January 1, 2015
Actuarial Valuation Report
for Fiscal Year ending
March 31, 2015
Township of Bloomfield Retirement Income Plan

Prepared: March 2015

## Table of Contents

## Executive Summary of the Actuarial Valuation Report

Important Facts ..... 1
Changes Since Last Year's Valuation ..... 2
Actuary Certification ..... 3
Employer Contributions and Asset Allocation ..... 4
Funded Status ..... 5
Additional Disclosures
Statement of Net Assets Available for Benefits ..... 6
Participant Data ..... 7
Pension Benefit Liabilities ..... 8
Determination of Actuarial Gains/(Losses) During the Preceding Year ..... 9
Accounting Information for ASC \#960. ..... 10
Present Value of Accumulated Plan Benefits for ASC \#960 ..... 11
Pension Contribution Summary ..... 12
Amortization Payments ..... 13
Departmental Allocation of Contributions ..... 14
Actuarial Cost Method ..... 15
Plan Assumptions ..... 16
Plan Provisions ..... 18

This report summarizes valuation results for the Township of Bloomfield Retirement Income Plan based upon actuarial valuations as of January 1, 2014 for Fiscal Year ending March 31, 2014, and January 1, 2015 for Fiscal Year ending March 31, 2015.

Valuation Date:
Applicable Fiscal Year:

## Contributions

## - Employer Contribution <br> - Estimated Employee Contributions <br> Pension Plan Asset Information

\$0
0.00\%
\$343,001
January 1, 2015
March 31, 2015
March 31, 2014

Expressed as a percentage of pensionable payroll
\$333,945

- Actuarial Value of Assets
\$218,093,625
\$222,705,325
- Market Value of Assets
\$219,061,216
\$221,835,237


## Liability Information

- Present Value of Projected Benefits
- Actuarial Accrued Liability
- Present Value of Accrued Benefits

| $\$ 219,464,612$ | $\$ 226,551,564$ |
| :--- | :--- |
| $\$ 187,794,369$ | $\$ 196,449,788$ |
| $\$ 176,300,221$ | $\$ 184,746,806$ |

## Participant Information

| • | Active Participant Lifecount | 199 |
| :--- | ---: | ---: |
| • Total Participant Lifecount | 467 | 462 |
| - Total Pensionable Payroll | $\$ 14,159,863$ | $\$ 13,711,213$ |

## Actuarial Assumptions

Effective January 1, 2015, the mortality assumption was changed from The RP-2000 Generational Mortality Table projected with Scale BB to the RP-2014 Blue Collar Mortality Table with Scale MP-2014 for Divisions 2, 4, 5, \& 7, and to the RP 2014 Total Data Set Mortality Table with Scale MP-2014 for Divisions $0,1, \& 3$. This change was made to better anticipate future mortality experience based on the most recent actuarial tables available.

## Pension Plan

There have been no changes to the Pension Plan this year.

## Gain/(Loss)

Actuarial gains and losses are recognized with each valuation by routine application of the Actuarial Cost Method. Under your cost method, actuarial gains and losses are recognized with each valuation and amortized over 20 years.

## Funding Method

There have been no changes to the Funding Method this year.

## Demographics

Total Participant lifecount decreased $1.1 \%$ when compared with last year. Within the total group, active lifecount decreased $5.5 \%$.

## New Legislation

There have been no significant changes made to the pension code during the previous year.

## Purpose of Report

This report presents the results of the actuarial valuation for the Township of Bloomtield Retirement Income Plan as of January 1, 2015. It was prepared for the plan sponsor for the principle purpose of providing an acceptable range of contributions based on our understanding of the applicable laws and regulations. The report also provides funded status information under Accounting Standards Codification 960.
Calculations for other purposes may be significantly different than the results presented in this report. Accordingly, additional calculations should be requested for other purposes, such as assessing the sufficiency of plan assets to settle the obligation.

## Methodology

The report relies on the census data submitted by the plan sponsor as summarized in "Census Data Summary" and the retirement plan provisions as outlined in "Plan Provisions". It also relies on the plan asset information provided by the trustee. Appropriate tests for consistency and reasonableness were completed on the information relied on to produce this valuation. The liabilities and costs were determined using the method summarized in "Actuarial Methods" and the actuarial assumptions described in "Actuarial Assumptions". The non-prescribed assumptions reflect estimates of future experience, are appropriate for the purpose of the measurement, consider relevant plan characteristics, and contain no significant bias unless otherwise noted. Relevant historical information such as credible plan experience and experience from representative populations was considered in the selection of the non-prescribed assumptions. Factors that may affect future experience and the views of experts were also considered. The measurements reflect a single assumption scenario, however, the future is uncertain and a range of outcomes can reasonably be expected to occur. Future measurements may differ significantly from the current measurements presented in this report. Due to the limited scope of the assignment, an analysis of the potential range of future measurements was not completed.

## Certification

Each prescribed assumption was applied in accordance with applicable law and regulations. In my opinion, each other assumption is reasonable (taking into account experience of the plan and reasonable expectations) and such other assumptions, in combination, offer our best estimate of anticipated experience under the plan. The report was completed in accordance with generally accepted actuarial standards and procedures, and conforms to the Guidelines for Professional Conduct of the American Academy of Actuaries. The undersigned credentialed actuary meets the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinion contained herein.

I am the Actuary for this plan, and have no other relationship with the plan or the plan sponsor, which may impair or appear to impair the objectivity of my work.


David V. Pappalardo, F.S.A., E.A., F.C.A., M.A.A.A.
Vice President \& Consulting Actuary
Prudential Retirement
P.O. Box 2975

Hartford, CT 06104
(860) 534-2262

David.Pappalardo@Prudential.com

Assisted By:


Edward Lin
Senior Actuarial Specialist
(860) 534-2600

Edward.Lin@Prudential.com

## David Lisurvick

David Lisevick
Senior Actuarial Associate
(860) 534-2760

David.Lisevick@Prudential.com

Contribution levels are for the Fiscal Years ending as shown.


The following illustrates how plan assets have been invested on January 1,2015. The Market Value of Assets on January 1,2015 is $\$ 221,835,237$.

## Asset Class

| Domestic Equity | $28 \%$ |
| :--- | :---: |
| International Equity | $5 \%$ |
| Fixed Income | $66 \%$ |
| Real Estate | $0 \%$ |
| Cash | $1 \%$ |
| Total | $100 \%$ |

The funded status is measured by comparing the Actuarial Value of Assets with the Actuarial Accrued Liability (AAL).
For each valuation, the Plan's total liability for all benefits is measured on the valuation date. This liability includes benefits which have accrued as well as benefits which are expected to accrue. This liability is called the Present Value of Benefits (PVB). The Plan's AAL is equal to the excess of this liability over the present value of future normal costs. Under any cost method, the excess of PVB over assets is funded systematically over future years through contributions.


January 1, 2014
January 1, 2015
2. Guaranteed Account (GA)
c. Payables period

1. Market Value of Separate Accounts and Outside Assets
a. At market value as of Valuation Date:
b. Receivables
i. Investment Income
ii. Employer Contributions
d. Total Guaranteed Account

$$
2(a)+2(b)-2(c)
$$

3. Total Market Value of Assets
\$219,061,216
4.66\%
\$218,093,625
1.20\%
6.47\% Assets during preceding twelve month

Determination of Actuarial Value of Assets on January 1, 2015
Market Value

| Plan Year | (Gain)/Loss | Percent <br> Recognized | Percent <br> Deferred | Deferred <br> (Gain)/Loss |
| ---: | ---: | ---: | ---: | ---: |
| 2014 | $1,414,053$ | $20 \%$ | $80 \%$ | $1,131,242$ |
| 2013 | $(518,525)$ | $40 \%$ | $60 \%$ | $(311,115)$ |
| 2012 | $(670,812)$ | $60 \%$ | $40 \%$ | $(268,325)$ |
| 2011 | $1,591,426$ | $80 \%$ | $20 \%$ | $\underline{318,285}$ |

Preliminary Actuarial Value of Assets as of January 1, 2015
Corridor Limit of 80\% of Market Value
Corridor Limit of $120 \%$ of Market Value
Actuarial Value of Assets as of January 1, 2015
\$84,750,178
\$75,092,977

134,311,038
146,742,260
\$146,742,260
\$221,835,237
5.58\%
\$222,705,325
\$134,311,038
,
. 6
\$221,835,237
\$222,705,325
\$177,468,190
\$266,202,284
\$222,705,325

## Lifecount and Data Reconciliation:

| Description | Actives | Deferred Benefits | Receiving Benefits |
| :--- | :---: | :---: | :---: |
| Participants on |  |  | Total |
| January 1, 2014 | 199 | 13 | 255 |
| New Participants | 0 | 0 | 1 |
| Rehires | 0 | 0 | 0 |
| Vested Term | $(2)$ | 2 | 0 |
| Non-Vested Term | 0 | 0 | 0 |
| Inactive | 0 | 0 | 0 |
| Disabled | 0 | 0 | 0 |
| Retired | $(9)$ | 0 | 12 |
| Cash Out | 0 | 0 | 0 |
| Death | 0 | 0 | $(6)$ |
| Expired Payments | 0 | 0 | 0 |
| Data Corrections | 0 | 0 | 0 |
| Participants on |  | 12 |  |
| January 1, 2015 |  |  | 0 |

## ACTIVE PARTICIPANTS

AVERAGE AGES for active eligible lives
Average eligibility age for funding 29.1
Average attained age
45.2

PAYROLL for active eligible lives
Average Pensionable Pay
\$71,155
\$72,932
Total Pensionable Payroll
\$14,159,863
\$13,711,213

## PARTICIPANTS WITH DEFERRED BENEFITS

Average attained age
47.5
43.3

Average Annual Benefit
\$13,586
\$18,682

## PARTICIPANTS RECEIVING BENEFITS

Average attained age
Average Annual Benefit

Present Value of Projected Plan Benefits: (at $6.25 \%$ for the preceding year and $6.25 \%$ for the current year)

| Actives |  |  |
| :--- | ---: | ---: |
| Retirement Benefits | $\$ 95,967,180$ | $\$ 94,427,312$ |
| Withdrawal | $1,065,398$ | 989,714 |
| Pre-retirement Spouse | $1,623,414$ | $1,258,008$ |
| Disability | $3,488,777$ | $3,259,471$ |
| Refund of Employee Contributions | 0 | 0 |
| Other | 0 | 0 |
| Subtotal for Actives | $\$ 102,144,769$ | $\$ 99,934,505$ |
| Inactives | $\$ 115,189,817$ | $\$ 124,386,047$ |
| Participants Receiving Benefits | $\$ 2,130,026$ |  |
| Participants with Deferred Benefits | $\$ 117,319,843$ | $\$ 2,231,012$ |
| Subtotal for Inactives | $\$ 219,464,612$ | $\$ 126,617,059$ |
| Total Present Value of Benefits |  | $\$ 226,551,564$ |

Actuarial Accrued Liability: (at $6.25 \%$ for the preceding year and $6.25 \%$ for the current year)

| Actives |  |  |
| :--- | ---: | ---: |
| Retirement Benefits | $\$ 65,289,768$ | $\$ 65,122,804$ |
| Withdrawal | 783,867 | 750,712 |
| Pre-retirement Spouse | $1,141,908$ | 909,458 |
| Disability | $3,258,983$ | $3,049,755$ |
| Refund of Employee Contributions | 0 | 0 |
| Other | 0 | 0 |
| Subtotal for Actives | $\$ 70,474,526$ | $\$ 69,832,729$ |
| Inactives (from above) | $\$ 117,319,843$ | $\$ 126,617,059$ |
| Total Actuarial Accrued Liability | $\$ 187,794,369$ | $\$ 196,449,788$ |

Total Gain/(Loss) during Preceding Plan Year:
a. Preceding Year Accrued Liability
\$187,794,369
b. Preceding Year Actuarial Value of Assets 218,093,625
c. Preceding Year Accrued Liability - Assets (a - b)
$(30,299,256)$
d. Interest on (c) at 6.25\% $(1,893,704)$
e. Preceding Year Normal Cost 3,326,362
f. Interest on (e) at 6.25\% 207,898
g. Contributions with Interest 352,905
h. Expected UAL on Valuation Date $(c+d+e+f-g)$
(\$29,011,605)
i. Current Year Actuarial Accrued Liability prior to changes
j. Current Year Actuarial Value of Assets
\$222,705,325
k. Actual UAL on Valuation Date (i-j) (\$27,112,306)

Total Gain/(Loss) (h-k)
(\$1,899,299)

The following information, together with other sections of this report, is provided to meet the disclosure requirements of Accounting Standards Codification \# 960 (formerly Financial Accounting Statement \#35). If confirmation should be requested by the Accountant, we are prepared to provide a copy of this information directly.

The assumptions used to calculate the pension contribution are shown in "Plan Assumptions", of this report.

## ASSETS

The Net Assets Available for Benefits are shown on page 6 of this report.

## CHANGES

Changes occurring since the last valuation and their effects on cost are detailed on pages 2 and 9 of this report.

## BENEFITS

All benefits provided by the Plan have been considered in the calculations.

Actuarial Present Value of Accumulated Plan Benefits
January 1, 2014
January 1, 2015

| Description: | Lives | Present Value | Lives | Present Value |
| :---: | :---: | :---: | :---: | :---: |
| Vested Benefits: |  |  |  |  |
| Fully Vested Actives | 194 |  | 154 |  |
| Employee Contributions only | $\underline{0}$ |  | $\underline{0}$ |  |
| Total Vested Actives | 194 | \$58,056,314 | 154 | \$57,385,893 |
| Participants Receiving Benefits | 255 | 115,189,817 | 262 | 124,386,047 |
| Participants with Deferred Benefits | 13 | 2,130,026 | 12 | 2,231,012 |
| Subtotal for Non-Actives |  | \$117,319,843 |  | \$126,617,059 |
| Total Present Value of Vested Benefits |  | \$175,376,157 |  | \$184,002,952 |
| Non-Vested Benefits: |  |  |  |  |
| Total Present Value of Non-Vested Benefits |  | 924,064 |  | 743,854 |
| Total Present Value of Accumulated Plan Benefits |  | \$176,300,221 |  | \$184,746,806 |

The actuarial assumptions used in calculating the Present Value of Accumulated Plan Benefits are described in "Plan Assumptions", with the exception that no assumption for future salary increase has been used.

The assumed rate of investment return is $6.25 \%$ for this year and $6.25 \%$ for last year.
Assets and Liabilities presented in this report are based on an "ongoing plan" assumption. Therefore, the values shown in this report should not be used to represent the plan's funded status in the event of plan termination, merger, spin-off, transfer of liabilities, or settlement of benefit obligations.

## Reconciliation of Present Value of Accumulated Plan Benefits

| Present Value as of January 1, 2014 | $\$ 176,300,221$ |
| :--- | ---: |
| Interest at $6.25 \%$ | $11,018,764$ |
| Distributions with weighted interest | $(9,827,704)$ |
| Benefits Accumulated plus Gain/Loss | $7,255,525$ |
| Present Value as of January 1, 2015 | $\$ 184,746,806$ |
| Assumption and Plan changes | 0 |
| Present Value of Accumulated Plan Benefits as of January 1, 2015 | $\$ 184,746,806$ |

Pension Contribution for the fiscal year ending March 31, 2015

1 a. Total Normal Cost
\$2,988,547
b. (Net of Employee Contributions)
c. Amortization of Unfunded Actuarial Accrued Liability
d. Expected Expenses
e. Initial Employer Contribution as of January 1, 2015
f. Interest at Valuation Date
g. Initial Employer Contribution as of January 1, 2016

2 a. Actuarial Accrued Liability as of January 1, 2015
b. Normal Cost
c. Expected Disbursements
d. Interest
e. Expected Liability as of January 1, 2016

3 a. Actuarial Value of Assets as of January 1, 2015
b. Expected Disbursements
c. Interest
d. Expected Actuarial Value of Assets as of January 1, 2016
(985,104)
13,581,045
226,301,266
4 a. Unfunded Adjusted Liability as of January 1, 2016 (2e - 2d)
b. Undeducted/(Prededucted) Contributions In/(Not In) Assets
c. Full Funding Limitation
$(24,721,177)$
$\frac{-}{(24,721,177)}$
d. Final Recommended Contribution (minimum of 4 c and 1 g , not less than 0 )

## Contributions for the Preceding Year:

|  | Employer |  | Employee |
| :---: | :---: | :---: | :---: |
| Date Received | Contribution | Interest | Contribution |
| Jan-14 | \$0 | \$0 | \$50,384.03 |
| Feb-14 | 0 | 0 | 25,257.61 |
| Mar-14 | 0 | 0 | 25,338.19 |
| Apr-14 | 0 | 0 | 0.00 |
| May-14 | 0 | 0 | 38,340.47 |
| Jun-14 | 0 | 0 | 25,307.25 |
| Jul-14 | 0 | 0 | 49,702.87 |
| Aug-14 | 0 | 0 | 24,890.21 |
| Sep-14 | 0 | 0 | 24,992.80 |
| Oct-14 | 0 | 0 | 0.00 |
| Nov-14 | 0 | 0 | 37,429.80 |
| Dec-14 | 0 | 0 | 40,567.39 |
| Jan-00 | 0 | 0 | 0.00 |
| Totals | \$0 | \$0 | \$342,210.62 |


|  |  | Remaining | Annual |  |
| :--- | :---: | :---: | :---: | :---: |
| Description | Effective Date Initial Amount | Balance | Years Remaining | Payment |

None*

| Total | 0 | 0 | 0 |
| :--- | :---: | :---: | :---: | :---: |

*Since assets exceed liabilities as of January 1, 2015, all existing bases are considered fully amortized. No new bases will be created until liabilities exceed assets

The following percentages may be used to allocate contributions to each department. These percentages are based on the ratio of the liabilities for employees of each department to the liabilities for all departments.

| Contribution \% Breakdown | Active | Deferred | Receiving | Total |
| :--- | ---: | ---: | ---: | ---: |
| Accounting | $0.29 \%$ | $0.05 \%$ | $1.03 \%$ | $1.37 \%$ |
| Assessing | $1.06 \%$ | $0.00 \%$ | $1.25 \%$ | $2.31 \%$ |
| Building Inspection | $0.54 \%$ | $0.00 \%$ | $1.55 \%$ | $2.09 \%$ |
| Buildings \& Grounds | $0.45 \%$ | $0.00 \%$ | $0.94 \%$ | $1.39 \%$ |
| Cable Studio | $0.41 \%$ | $0.08 \%$ | $0.45 \%$ | $0.94 \%$ |
| Clerk | $0.19 \%$ | $0.08 \%$ | $0.34 \%$ | $0.61 \%$ |
| Dispatch | $0.88 \%$ | $0.00 \%$ | $1.32 \%$ | $2.20 \%$ |
| Elections | $0.19 \%$ | $0.08 \%$ | $0.34 \%$ | $0.61 \%$ |
| Fire | $11.73 \%$ | $0.25 \%$ | $18.74 \%$ | $30.72 \%$ |
| Information Technology | $0.89 \%$ | $0.00 \%$ | $0.43 \%$ | $1.32 \%$ |
| Library | $1.70 \%$ | $0.00 \%$ | $1.85 \%$ | $3.55 \%$ |
| Motor Pool | $0.97 \%$ | $0.00 \%$ | $1.21 \%$ | $2.18 \%$ |
| Ordinance | $0.17 \%$ | $0.00 \%$ | $0.50 \%$ | $0.67 \%$ |
| Planning | $0.11 \%$ | $0.00 \%$ | $0.36 \%$ | $0.47 \%$ |
| Police | $11.70 \%$ | $0.46 \%$ | $23.41 \%$ | $35.57 \%$ |
| Road | $1.43 \%$ | $0.03 \%$ | $3.12 \%$ | $4.58 \%$ |
| Safety Path | $0.10 \%$ | $0.00 \%$ | $0.00 \%$ | $0.10 \%$ |
| Senior Services | $0.20 \%$ | $0.00 \%$ | $0.18 \%$ | $0.38 \%$ |
| Supervisor | $0.19 \%$ | $0.00 \%$ | $1.54 \%$ | $1.73 \%$ |
| Treasurer | $0.36 \%$ | $0.03 \%$ | $0.98 \%$ | $1.37 \%$ |
| Village Police | $0.00 \%$ | $0.00 \%$ | $0.19 \%$ | $0.19 \%$ |
| Water \& Sewer | $\underline{2.02 \%}$ | $\underline{0.08 \%}$ |  | $3.55 \%$ |
|  |  |  |  | $5.65 \%$ |
| Total | $35.58 \%$ | $1.14 \%$ | $63.28 \%$ | $100.00 \%$ |

## I. ACTUARIAL COST METHOD

Costs have been computed in accordance with the Projected Unit Credit Level Dollar Funding Method using a 20-year amortization period and reflect the actuarial assumptions described in "Plan Assumptions" of this report.

## NORMAL COST

The Normal Cost is the cost of benefits expected to accrue during the coming year for all Participants who are eligible for funding as of the valuation date.

## ACTUARIAL ACCRUED LIABILITY

As of January 1, 2011, an Actuarial Accrued Liability is established which represents the value of accrued benefits. This Actuarial Accrued Liability is offset by assets, if any, and the remainder, the Unfunded Actuarial Accrued Liability, is amortized over a fixed number of years from the effective date.

Subsequent changes due to plan amendment or revised actuarial assumptions create increments of Actuarial Accrued Liability which will be amortized over a similar fixed period of years from their effective dates. Actuarial gains and losses will be recognized with each valuation and amortized over a 20-year period.

## II. ASSET VALUATION METHOD

Assets have been valued in accordance with generally accepted procedures as described below. All funds invested are valued in the following manner:

Definitions
i assumed growth rate, set equal to the expected return on assets
$\mathrm{C}(\mathrm{t}) \quad$ sum of contributions and other additions to the fund from all sources other than investment transactions in Plan Year t
$\mathrm{W}(\mathrm{t}) \quad$ sum of all withdrawals and other decreases to the fund from all sources other than investment transactions in Plan Year t
$\mathrm{AV}(\mathrm{t}) \quad$ Actuarial Value of Assets as of Plan Year t
MV(t) Market Value of Assets as of Plan Year $t$
$E V(t) \quad$ Expected Value of Assets as of Plan Year $t$
$\mathrm{G} / \mathrm{L}(\mathrm{t}) \quad$ Gain or Loss for Plan Year t

## Method

Deferred Recognition Method, with no gain or loss recognition prior to January 1, 2002.
On January 1, 2002, let $\mathrm{AV}(\mathrm{t})=\mathrm{MV}(\mathrm{t})$. For subsequent years, $\mathrm{AV}(\mathrm{t})$ is determined as follows:

$$
\mathrm{EV}(\mathrm{t})=\mathrm{MV}(\mathrm{t}-1) *(1+\mathrm{i})+[\mathrm{C}(\mathrm{t}-1)-\mathrm{W}(\mathrm{t}-1)] *(1+\mathrm{i} * \mathrm{~m})
$$

where m represents a proportionate yield consistent with the portion of the year for which C and W are invested.

$$
\begin{aligned}
& \mathrm{G} / \mathrm{L}(\mathrm{t}-1)=\mathrm{EV}(\mathrm{t})-\mathrm{MV}(\mathrm{t}) \\
& \mathrm{AV}(\mathrm{t})=\mathrm{MV}(\mathrm{t})+4 / 5 * \mathrm{G} / \mathrm{L}(\mathrm{t}-1)+3 / 5 * \mathrm{G} / \mathrm{L}(\mathrm{t}-2)+2 / 5 * \mathrm{G} / \mathrm{L}(\mathrm{t}-3)+1 / 5 * \mathrm{G} / \mathrm{L}(\mathrm{t}-4)
\end{aligned}
$$

## Corridor Limits

The resulting Actuarial Value of Assets may not be less than $80 \%$ or more than $120 \%$ of the current market value of plan assets as of the applicable valuation date [ as required by IRC Section 1.412(c)(2)(1)].

Assumptions have been chosen to anticipate the long-range experience of the Plan. Consistency among assumptions is important as each interacts with the others; equally important is the recognition of inflationary trends in the economy.

The actuarial assumptions used to compute Plan costs are:

## Mortality:

Divisions 0, 1, \& $3 \quad$ RP 2014 Total Data Set Mortality Table with Scale MP-2014
Divisions 2, 4, 5, \& 7
RP 2014 Blue Collar Mortality Table with Scale MP-2014

## Termination:

$50 \%$ of Prudential Scale 1/2A
The probabilities that Participants at the ages indicated will terminate before reaching the assumed retirement age are:

| Age | $\underline{\text { Male }}$ | Female |
| :--- | ---: | ---: |
| 20 | $28.5 \%$ | $35.8 \%$ |
| 25 | $22.4 \%$ | $29.7 \%$ |
| 30 | $15.0 \%$ | $20.9 \%$ |
| 35 | $8.6 \%$ | $13.2 \%$ |
| 40 | $4.0 \%$ | $6.5 \%$ |
| 45 | $1.1 \%$ | $1.9 \%$ |
| $50 \&$ Over | $0.0 \%$ | $0.0 \%$ |

## Retirement Age:

## Investment Return:

## Estimated Expenses:

## Annual Cost of Living Adjustment:

## Maximum Benefit and <br> Maximum Compensation Limits:

Age 55 with 25 years of Service or Age 62. Participants at or beyond this age are assumed to retire immediately. Non-active, non-retired participants are assumed to retire at Normal Retirement Age.
$6.25 \%$ per annum.
\$45,000 per annum.

All retirees and participants eligible to retire immediately receive a $1 \%$ annual cost of living adjustment for life.

Assumed to increase 3\% per year.

It is assumed that husbands are 3 years older than wives and that $80 \%$ of Participants who are or will become eligible for coverage under the Spouse's Benefit will be survived by an eligible spouse.

The salary at age 55 bears the following relationship to the current earnings of a Participant at the indicated age, except that for Participants with a later normal or assumed retirement date, salaries are assumed to increase to that date.

| Age | Ratio |
| :---: | :---: |
| 20 \& under | 2.81 |
| 25 | 2.43 |
| 30 | 2.09 |
| 35 | 1.81 |
| 40 | 1.56 |
| 45 | 1.34 |
| 50 | 1.16 |
| 55 | 1.00 |

## Disability:

Table C-4 of the Society of Actuaries Transactions Volume XXXIX, $100 \%$ of the 6 -month rates. The probabilities the Participants at the ages indicated will terminate within the next year are:

| Age | Male | Female |
| :---: | :---: | :---: |
|  | A. |  |
| 20 | $0.080 \%$ | $0.100 \%$ |
| 25 | $0.085 \%$ | $0.110 \%$ |
| 30 | $0.099 \%$ | $0.140 \%$ |
| 35 | $0.124 \%$ | $0.201 \%$ |
| 40 | $0.176 \%$ | $0.276 \%$ |
| 45 | $0.294 \%$ | $0.400 \%$ |
| 50 | $0.540 \%$ | $0.622 \%$ |
| 55 | $0.977 \%$ | $0.932 \%$ |
| 60 | $1.477 \%$ | $1.179 \%$ |
| 62 | $1.671 \%$ | $1.253 \%$ |

## Rate of Earnings:

## Final Earnings:

## Service:

## Credited Service:

## Form of Annuity:

Normal Retirement Date:

Basic compensation including longevity adjustments but excluding overtime, commissions, bonuses and any other additional compensation.

Divisions 000, 003 and 004:
Average Rate of Earnings as of the highest three consecutive May 1's during the last 10 years before Retirement Date. If Service ceases more than three years before Retirement Date, Final Earnings is average Rate of Earnings as of the last three May 1's before Service ceases.

Divisions 002, 005 and 007:
Average Rate of Earnings as of the highest three May 1's.
Divisions 001 and 006:

Average Rate of Earnings as of the highest five consecutive May 1's during the last 10 years before Retirement Date. If Service ceases more than five years before Retirement Date, Final Earnings is the average Rate of Earnings as of the last five May 1's before Service ceases.

All years of Service with the Employer from date of employment to the earlier of retirement, termination of employment or death (without regard to hours worked).

All years of Service with the Employer from date of employment to the earlier of retirement, termination of employment or death, counted in whole years and full months. Service prior to August 1, 1961 is excluded if the Employee was not a plan Participant at that time. Service while the Participant was eligible to make contributions but did not is also excluded. Service while the Participant is disabled is excluded.

Modified Cash Refund with a 50\% Spouse Coninuation. Participants who are not narried receive an actuarially increased benefit.

Divisions 000 and 003:
The first day of the month coinciding with or next following the Participant's $52^{\text {nd }}$ birthday and the completion of 8 years of Service, or the completion of 30 years of Service.

Division 001:

The first day of the month coinciding with or next following the Participant's $55^{\text {th }}$ birthday and the completion of 8 Years of Service.

Division 002 and 007:
The first day of the month coinciding with or next following the Participant's $52^{\text {nd }}$ birthday and the completion of 8 Years of Service.

Division 004 and 005:
The first day of the month coinciding with or next following the Participant's $50^{\text {th }}$ birthday and the completion of 25 years of service or the Participant's $52^{\text {nd }}$ birthday and the completion of 10 years of Service, if later.

Division 006:
The first day of the month coinciding with or next following the earlier of (a) the Participant's $55^{\text {th }}$ birthday and the completion of 10 years of Service or (b) the Participant's $60^{\text {th }}$ birthday and the completion of 8 years of Service.

A Participant who continues in employment after reaching
Normal Retirement is considered to be in postponed
Retirement status.

## PENSION BENEFIT:

Normal Retirement:
Benefit Formula:
Divisions 001 and 006:
$2.1 \%$ of Final Earnings multiplied by years of Credited Service.
Divisions 002 and 007:
2.75\% of Final Earnings multiplied by years of Credited Service.

Divisions 000, 003:
$2.85 \%$ of Final Earnings multiplied by years of Credited Service.
Divisions 004, 005 :
$3.00 \%$ of Final Earnings multiplied by years of Credited Service.
Divisions 000 and 003:
On and after June 1, 2005, the maximum benefit at retirement shall not exceed $90 \%$ of Final Earnings for any Participant with 36 or fewer Years of Credited Service on April 1, 1996.

Division 002:
On and after July 8, 1996, the maximum benefit at retirement shall not exceed $80 \%$ of Final Earnings.

Division 004:
On and after April 27, 2000, the maximum benefit at retirement shall not exceed $90 \%$ of Final Earnings.

Division 005:
On and after April 1, 1999, the maximum benefit at retirement shall not exceed $85 \%$ of Final Earnings.

Division 007:

On and after December 18, 1996, the maximum benefit at retirement shall not exceed $80 \%$ of Final Earnings.

1\% increase each January 1.
Cost of Living:

Early Retirement :
Eligibility:
Benefit Formula:
Age 50 with a Vesting Percentage of $100 \%$
Normal retirement benefit accrued to early retirement, reduced by .5\%
for each month Annuity Commencement Date precedes Normal Retirement Date.

Vesting:

Eligibility:

Benefit Formula:

Divisions 000, 001, 002, 003, 006 and 007
Eight years of Service or attainment of Normal Retirement Date equals $100 \%$ vesting.

Divisions 004 and 005:
Ten years of Service or attainment of Normal Retirement Age equals 100\% vesting.

Benefit accrued to date of termination adjusted by the appropriate vesting percentage.

## SUPPLEMENTAL BENEFITS:

Preretirement Death

Benefit:

Eligibility:
Benefit Formula:

Preretirement Spouse
Benefit:

Eligibility:

Benefit Formula:

Divisions 000, 002, 003, 004, 005 and 007:

Active Employee who is eligible for vesting
$50 \%$ of the pension benefit accrued to date of death. If eligible for early retirement at time of death, $100 \%$ of the pension benefit accrued to date of death.

Divisions 001 and 006

Active employee eligible for early retirement and married
$50 \%$ of the pension benefit accrued to date of death. If eligible for early retirement at time of death, $100 \%$ of the pension benefit accrued to date of death.

Eligibility:
Benefit Formula:

## EMPLOYEE CONTRIBUTIONS

Interest Credits:
Death or Termination Refund:
Preretirement:
Postretirement:

Only applies to Divisions $002,004,005$ and 007.
Participants are eligible immediately.

- Duty Disability
$2.75 \%$ ( $3.0 \%$ for Divisions $004 \& 005$ ) of Final Earnings equal to the rate of earnings immediately prior to disablement adjusted by increases negotiated for job classification between date of disablement and the earlier of the date the Participant is no longer disabled, or the Normal Retirement Date, multiplied by years of Credited Service. Credited Service is defined from employment date to the earlier of the date the Participant is no longer considered disabled or Normal Retirement Date. Final Earnings equals the Rate of Earnings immediately prior to disablement adjusted by increases negotiated for that job classification between the date of disablement and the earlier of the date the Participant is no longer disabled or Normal Retirement Date.
- Non-Duty Disability
$2.75 \%$ ( $3.0 \%$ for Divisions $004 \& 005$ ) of Final Earnings multiplied by years of Credited Service. Final Earnings and Credited Service are as of date of disablement.

Divisions 002 and 007: 1\% of earnings
Divisions 004 and 005: 3.5\% of earnings
Divisions 000 and 003: 2\% of earnings
Divisions 001 and 006: 5\% of earnings
$5 \%$ per annum

Refund of Employee Contributions with interest to date of termination or date of death
Refund of Employee Contributions with interest over annuity payments made, unless the form of annuity elected is other than the normal form of annuity.

