 |
| 2017 | 2,338,800 | 508,595 | 1,967,471 |
| 2018 | 1,967,471 | 523,853 | 1,551,890 |
| 2019 | 1,551,890 | 539,568 | 1,088,246 |
| 2020 | 1,088,246 | 555,755 | 572,428 |
| 2021 | 572,428 | 572,428 | 0 |

The annual amortization payment is determined by amortizing the unfunded liability over 18 years as a level percentage of total payroll. Total payroll is assumed to increase at 3% per year. Therefore, the remaining balance of $4,441,608 as of January 1, 2004 will be fully amortized over an 18-year period with payments increasing from $346,328 in 2004 by 3% per year.

## THE CITY OF BISMARCK EMPLOYEES' PENSION PLAN

EXHIBIT 10

DEVELOPMENT OF RECOMMENDED CONTRIBUTION

**Recommended Contribution**
**(Dollar Amounts)**

| | 1/1/03 to 12/31/03 | 1/1/04 to 12/31/04 |
|---|---|---|
| A. Normal Cost | $ 1,207,899 | $ 875,015 |
| B. Amortization of Unfunded Actuarial Accrued Liability | 268,328 | 346,328 |
| C. Recommended Contribution, Beginning of Year (A + B) | $ 1,476,227 | $ 1,221,343 |
| D. Interest to Mid-Year at 7.5% | 55,359 | 45,800 |
| E. Recommended Contribution, Mid-Year, (C + D) | $ 1,531,586 | $ 1,267,143 |

**Recommended Contribution**
**(As a Percent of Payroll)**

| | 1/1/03 to 12/31/03 | 1/1/04 to 12/31/04 |
|---|---|---|
| A. Normal Cost | 10.2% | 7.0% |
| B. Amortization of Unfunded Actuarial Accrued Liability | 2.2% | 2.8% |
| C. Recommended Contribution, Beginning of Year (A + B) | 12.5% | 9.8% |
| D. Interest to Mid-Year at 7.5% | 0.5% | 0.4% |
| E. Recommended Contribution, Mid-Year, (C + D) | 13.0% | 10.2% |

# THE CITY OF BISMARCK EMPLOYEES' PENSION PLAN

## *ACCOUNTING INFORMATION*

## EXHIBIT 11

## ACCUMULATED BENEFIT LIABILITY
## JANUARY 1, 2004

A measure of the degree of progress made in funding any plan is a comparison between the liability for benefits and the assets accumulated to date. For ongoing plans, the liabilities are determined using the regular valuation assumptions. The table below shows the actuarial present value of accumulated plan benefits.

| | No. of Participants | Plan Liability |
|---|---|---|
| **Inactive Participants** | | |
| Receiving Benefits | 117 | $ 12,860,807 |
| Deferred Benefits | 17 | 617,236 |
| **Active Participants** | | |
| 100% Vested Benefits | 233 | 17,900,127 |
| Non-Vested Benefits | 103 | 150,235 |
| **Vested Accrued Benefits** | 367 | $ 31,378,170 |
| **Total Accrued Benefits** | 470 | $ 31,528,405 |

The ratio of assets to the above liabilities (known as the Funding Ratio) represents the degree to which accumulated plan benefits have been funded. As of January 1, 2004, the market value of assets was $34,646,791 (including both the funds accumulated by the Employer and the Accumulated Employee Contributions with Interest). The table below outlines the Funding Ratios.

| | **Plan Liability** |
|---|---|
| **Funding Ration** | |
| • Vested Accrued Benefits | 110% |
| • Total Accrued Benefits | 110% |

# THE CITY OF BISMARCK EMPLOYEES' PENSION PLAN

EXHIBIT 12

STATEMENT OF ACCUMULATED PLAN BENEFITS

| | 1/1/03 | 1/1/04 |
|---|---|---|
| **Actuarial Present Value of Accumulated Plan Benefits:** | | |
| Vested Accrued Benefits | | |
| • Participants Currently Receiving Payments | $ 13,022,349 | $ 12,860,807 |
| • Other Participants | 15,690,006 | 18,517,363 |
| Total Vested Accrued Benefits | $ 28,712,355 | $ 31,378,170 |
| Non-Vested Accrued Benefits | 103,892 | 150,235 |
| Total Accrued Benefits | $ 28,816,247 | $ 31,528,405 |

**Statement of Changes in Accumulated Plan Benefits**

| | |
|---|---|
| Beginning Value, January 1, 2003 | $ 28,816,247 |
| Increases (Decreases) | |
| • Plan Amendment | 0 |
| • Change in Actuarial Assumptions | 0 |
| • Benefits Accumulated | 1,997,970 |
| • Increase for Interest Due to Decrease in Discount Period | 2,161,219 |
| • Benefits Paid | (1,447,031) |
| • Net Increase (Decrease) | 2,712,158 |
| Ending Value, January 1, 2004 | $ 31,528,405 |

**THE CITY OF BISMARCK EMPLOYEES' PENSION PLAN**

EXHIBIT 13

GOVERNMENTAL ACCOUNTING STANDARDS NO. 5

| | 1/1/03 | 1/1/04 |
|---|---|---|
| 1. Pension Benefit Obligation | | |
| a. Retired Participants | $ 13,022,349 | $ 12,860,807 |
| b. Terminated Vested Participants | 595,881 | 617,236 |
| c. Active Participants | 21,295,936 | 24,227,943 |
| d. Total Pension Benefit Obligation (a + b + c) | $ 34,914,166 | $ 37,705,986 |
| 2. Net Assets Available for Benefits* | $ 20,158,412 | $ 24,469,192 |
| 3. Accumulated Employee Contributions with Interest (Kemper Fund Balance) | $ 8,166,555 | $ 10,177,599 |
| 4. Unfunded Pension Benefit Obligation (1d - 2 - 3), not less than zero | $ 6,589,199 | $ 3,059,195 |
| 5. Accumulated Benefit Obligation | | |
| a. Retired Participants | $ 13,022,349 | $ 12,860,807 |
| b. Terminated Vested Participants | 595,881 | 617,236 |
| c. Vested Active Participants | 15,094,125 | 17,900,127 |
| d. Total Vested Benefit Obligation (a + b + c) | $ 28,712,355 | $ 31,378,170 |
| e. Non-Vested Active Participants | 103,892 | 150,235 |
| f. Total Accumulated Benefit Obligation (d + e) | $ 28,816,247 | $ 31,528,405 |

* Does not include Accumulated Employee Contributions (Assets held with Kemper Financial Services for Group #K3130).