# DISTRICT ATTORNEYS' RETIREMENT SYSTEM

ACTUARIAL VALUATION AS OF
JUNE 30, 2012

# G. S. CURRAN & COMPANY, LTD.

**Actuarial Services**

**10555 N. Glenstone Place • Baton Rouge, Louisiana 70810 • (225) 769-4825**

Gary S. Curran, FCA, MAAA, ASA, EA
Consulting Actuary

Gregory M. Curran, FCA, MAAA, ASA, EA
Consulting Actuary


November 29, 2012

Board of Trustees
District Attorneys' Retirement System
1645 Nicholson Drive
Baton Rouge, LA 70802

Gentlemen:

We are pleased to present our report on the actuarial valuation of the District Attorneys' Retirement System for the fiscal year ending June 30, 2012. Our report is based on the actuarial assumptions specified and relies on the data supplied by the system's administrator and accountants. This report was prepared at the request of the Board of Trustees of the District Attorneys' Retirement System. The primary purposes of the report are to determine the actuarially required contribution for the retirement system for the fiscal year ending June 30, 2013, to recommend the net direct employer contribution rate for fiscal 2014, and to provide information required for the system's financial statements. This report was prepared exclusively for the District Attorneys' Retirement System for a specific limited purpose. It is not for the use or benefit of any third party for any purpose.

This report has been prepared in accordance with generally accepted actuarial principles and practices, and to the best of our knowledge and belief, fairly reflects the actuarial present values and costs stated herein. The undersigned actuaries are members of the American Academy of Actuaries and have met the qualification standards for the American Academy of Actuaries to render the actuarial opinions incorporated in this report, and are available to provide further information or answer any questions with respect to this valuation.

Sincerely,

G. S. CURRAN & COMPANY, LTD.

By: ______________________________
Gary Curran, F.C.A., M.A.A.A., A.S.A.

By: ______________________________
Gregory Curran, F.C.A., M.A.A.A., A.S.A.

# TABLE OF CONTENTS

# SUMMARY OF VALUATION RESULTS
## DISTRICT ATTORNEYS' RETIREMENT SYSTEM

| | | | |
|---|---|---|---|
| Valuation Date: | | June 30, 2012 | June 30, 2011 |
| Census Summary: | Active Members | 759 | 761 |
| | Retired Members and Survivors | 219 | 201 |
| | Terminated Due a Deferred Benefit | 89 | 91 |
| | Terminated Due a Refund | 177 | 174 |
| Payroll (including DROP participants): | | $ 55,977,999 | $ 55,359,672 |
| Benefits in Payment (excluding DROP accruals): | | $ 9,778,123 | $ 8,817,160 |
| Market Value of Assets: | | $ 262,386,314 | $ 252,070,535 |
| Actuarial Asset Value: | | $ 267,941,755 | $ 253,675,141 |
| Entry Age Normal Accrued Liability | | $ 322,042,310 | $ 300,367,838 |
| Unfunded Actuarial Accrued Liability | | None | None |
| Funded Ratio (GASB 50) | | 83.20% | 84.45% |

*********************************************************************************************

| | FISCAL 2013 | FISCAL 2012 |
|---|---|---|
| Employer Normal Cost (July 1): | $ 12,353,107 | $ 11,730,361 |
| Amortization Cost (July 1): | N/A | N/A |
| Interest Adjusted Gross Employer Actuarially Required Contribution Including Estimated Administrative Costs: | $ 13,126,664 | $ 12,484,043 |
| Projected Ad Valorem Taxes and Revenue Sharing Funds: | $ 7,544,601 | $ 6,619,412 |
| Net Direct Employer Actuarially Required Contribution: | $ 5,582,063 | $ 5,864,631 |
| Actuarially Required Net Direct Employer Contribution Rate | 9.70% | 10.28% |
| Actual Net Direct Employer Contribution Rate: | 10.25% | 9.75% |

*********************************************************************************************

**Recommended Net Employer Contribution Rate for Fiscal 2014: 9.75% Fiscal 2013 10.25%**

Employee Contribution Rate: 7% (Effective January 1, 2013 the rate will change to 8%)

Actuarial Cost Method: Aggregate Actuarial Cost Method

Valuation Interest Rate: 7.5% (Net of Investment Expense)

Exclusions from Census: None

Basis of Actuarial Asset Value: The actuarial value of assets is based on the market value of assets adjusted to phase in asset earnings above or below the assumed rate of return over a five-year period with limits set at 85% and 115% of the market value of assets. When the adjusted value falls outside of the limits, the actuarial value is set equal to the average of the limited and adjusted value.

Changes in Valuation Methods, Assumptions, and/or Amortization Periods: The valuation interest rate was reduced from 8% to 7.5% and the assumed rate of salary increase was reduced from 6.75% to 6.5%.

Method of Recognizing Gains and Losses: Gains and losses are spread over future normal costs.

# COMMENTS ON DATA

For the valuation, the administrative staff of the system furnished a census on magnetic diskette derived from the system's master data processing file indicating each active covered employee's sex, date of birth, service credit, annual salary, and accumulated contributions. Information on retirees detailing dates of birth of retirees and beneficiaries, as well as option categories and benefit amounts, was provided in like manner. In addition, data was supplied on former employees who are vested or who have contributions remaining on deposit. As illustrated in Exhibit X, there are 759 active members in the system of whom 335 have vested retirement benefits; 219 former system members or their beneficiaries are receiving retirement benefits. An additional 266 members have contributions remaining on deposit with the system; of this number, 89 have vested rights for future retirement benefits. All individuals submitted were included in the valuation.

Census data submitted to our office is tested for errors. Several types of census data errors are possible; to ensure that the valuation results are as accurate as possible, a significant effort is made to identify and correct these errors. In order to minimize coverage errors (i.e., missing or duplicated individual records) the records are checked for duplicates, and a comparison of the current year's records to those submitted in prior years is made. Changes in status, new records, and previous records, which have no corresponding current record are identified. This portion of the review indicates the annual flow of members from one status to another and is used to check some of the actuarial assumptions, such as retirement rates, rates of withdrawal, and mortality. In addition, the census is checked for reasonableness in several areas, such as age, service, salary, and current benefits. The records identified by this review as questionable are checked against data from prior valuations; those not recently verified are included in a detailed list of items sent to the system's administrator for verification and/or correction. Once the identified data has been researched and verified or corrected, it is returned to us for use in the valuation. Occasionally some requested information is either unavailable or impractical to obtain. In such cases, values may be assigned to missing data. The assigned values are based on information from similar records or based on information implied from other data in the record.

In addition to the statistical information provided on the system's participants, the system's administrator furnished general information related to other aspects of the system's expenses, benefits and funding. Valuation asset values as well as income and expenses for the fiscal year were based on information furnished by the system's auditor, the firm of Duplantier, Hrapmann, Hogan & Maher, Certified Public Accountants. As indicated in the system's audit report, the net market value of the system's assets was $262,386,314 as of June 30, 2012. Net investment income for fiscal 2012 measured on a market value basis amounted to $4,111,214. Contributions to the system for the fiscal year totaled $16,927,324; benefits and expenses amounted to $10,722,759.

Notwithstanding our efforts to review both census and financial data for apparent errors, we must rely upon the system's administrative staff and accountants to provide accurate information. Our review of submitted information is limited to validation of reasonableness and consistency. Verification of submitted data to source information is beyond the scope of our efforts.

## COMMENTS ON ACTUARIAL METHODS AND ASSUMPTIONS

This valuation is based on the Aggregate Actuarial Cost Method. Under the Aggregate Cost Method, actuarial gains and losses are spread over future normal costs. Thus, favorable plan experience will lower future normal costs; unfavorable experience will cause future normal costs to increase. In addition, changes in benefits and assumptions are also spread over future normal costs.

The current year actuarial assumptions utilized for the report are outlined on pages thirty-four through thirty-seven. Two changes were made to the assumptions for this valuation. First, the valuation interest rate was reduced from 8% to 7.5%. Second, the rate of assumed salary increase was reduced from 6.75% to 6.50%. With the exception of these two changes, the assumptions used are the same as those used for the prior year report. In the aggregate the assumptions are within our "best estimate range". All calculations, recommendations, and conclusions are based on the assumptions specified. To the extent that prospective experience differs from that assumed, adjustments will be required to contribution levels. Such differences will be revealed in future actuarial valuations. The net effect of all changes in assumptions was to increase the system's normal cost accrual rate by 4.5257%.

## CHANGES IN PLAN PROVISIONS

The following changes in plan provisions were enacted during the 2012 Regular Session of the Louisiana Legislature:

**Act 237** changes the membership of the board of trustees by adding an additional active and contributing member and requiring that at least one member be an assistant district attorney.

**Act 515** increases the employee contribution rate from 7.0% to 8.0% effective January 1, 2013. It also changes the average final compensation calculation from a 36-month (three year) average to a 60-month (five year) average with a phase in period ending December 31, 2014. During the phase-in period, final average compensation will be based on thirty-six months plus the number of whole months elapsed between January 1, 2013 and the member's date of retirement (not to exceed sixty months). In addition, the final average compensation used for retirement cannot be less than a member's thirty-six month final average compensation as it was on December 31, 2012. The act also allows the surviving spouse of members who are eligible to retire, to elect to receive benefits as though the member had elected the Back-DROP option as of the day following the date of death.

**Act 523** includes provisions to comply with IRS qualification requirements. It also provides additional survivor benefits in the case of a death of a member on or after January 1, 2007, while performing military service. The system will credit the member's qualified military service as service credit for vesting purposes and for eligibility purposes as though the member had resumed employment immediately prior to the member's death. However, the time spent by the member in qualified military service will not be used for calculation of benefit accrual purposes.

The net effect of all changes in plan benefits and the employee contribution rate was to reduce the employer normal cost rate by 3.8771%.

## ASSET EXPERIENCE

The actuarial and market rates of return for the past ten years are given below. These rates of return on assets were arrived at by assuming a uniform distribution of income and expense throughout the fiscal year.

| | Market Value | Actuarial Value |
|---|---|---|
| 2003 | 2.8% | -5.7% |
| 2004 | 13.2% | 1.7% |
| 2005 | 5.0% | 6.8% |
| 2006 | 7.7% | 13.8% * |
| 2007 | 14.6% | 9.9% |
| 2008 | -4.9% | 5.8% |
| 2009 | -14.2% | -3.0% * |
| 2010 | 11.7% | 6.4% |
| 2011 | 19.3% | 4.4% |
| 2012 | 1.6% | 3.1% |

* Includes effect of change in asset valuation method.

The market rate of return gives a measure of investment return on a total return basis and includes realized and unrealized capital gains and losses as well as interest income and dividends. This rate of return gives an indication of performance for an actively managed portfolio where securities are bought and sold with the objective of producing the highest total rate of return. During 2012, the fund earned $6,979,110 of dividends, interest, and other recurring income. In addition to this income, the Fund had net realized and unrealized capital losses on investments of -$2,628,645. In addition, the Fund paid $243,946 in investment expenses. The geometric mean of the market value rates of return measured over the last ten years was 5.2%. For the last 20 years the geometric mean of the market value rates of return was 6.7%.

The actuarial rate of return is presented for comparison to the assumed long-term rate of return of 7.5% used for the valuation. This rate is calculated based on the actuarial value of assets and all interest, dividends, and recognized capital gains as given in Exhibit VI. Investment income used to calculate this yield is based upon smoothing earnings above or below the 8% assumed rate of return over a five-year period, subject to constraints as outlined in the section in the report describing actuarial assumptions. (Since the valuation interest rate was changed effective June 30, 2012, smoothing for prior years was based on a valuation interest rate of 8%). The difference between rates of return on an actuarial and market value basis results from the smoothing of gains or losses on investments relative to the valuation interest rate over the five-year period. In the future, yields in excess of the 7.5% assumption will reduce future costs; yields below 7.5% will increase future costs. For fiscal 2012 the system experienced net actuarial investment earnings of $12,475,370 less than the actuarial assumed earnings rate of 8.0%, applicable for fiscal 2012. (For future years, investment income above or below 7.5% will be smoothed over a five year period.) This deficiency in earnings produced an actuarial loss, which increased the normal cost accrual rate by 2.5492%.

## DEMOGRAPHICS AND LIABILITY EXPERIENCE

A reconciliation of the census for the system is given in Exhibit X. The system's active contributing membership decreased by two members over the prior fiscal year. The average active member is 47 years old with 10.70 years of service and an annual salary of $73,752. The plan has experienced an increase in the active plan population of 43 members over the last five years. A review of the active census by age indicates that over the last ten years the active population in the under-fifty age group has decreased while the proportion of active members over-fifty increased. Over the same ten-year period the plan showed a decrease in the percentage of members with service less than fifteen years and a corresponding increase in members with more than fifteen years of service.

The average service retiree is 69 years old with a monthly benefit of $4,052. The retired population increased by 18 during the last fiscal year. Over the last five years the number of retirees increased by 78. During this same period, annual benefits in payment increased by $4,958,686. Hence over the last five years, the retired population of the plan has increased by more than 50% and the benefits in payment have more than doubled.

Plan liability experience for fiscal 2012 was favorable. The main factors contributing to the favorable experience were salary increases well below the projected levels, retirements below expected levels, and retiree deaths above projected levels. Partially offsetting the decrease were withdrawals below expected levels. Plan liability experience decreased the normal cost accrual rate by 1.6451%.

## FUNDING ANALYSIS AND RECOMMENDATIONS

Actuarial funding of a retirement system is a process whereby funds are accumulated over the working lifetimes of employees in such a manner as to have sufficient assets available at retirement to pay for the lifetime benefits accrued by each member of the system. The required contributions are determined by an actuarial valuation based on rates of mortality, termination, disability, and retirement, as well as investment return and other statistical measures specific to the particular group. Each year a determination is made of the normal cost, and the actuarially required contributions are based on the sum of this value and administrative expenses. Under the funding method used for the plan, changes in plan experience, benefits, or assumptions increase or decrease future normal costs. In addition excess or deficient contributions can decrease or increase future costs.

In order to establish the actuarially required contribution in any given year, it is necessary to define the assumptions and funding method. Thus, the determination of what contribution is actuarially required depends upon the funding method employed. Regardless of the method selected, the ultimate cost of providing benefits is dependent upon the benefits, expenses, and investment earnings. Only to the extent that some methods accumulate assets more rapidly and thus produce greater investment earnings does the funding method affect the ultimate cost.

The derivation of the actuarially required contribution for the current fiscal year is given in Exhibit I. The normal cost for fiscal 2013 as of July 1, 2012, is $12,353,107. The total actuarially required contribution is determined by adjusting this value for interest (since payments are made throughout the fiscal year) and adding estimated administrative expenses. As given on line 11 of Exhibit I the total gross actuarially required employer contribution for fiscal 2013 is $13,126,664. When this amount is reduced by projected ad valorem taxes and revenue sharing funds which the system receives each year, the resulting employers' net direct actuarially required contribution for fiscal 2013 is $5,582,063. This is 9.70% of the projected payroll for fiscal 2013.

Liability and asset experience as well as changes in assumptions and benefits can increase or lower plan costs. In addition to these factors, any COLA granted in the prior fiscal year will increase required contributions. New entrants to the system can also increase or lower costs as a percent of payroll depending upon their demographic distribution and other factors related to prior plan experience. Finally, contributions above or below requirements may reduce or increase future costs.

The effects of various factors on the fund's cost structure are outlined below:

| | |
|---|---|
| Normal Cost Accrual Rate – Fiscal 2012 | 22.1986% |
| Factors Increasing the Normal Cost Accrual Rate: | |
| Asset Experience | 2.5492% |
| Assumption Loss | 4.5257% |
| Factors Decreasing the Normal Cost Accrual Rate: | |
| Liability Experience | 1.6451% |
| New Hires | 0.5382% |
| Benefit Gain | 3.8771% |
| Contribution Gain | 0.0565% |
| Normal Cost Accrual Rate – Fiscal 2013 | 23.1566% |

Required net direct employer contributions are affected by the available ad valorem taxes and revenue sharing funds which the system receives each year. When these funds change as a percentage of payroll, net direct employer contributions are adjusted accordingly. We estimate that these funds will increase by 1.50% of payroll in fiscal 2013.

Although the actuarially required net direct employer contribution rate for fiscal 2013 is 9.70%, the actual employer contribution rate for fiscal 2013 is 10.25%. Since the contribution rate for fiscal 2013 was 10.25%, the excess in employer contributions collected in the fiscal year will decrease the Fund's normal cost accrual rate in the following year. We estimate this excess will result in an decrease of 0.06% to the normal cost accrual rate in fiscal 2013. R.S. 11:103 requires that the net direct employer contributions be rounded to the nearest 0.25%, hence we are recommending a minimum net direct employer contribution rate of 9.75% for fiscal 2014.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions, changes in economic or demographic assumptions, and changes in plan provisions or applicable law. Analysis of the effect of all these factors is beyond the scope of this report. We have, however, calculated the sensitivity of the plans' costs to two factors. First, we have determined that based on current assets and demographics, for each percentage earnings in a single year under (over) the assumed rate of return on the actuarial value of assets, there will be a corresponding increase (reduction) in the normal cost accrual rate of 0.55%

for the Fund. We have also determined that a 1% reduction in the valuation interest rate for the Fund would increase the actuarially required contribution rate for fiscal 2013 by 11.76%. Please note that the above results are only intended to serve as an illustration of the impact of a change in the valuation interest rate. Any actual change in the valuation interest rate should only be effected with a review of all other plan assumptions.

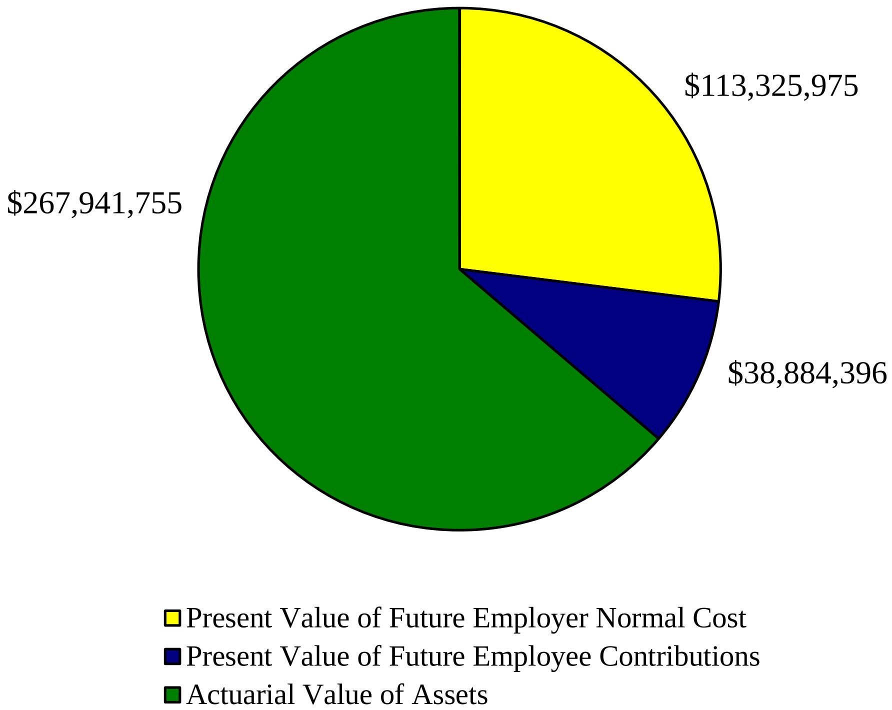
Notwithstanding recent contribution increases, a significant portion of investment losses incurred in fiscal 2009 have not yet been released into the actuarial value of assets due to the current asset smoothing methodology. These losses will be released over the year and this will put upward pressure on costs as they are released into income unless they are offset by substantial asset or liability gains.

## COST OF LIVING INCREASES

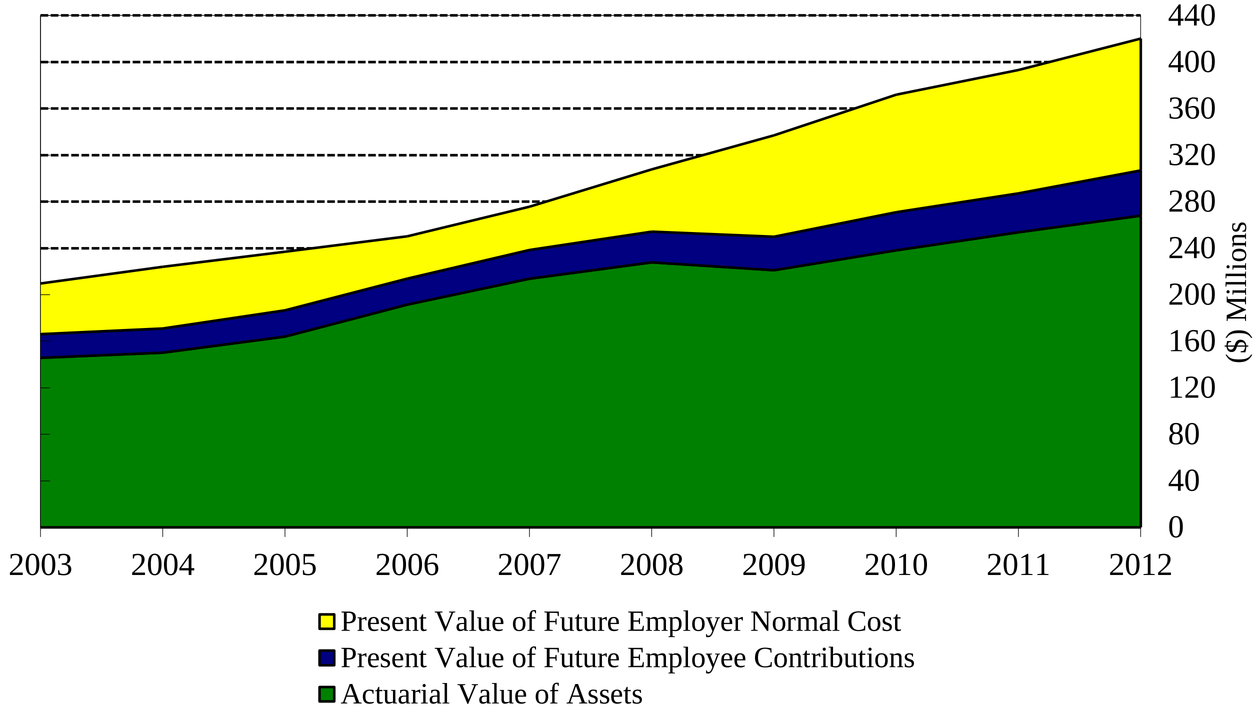
During fiscal 2012 the actual cost of living (as measured by the US Department of Labor CPI-U) increased by 1.66%. Cost of living provisions for the system are detailed in R.S. 11:1638 and R.S. 11:246. The former statute allows the board to grant annual cost of living increases of 3% of each retiree's original benefit subject to a limit of $60 per month. R. S. 11:246 provides cost of living increases of retirees and beneficiaries over the age of 65 equal to 2% of the benefit in payment on October 1, 1977, or the date the benefit was originally received if retirement commenced after that date (R.S. 11:246 only permits payment of such an increase if earnings exceed the system's valuation rate). R.S. 11:241 provides that cost of living benefits shall be in the form (unless the board otherwise specifies) of $\$X\times(A+B)$ where X is at most $1 and "A" represents the number of years of credited service accrued at retirement or at death of the member or retiree and "B" is equal to the number of years since retirement or since death of the member or retiree to June 30th of the initial year of such increase. The provisions of this subpart do not repeal provisions relative to cost of living adjustments contained within the individual laws governing systems; however, they are to be controlling in cases of conflict. In order to grant any cost of living increase, the ratio of the plan's assets to benefit obligations must meet the criteria established in R.S. 11:242. This section sets forth a minimum "target ratio" of the actuarial value of assets to the Pension Benefit Obligation. We have determined that for fiscal 2012 the fund has not met the necessary target ratio and that plan investment experience was below assumptions. Therefore, the system is not eligible to provide a cost of living increase to retirees.

# Components of Present Value of Future Benefits

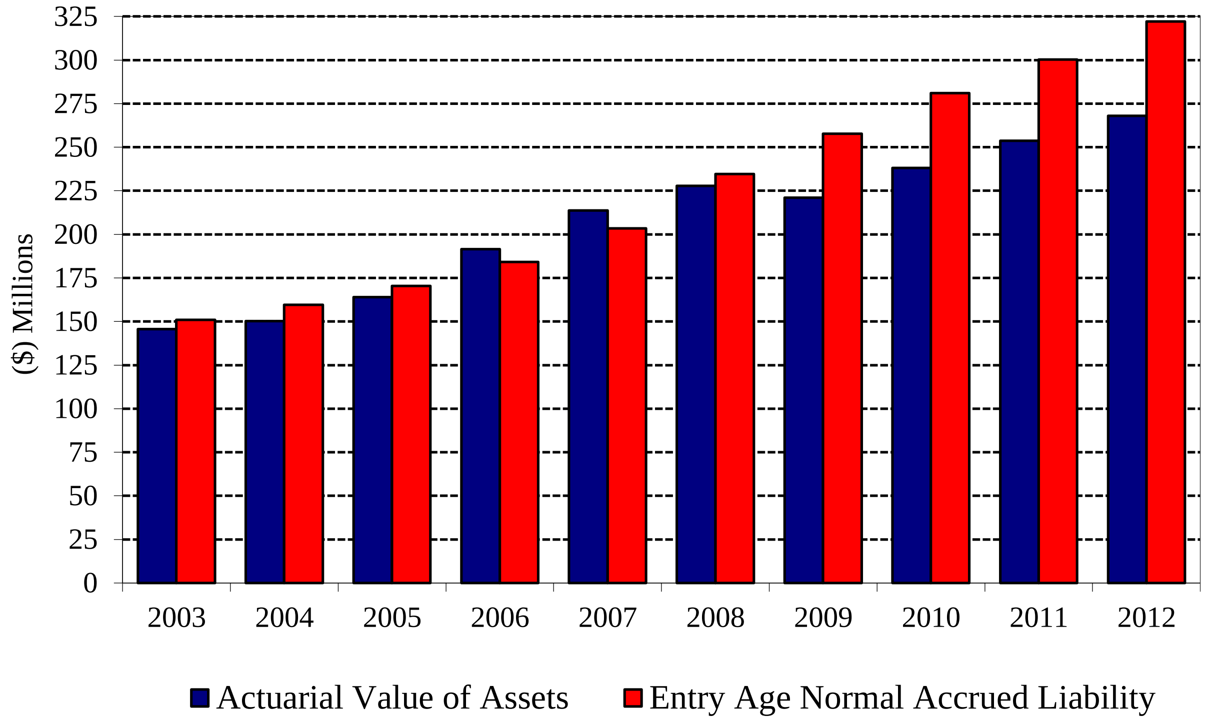
## June 30, 2012



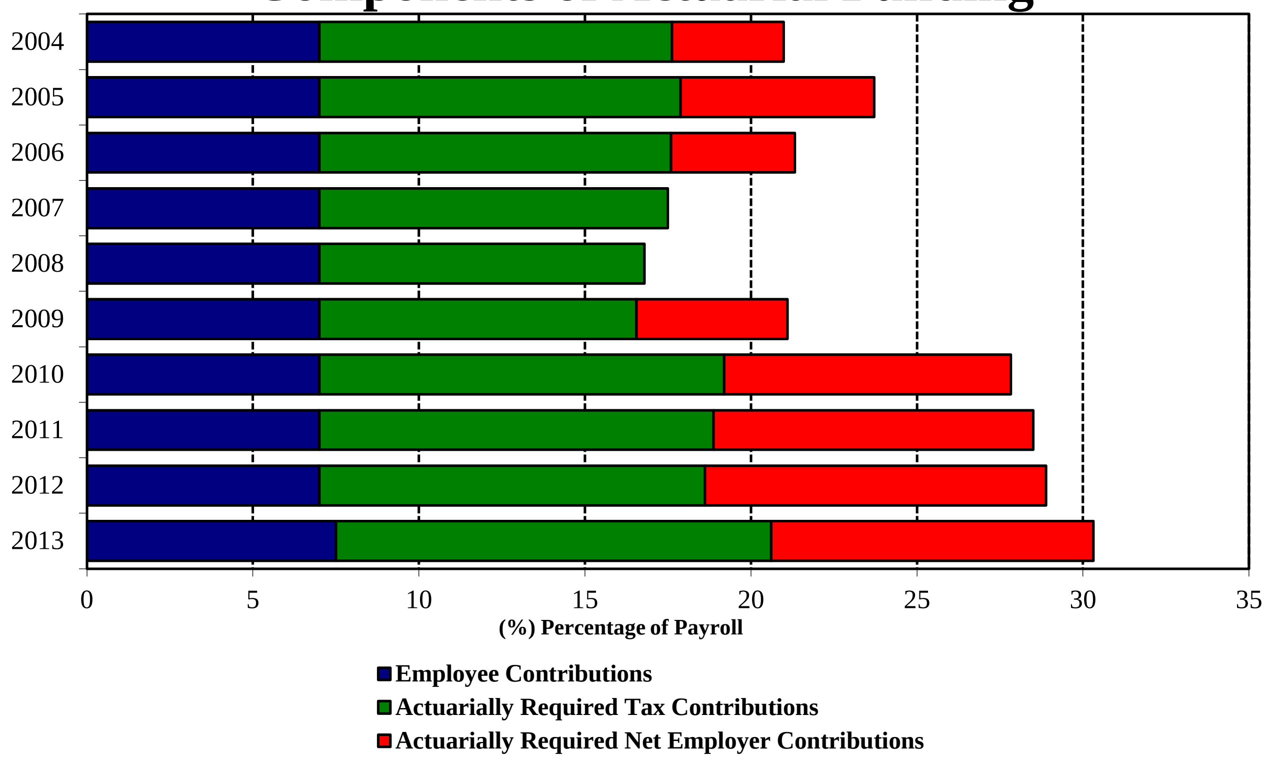

# Components of Present Value of Future Benefits



# Actuarial Value of Assets vs.
# Entry Age Normal Accrued Liability

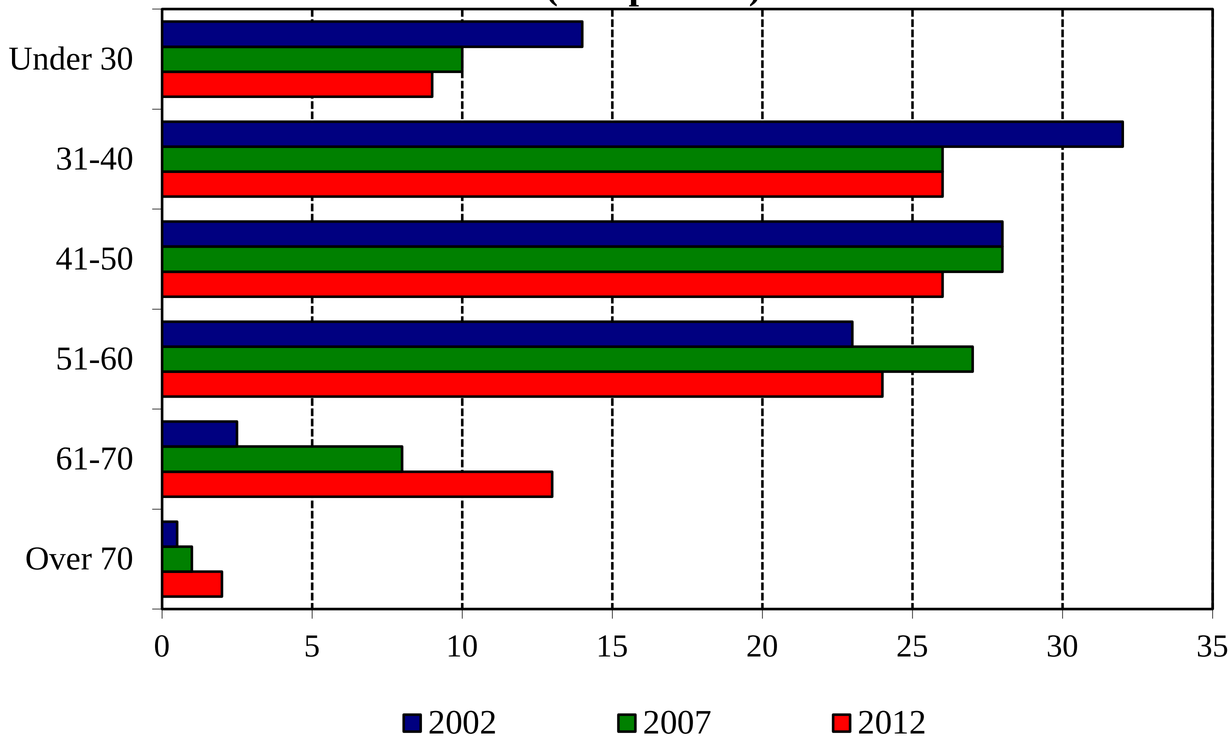



# Components of Actuarial Funding



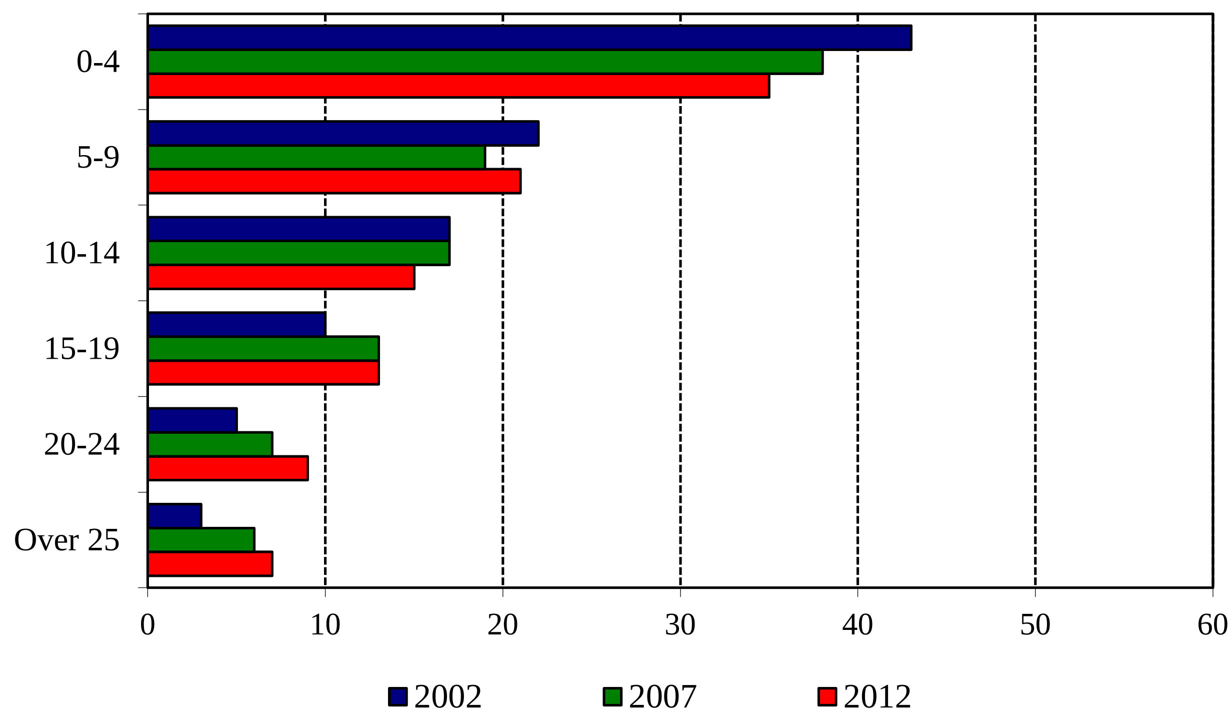
## Active – Census By Age

**(as a percent)**

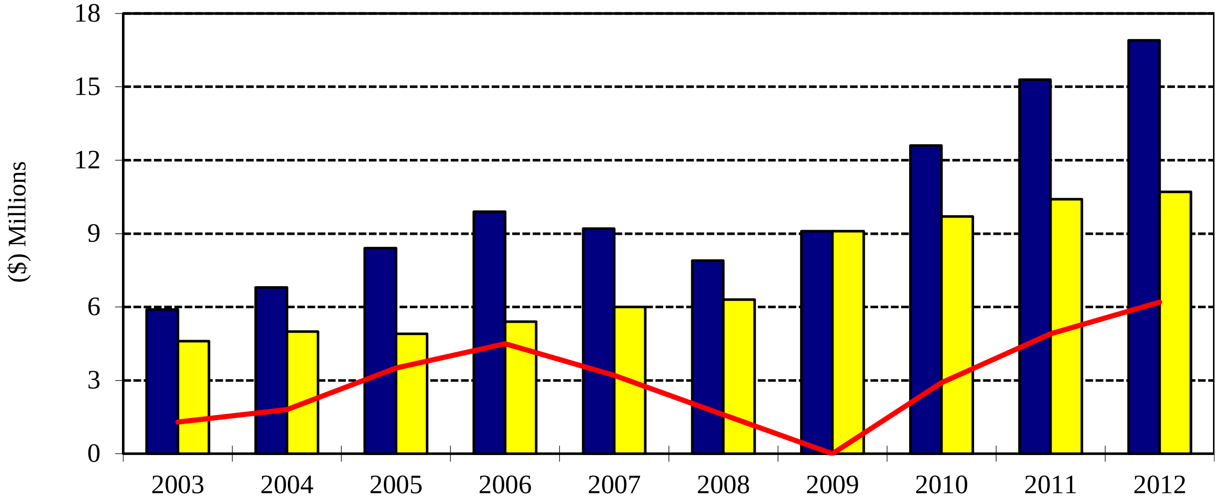



## Active – Census By Service

**(as a percent)**

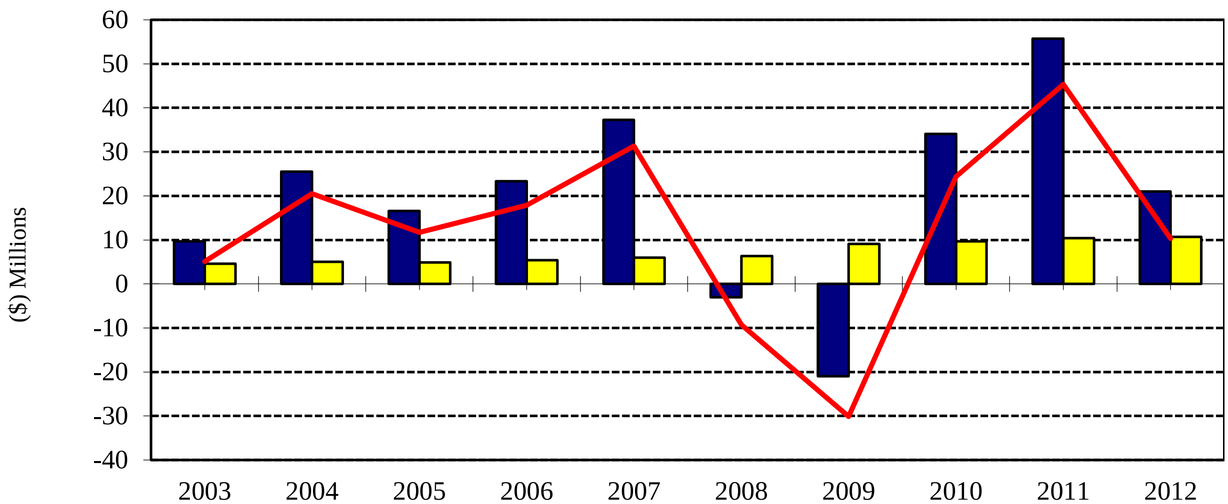


# Net Non-Investment Income



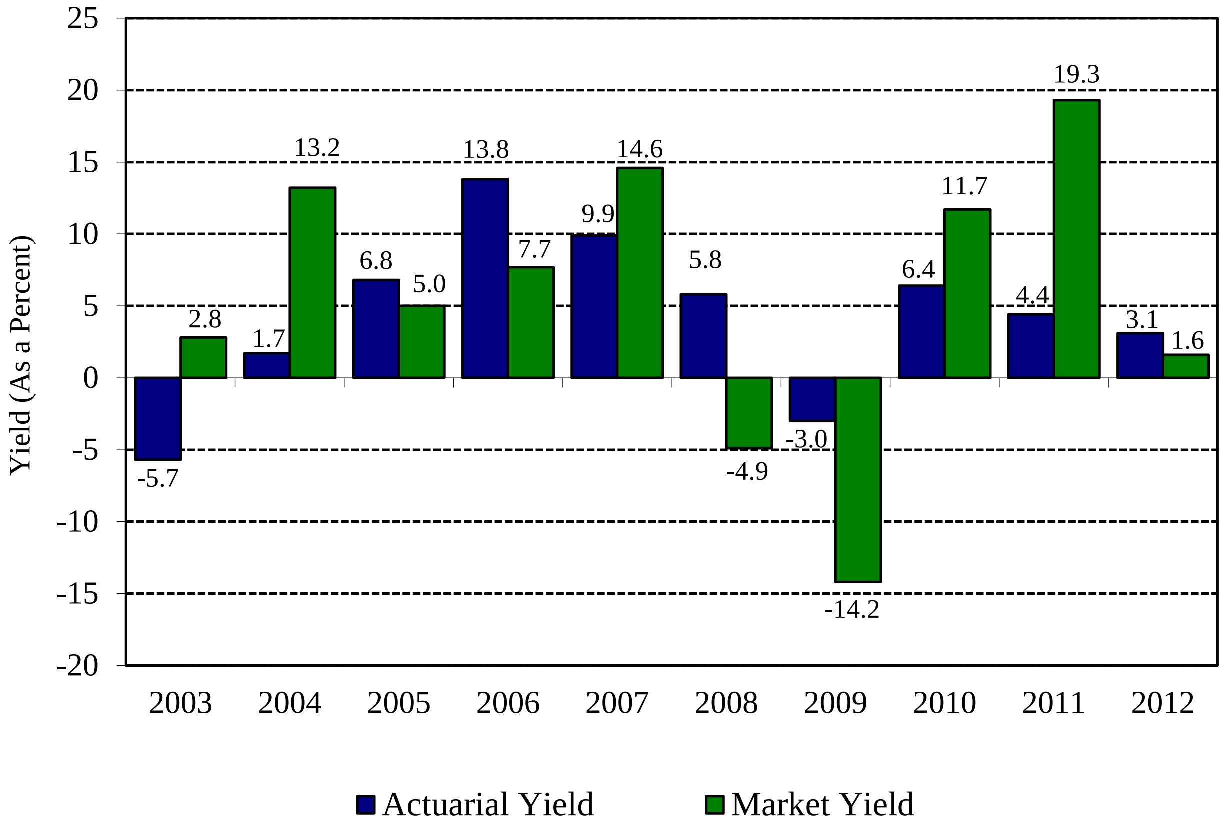

| | | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Non-Investment Income ($Mil) | | 5.9 | 6.8 | 8.4 | 9.9 | 9.2 | 7.9 | 9.1 | 12.6 | 15.3 | 16.9 |
| Benefits and Expenses ($Mil) | | 4.6 | 5.0 | 4.9 | 5.4 | 6.0 | 6.3 | 9.1 | 9.7 | 10.4 | 10.7 |
| Net Non-Investment Income ($Mil) | | 1.3 | 1.8 | 3.5 | 4.5 | 3.2 | 1.6 | 0.0 | 2.9 | 4.9 | 6.2 |

# Total Income vs. Expenses
## (Based on Market Value of Assets)




| | | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2011 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Income ($Mil) | | 9.7 | 25.5 | 16.6 | 23.3 | 37.3 | -3.0 | -21.0 | 34.1 | 55.7 | 21.0 |
| Benefits and Expenses ($Mil) | | 4.6 | 5.0 | 4.9 | 5.4 | 6.0 | 6.3 | 9.1 | 9.7 | 10.4 | 10.7 |
| Net Change in MVA ($Mil) | | 5.1 | 20.5 | 11.7 | 17.9 | 31.3 | -9.3 | -30.1 | 24.4 | 45.3 | 10.3 |

# Historical Asset Yields



# EXHIBITS

# EXHIBIT I
## ANALYSIS OF ACTUARIALLY REQUIRED CONTRIBUTIONS

| | | |
|---|---|---|
| 1. | Present Value of Future Benefits | $ 420,152,126 |
| 2. | Actuarial Value of Assets | $ 267,941,755 |
| 3. | Present Value of Future Employee Contributions | $ 38,884,396 |
| 4. | Present Value of Future Employer Normal Costs (1 – 2 – 3) | $ 113,325,975 |
| 5. | Present Value of Future Salaries | $ 489,389,077 |
| 6. | Employer Normal Cost Accrual Rate (4 ÷ 5) | 23.156621% |
| 7. | Projected Fiscal 2013 Salary for Current Membership | $ 53,345,898 |
| 8. | Employer Normal Cost as of July 1, 2012 (6 x 7) | $ 12,353,107 |
| 9. | Normal Cost Adjusted for Midyear Payment | $ 12,807,974 |
| 10. | Estimated Administrative Cost for Fiscal 2013 | $ 318,690 |
| 11. | GROSS Employer Actuarially Required Contribution for Fiscal 2013 (9 + 10) | $ 13,126,664 |
| 12. | Projected Revenue Sharing Funds for Fiscal 2013 | $ 214,218 |
| 13. | Projected Ad Valorem Taxes for Fiscal 2013 | $ 7,330,383 |
| 14. | Net Direct Actuarially Required Employer Contribution (11 – 12 – 13) | $ 5,582,063 |
| 15. | Projected Payroll (Fiscal 2013) | $ 57,561,879 |
| 16. | Employer's Minimum Net Direct Actuarially Required Contribution as a % of Projected Payroll for Fiscal 2013 (14 ÷ 15) | 9.70% |
| 17. | Actual Employer Contribution Rate for Fiscal 2013 | 10.25% |
| 18. | Contribution Shortfall (Excess) as a Percentage of Payroll (16-17) | (0.55%) |
| 19. | Increase (Reduction) to Following Year Payment for Contribution Shortfall (Excess) | (0.06%) |
| 20. | Minimum Recommended Net Direct Employer Contribution Rate for Fiscal 2014 (16 + 19; rounded to the nearest 0.25%) | 9.75% |

# EXHIBIT II
## PRESENT VALUE OF FUTURE BENEFITS

Present Value of Future Benefits for Active Members:

| | | |
|---|---|---|
| Retirement Benefits | $ 262,894,179 | |
| Survivor Benefits | 11,759,607 | |
| Disability Benefits | 909,536 | |
| Vested Deferred Termination Benefits | 17,436,608 | |
| Contribution Refunds | 3,790,298 | |
| Special Deposits | 1,173,813 | |
| TOTAL Present Value of Future Benefits for Active Members | | $ 297,964,041 |

Present Value of Future Benefits for Terminated Members:

| | | |
|---|---|---|
| Terminated Vested Members Due Benefits at Retirement | $ 15,739,769 | |
| Terminated Members with Reciprocals Due Benefits at Retirement | 368,322 | |
| Terminated Members Due a Refund | 1,472,335 | |
| TOTAL Present Value of Future Benefits for Terminated Members | | $ 17,580,426 |

Present Value of Future Benefits for Retirees:

| | | | |
|---|---|---|---|
| Regular Retirees | | | |
| Maximum | $ 26,592,883 | | |
| Option 1 | 1,788,228 | | |
| Option 2 | 46,182,010 | | |
| Option 3 | 12,871,572 | | |
| Option 4 | 2,310,490 | | |
| TOTAL Regular Retirees | | $ 89,745,183 | |
| Disability Retirees | | 612,034 | |
| Survivors & Widows | | 8,162,680 | |
| DROP/Back-DROP Deposits | | 6,087,762 | |
| TOTAL Present Value of Future Benefits for Retirees & Survivors | | | $ 104,607,659 |
| TOTAL Present Value of Future Benefits | | | $ 420,152,126 |

# EXHIBIT III - SCHEDULE A
# MARKET VALUE OF ASSETS

Current Assets:

| | | |
|---|---|---|
| Cash in Banks | $ 1,301,877 | |
| Contributions Receivable from Employer | 594,202 | |
| Contributions Receivable from Members | 426,606 | |
| Accrued Interest and Dividends | 387,862 | |
| TOTAL CURRENT ASSETS | | $ 2,710,547 |

Investments:

| | | |
|---|---|---|
| Exchange Traded Funds - Equity | $ 153,053,988 | |
| U. S. Government and Corporate Bonds | 41,091,564 | |
| Exchange Traded Funds – Fixed Income | 27,658,617 | |
| Cash Equivalents | 19,713,113 | |
| Real Estate Investment Trusts | 9,691,259 | |
| Exchange Traded Funds - Notes | 4,607,586 | |
| Investment in Partnerships | 4,034,377 | |
| TOTAL INVESTMENTS | | $ 259,850,504 |
| TOTAL ASSETS | | $ 262,561,051 |

Current Liabilities:

| | | |
|---|---|---|
| Accounts Payable | $ 174,737 | |
| Payroll Taxes Withheld | $ 0 | |
| TOTAL CURRENT LIABILITIES | | $ 174,737 |
| MARKET VALUE OF ASSETS | | $ 262,386,314 |

## EXHIBIT III – SCHEDULE B
## ACTUARIAL VALUE OF ASSETS

Excess (Shortfall) of invested income
for current and previous 4 years:

| | | |
|---|---|---|
| Fiscal year 2012 | $ | (16,297,837) |
| Fiscal year 2011 | | 23,682,947 |
| Fiscal year 2010 | | 6,723,337 |
| Fiscal year 2009 | | (47,081,375) |
| Fiscal year 2008 | | (28,762,081) |
| Total for five years | $ | (61,735,009) |

Deferral of excess (shortfall) of invested income:

| | | |
|---|---|---|
| Fiscal year 2012 (80%) | $ | (13,038,270) |
| Fiscal year 2011 (60%) | | 14,209,768 |
| Fiscal year 2010 (40%) | | 2,689,335 |
| Fiscal year 2009 (20%) | | (9,416,275) |
| Fiscal year 2008 (0%) | | 0 |
| Total deferred for year | $ | (5,555,441) |

| | | |
|---|---|---|
| Market value of plan net assets, end of year | $ | 262,386,314 |
| Preliminary actuarial value of plan assets, end of year | $ | 267,941,755 |

Actuarial value of assets corridor

| | | |
|---|---|---|
| 85% of market value, end of year | $ | 223,028,367 |
| 115% of market value, end of year | $ | 301,744,261 |

| | | |
|---|---|---|
| Final actuarial value of plan net assets, end of year | $ | 267,941,755 |

## EXHIBIT IV
### PRESENT VALUE OF FUTURE CONTRIBUTIONS

| | | |
|---|---|---|
| Employee Contributions to the Annuity Savings Fund | $ | 38,884,396 |
| Employer Normal Contributions to the Pension Accumulation Fund | | 113,325,975 |
| TOTAL PRESENT VALUE OF FUTURE CONTRIBUTIONS | $ | 152,210,371 |

## EXHIBIT V
### RECONCILIATION OF CONTRIBUTIONS

| | | | | |
|---|---|---|---|---|
| Employer Normal Cost for Prior Year | $ | 11,730,361 | | |
| Administrative Expenses for Prior Year | | 331,702 | | |
| Interest on the Normal Cost | | 938,429 | | |
| Interest on Expenses | | 13,013 | | |
| TOTAL Interest Adjusted Actuarially Required Contribution | | | $ | 13,013,505 |
| Direct Employer Contributions | $ | 5,515,930 | | |
| Interest on Employer Contributions | | 216,393 | | |
| Ad valorem taxes and Revenue Sharing Funds | | 7,272,381 | | |
| Interest on Taxes | | 285,299 | | |
| TOTAL Interest Adjusted Employer Contribution | | | $ | 13,290,003 |
| Contribution Shortfall (Gain) | | | $ | (276,498) |

# EXHIBIT VI
## ANALYSIS OF INCREASE IN ASSETS

| | | |
|---|---|---|
| Actuarial Value of Assets: (June 30, 2011) | | $253,675,141 |
| | | |
| Income: | | |
| Member Contributions | $ 4,042,611 | |
| Employer Contributions | 5,515,930 | |
| Ad valorem Taxes | 7,060,099 | |
| Revenue Sharing | 212,282 | |
| Irregular Contributions | 96,402 | |
| SUBTOTAL of all contributions | | $ 16,927,324 |
| | | |
| Net Appreciation in Fair Value of Investments | $ (2,628,645) | |
| Interest Income | 6,295,344 | |
| Class Action Lawsuits | 4,695 | |
| Other | 683,766 | |
| Investment Expense | (243,946) | |
| SUBTOTAL of all investment income | | $ 4,111,214 |
| | | |
| TOTAL Income | | $ 21,038,538 |
| | | |
| Expenses: | | |
| Retirement Benefits | $ 9,183,704 | |
| DROP Withdrawal | 670,064 | |
| Transfers to Other Retirement Systems | 151,490 | |
| Refunds of Contributions | 385,799 | |
| Administrative Expenses | 331,702 | |
| | | |
| TOTAL Expenses | | $ 10,722,759 |
| | | |
| Net Market Income for Fiscal 2012 (Income - Expenses) | | $ 10,315,779 |
| | | |
| Adjustment for Actuarial Smoothing | | $ 3,950,835 |
| | | |
| Actuarial Value of Assets (June 30, 2012) | | $ 267,941,755 |

## EXHIBIT VII
### FUND BALANCE AND ASSET RECONCILIATION

Present Assets of the System Creditable to:

| | | |
|---|---|---|
| Annuity Savings Fund | $ | 42,993,342 |
| Annuity Reserve Fund | | 98,519,897 |
| Pension Accumulation Fund | | 113,706,888 |
| DROP/Back-DROP Account | | 7,166,187 |
| NET MARKET VALUE OF ASSETS | $ | 262,386,314 |
| ADJUSTMENT FOR ACTUARIAL SMOOTHING | $ | 5,555,441 |
| ACTUARIAL VALUE OF ASSETS | $ | 267,941,755 |

## EXHIBIT VIII – Schedule A
### PENSION BENEFIT OBLIGATION

| | |
|---|---|
| Present Value of Credited Projected Benefits Payable to Current Employees | $ 182,468,590 |
| Present Value of Benefits Payable to Terminated Employees | 17,580,426 |
| Present Value of Benefits Payable to Current Retirees and Beneficiaries | 104,607,659 |
| TOTAL PENSION BENEFIT OBLIGATION | $ 304,656,675 |
| NET ACTUARIAL VALUE OF ASSETS | $ 267,941,755 |
| Ratio of Net Actuarial Value of Assets to Pension Benefit Obligation | 87.95% |

## EXHIBIT VIII – Schedule B
### ENTRY AGE NORMAL ACCRUED LIABILITIES (GASB – 50)

| | |
|---|---|
| Accrued Liability for Active Employees | $ 199,854,225 |
| Accrued Liability for Terminated Employees | 17,580,426 |
| Accrued Liability for Current Retirees and Beneficiaries | 104,607,659 |
| TOTAL ENTRY AGE NORMAL ACCRUED LIABILITY | $ 322,042,310 |
| NET ACTUARIAL VALUE OF ASSETS | $ 267,941,755 |
| Ratio of Net Actuarial Value of Assets to Entry Age Normal Accrued Liability | 83.20% |

# EXHIBIT IX
## COST OF LIVING ADJUSTMENTS - TARGET RATIO

| | | |
|---|---|---|
| 1) | Actuarial Value of Assets Divided by PBO as of Fiscal 1986 | 86.17% |
| 2) | Amortization of Unfunded Balance over 30 years: | 11.99% |

Adjustments in Funded Ratio Due to Changes in Assumption(s):

| | |
|---|---|
| Changes for Fiscal 1988 | 6.50% |
| Changes for Fiscal 1990 | 3.33% |
| Changes for Fiscal 1995 | 2.64% |
| Changes for Fiscal 1996 | (5.39%) |
| Changes for Fiscal 1998 | (8.19%) |
| Changes for Fiscal 2005 | 1.92% |
| Changes for Fiscal 2006 | 4.80% |
| Changes for Fiscal 2009 | 8.46% |
| Changes for Fiscal 2010 | (1.72%) |
| Changes for Fiscal 2012 | (4.62%) |

| | | |
|---|---|---|
| 3) | TOTAL Adjustments | 7.73% |

Amortization of Adjustments in Funded Ratio over 30 years:

| | |
|---|---|
| Changes for Fiscal 1988 | (5.20%) |
| Changes for Fiscal 1990 | (2.44%) |
| Changes for Fiscal 1995 | (1.50%) |
| Changes for Fiscal 1996 | 2.87% |
| Changes for Fiscal 1998 | 3.82% |
| Changes for Fiscal 2005 | (0.45%) |
| Changes for Fiscal 2006 | (0.96%) |
| Changes for Fiscal 2009 | (0.85%) |
| Changes for Fiscal 2010 | 0.11% |
| Changes for Fiscal 2012 | 0.00% |

| | | |
|---|---|---|
| 4) | TOTAL Amortization of Adjustments | (4.60%) |

| | |
|---|---|
| Target Ratio for Current Fiscal Year (Lesser of 100% or 1+2+3+4) | 100.00% |
| Actuarial Value of Assets Divided by PBO as of Fiscal 2012 | 87.95% |

# EXHIBIT X

## CENSUS DATA

| | Active | Terminated with Funds on Deposit | DROP | Retired | Total |
|---|---|---|---|---|---|
| Number of members as of June 30, 2011 | 761 | 265 | 0 | 201 | 1,227 |
| Additions to Census | | | | | |
| Initial membership | 54 | 1 | | | 55 |
| Death of another member | | | | 6 | 6 |
| Omitted in error last year | | | | | |
| Adjustment for multiple records | | | | | |
| Change in Status during Year | | | | | |
| Actives terminating service | (26) | 26 | | | |
| Actives who retired | (15) | | | 15 | |
| Actives entering DROP | | | | | |
| Term. members rehired | 1 | (1) | | | |
| Term. members who retire | | (6) | | 6 | |
| Retirees who are rehired | | | | | |
| Refunded who are rehired | 2 | | | | 2 |
| Repaid Refund | | | | | |
| DROP participants retiring | | | | | |
| DROP returned to work | | | | | |
| Omitted in error last year | | | | | |
| Eliminated from Census | | | | | |
| Refund of contributions | (15) | (19) | | | (34) |
| Deaths | (1) | | | (7) | (8) |
| Included in error last year | (2) | | | | (2) |
| Adjustment for multiple records | | | | (2) | (2) |
| Number of members as of June 30, 2012 | 759 | 266 | 0 | 219 | 1,244 |

**ACTIVES CENSUS BY AGE:**

| Age | Number Male | Number Female | Total Number | Average Salary | Total Salary |
|---|---|---|---|---|---|
| 26 - 30 | 38 | 28 | 66 | 50,277 | 3,318,256 |
| 31 - 35 | 57 | 51 | 108 | 57,828 | 6,245,473 |
| 36 - 40 | 44 | 48 | 92 | 66,219 | 6,092,179 |
| 41 - 45 | 53 | 33 | 86 | 72,740 | 6,255,631 |
| 46 - 50 | 80 | 32 | 112 | 77,983 | 8,734,071 |
| 51 - 55 | 49 | 26 | 75 | 76,505 | 5,737,871 |
| 56 - 60 | 89 | 20 | 109 | 85,156 | 9,281,975 |
| 61 - 65 | 58 | 9 | 67 | 93,251 | 6,247,807 |
| 66 - 70 | 29 | 2 | 31 | 93,494 | 2,898,310 |
| 71 - 75 | 7 | 1 | 8 | 99,970 | 799,763 |
| 76 - 80 | 4 | 0 | 4 | 56,633 | 226,531 |
| 81 - 85 | 1 | 0 | 1 | 140,132 | 140,132 |
| TOTAL | 509 | 250 | 759 | 73,752 | 55,977,999 |

THE ACTIVE CENSUS INCLUDES 335 ACTIVES WITH VESTED BENEFITS, INCLUDING 0 DROP PARTICIPANTS AND 5 ACTIVE FORMER DROP PARTICIPANTS.

**TERMINATED MEMBERS DUE A DEFERRED RETIREMENT BENEFIT:**

| Age | Number Male | Number Female | Total Number | Average Benefit | Total Benefit |
|---|---|---|---|---|---|
| 36 - 40 | 1 | 0 | 1 | 20,164 | 20,164 |
| 41 - 45 | 8 | 1 | 9 | 30,151 | 271,361 |
| 46 - 50 | 15 | 6 | 21 | 27,652 | 580,702 |
| 51 - 55 | 17 | 10 | 27 | 33,030 | 891,802 |
| 56 - 60 | 19 | 7 | 26 | 23,952 | 622,756 |
| 61 - 65 | 3 | 2 | 5 | 13,648 | 68,242 |
| TOTAL | 63 | 26 | 89 | 27,585 | 2,455,027 |

**TERMINATED MEMBERS DUE A REFUND OF CONTRIBUTIONS:**

| Contributions Ranging From | | To | Number | Total Contributions |
|---|---|---|---|---|
| 0 | - | 99 | 17 | 577 |
| 100 | - | 499 | 21 | 5,621 |
| 500 | - | 999 | 12 | 8,733 |
| 1000 | - | 1999 | 13 | 19,338 |
| 2000 | - | 4999 | 27 | 91,852 |
| 5000 | - | 9999 | 22 | 172,701 |
| 10000 | - | 19999 | 42 | 581,585 |
| 20000 | - | 99999 | 23 | 591,928 |
| | TOTAL | | 177 | 1,472,335 |

**REGULAR RETIREES:**

| Age | Number Male | Number Female | Total Number | Average Benefit | Total Benefit |
|---|---|---|---|---|---|
| 56 - 60 | 13 | 1 | 14 | 49,889 | 698,445 |
| 61 - 65 | 52 | 10 | 62 | 51,290 | 3,179,960 |
| 66 - 70 | 41 | 5 | 46 | 55,477 | 2,551,929 |
| 71 - 75 | 29 | 2 | 31 | 37,678 | 1,168,028 |
| 76 - 80 | 11 | 0 | 11 | 35,358 | 388,941 |
| 81 - 85 | 6 | 0 | 6 | 63,435 | 380,610 |
| 86 - 90 | 7 | 1 | 8 | 40,438 | 323,506 |
| 91 - 99 | 1 | 0 | 1 | 11,394 | 11,394 |
| TOTAL | 160 | 19 | 179 | 48,619 | 8,702,813 |

**DISABILITY RETIREES:**

| Age | Number Male | Number Female | Total Number | Average Benefit | Total Benefit |
|---|---|---|---|---|---|
| 56 - 60 | 0 | 1 | 1 | 44,228 | 44,228 |
| 61 - 65 | 1 | 0 | 1 | 25,410 | 25,410 |
| TOTAL | 1 | 1 | 2 | 34,819 | 69,638 |

**SURVIVORS:**

| Age | Number Male | Number Female | Total Number | Average Benefit | Total Benefit |
|---|---|---|---|---|---|
| 46 - 50 | 0 | 3 | 3 | 35,548 | 106,643 |
| 51 - 55 | 0 | 2 | 2 | 45,635 | 91,270 |
| 61 - 65 | 0 | 6 | 6 | 19,217 | 115,299 |
| 66 - 70 | 0 | 3 | 3 | 54,994 | 164,981 |
| 71 - 75 | 0 | 3 | 3 | 36,819 | 110,457 |
| 76 - 80 | 0 | 4 | 4 | 9,224 | 36,896 |
| 81 - 85 | 0 | 7 | 7 | 21,495 | 150,468 |
| 86 - 90 | 0 | 4 | 4 | 26,990 | 107,959 |
| 91 - 99 | 0 | 6 | 6 | 20,283 | 121,699 |
| TOTAL | 0 | 38 | 38 | 26,465 | 1,005,672 |

**ACTIVE MEMBERS:**

| Attained Ages | Completed Years of Service | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5- 9 | 10-14 | 15-19 | 20-24 | 25-29 | 30&Over | Total |
| 0 - 25 | | | | | | | | | | | | 0 |
| 26 - 30 | 21 | 18 | 13 | 10 | 3 | 1 | | | | | | 66 |
| 31 - 35 | 15 | 11 | 15 | 18 | 13 | 34 | 2 | | | | | 108 |
| 36 - 40 | 7 | 7 | 6 | 6 | 9 | 31 | 25 | | 1 | | | 92 |
| 41 - 45 | 4 | 2 | 2 | 6 | 8 | 28 | 23 | 13 | | | | 86 |
| 46 - 50 | 1 | 2 | 1 | 8 | 4 | 20 | 23 | 36 | 16 | 1 | | 112 |
| 51 - 55 | 2 | 2 | 2 | 2 | 3 | 16 | 13 | 15 | 17 | 3 | | 75 |
| 56 - 60 | | 4 | 5 | 6 | 4 | 14 | 17 | 18 | 24 | 15 | 2 | 109 |
| 61 - 65 | | 3 | 2 | 8 | 2 | 9 | 8 | 10 | 8 | 9 | 8 | 67 |
| 66 - 70 | | | 1 | 2 | 3 | 3 | 1 | 6 | 5 | 6 | 4 | 31 |
| 71 & Over | 1 | | 1 | 1 | | 4 | | | 1 | 3 | 2 | 13 |
| Totals | 51 | 49 | 48 | 67 | 49 | 160 | 112 | 98 | 72 | 37 | 16 | 759 |

**AVERAGE ANNUAL SALARY OF ACTIVE MEMBERS:**

| Attained Ages | Completed Years of Service | | | | | | | | | | | Average Salary |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5- 9 | 10-14 | 15-19 | 20-24 | 25-29 | 30&Over | |
| 0 - 25 | | | | | | | | | | | | 0 |
| 26 - 30 | 47,199 | 46,468 | 50,075 | 56,605 | 69,225 | 65,943 | | | | | | 50,277 |
| 31 - 35 | 48,785 | 50,308 | 52,010 | 53,332 | 63,944 | 65,663 | 78,186 | | | | | 57,828 |
| 36 - 40 | 49,340 | 54,081 | 65,078 | 58,597 | 75,058 | 67,458 | 71,558 | | 70,500 | | | 66,219 |
| 41 - 45 | 83,264 | 53,252 | 53,839 | 60,067 | 53,354 | 72,360 | 82,482 | 76,768 | | | | 72,740 |
| 46 - 50 | 46,027 | 73,899 | 85,538 | 68,183 | 59,005 | 65,249 | 73,709 | 88,086 | 89,551 | 69,000 | | 77,983 |
| 51 - 55 | 100,810 | 63,550 | 49,821 | 68,725 | 60,919 | 69,185 | 65,289 | 79,649 | 90,090 | 102,439 | | 76,505 |
| 56 - 60 | | 59,493 | 62,406 | 103,165 | 65,998 | 74,242 | 78,973 | 79,417 | 93,123 | 107,195 | 97,341 | 85,156 |
| 61 - 65 | | 88,506 | 75,376 | 95,236 | 38,027 | 73,081 | 88,318 | 85,524 | 103,918 | 120,798 | 106,945 | 93,251 |
| 66 - 70 | | | 77,295 | 63,850 | 80,469 | 74,842 | 49,800 | 78,528 | 96,308 | 122,217 | 122,895 | 93,494 |
| 71 & Over | 62,030 | | 45,000 | 91,459 | | 74,457 | | | 169,741 | 56,607 | 165,275 | 89,725 |
| Average | 53,158 | 54,149 | 56,240 | 67,477 | 64,113 | 69,045 | 75,762 | 82,855 | 93,784 | 107,420 | 117,023 | 73,752 |

TERMINATED MEMBERS DUE A DEFERRED RETIREMENT BENEFIT:

| Attained Ages | Years Until Retirement Eligibility 0 | 1 | 2 | 3 | 4 | 5- 9 | 10-14 | 15-19 | 20-24 | 25-29 | 30&Over | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 - 35 | | | | | | | | | | | | 0 |
| 36 - 40 | | | | | | | | | 1 | | | 1 |
| 41 - 45 | | | | | | | | 9 | | | | 9 |
| 46 - 50 | | | | | | | 21 | | | | | 21 |
| 51 - 55 | | | 1 | | | 26 | | | | | | 27 |
| 56 - 60 | 5 | 6 | 7 | 3 | 5 | | | | | | | 26 |
| 61 - 65 | 5 | | | | | | | | | | | 5 |
| 66 & Over | | | | | | | | | | | | 0 |
| Totals | 10 | 6 | 8 | 3 | 5 | 26 | 21 | 9 | 1 | 0 | 0 | 89 |

AVERAGE ANNUAL BENEFITS OF TERMINATED MEMBERS DUE A DEFERRED RETIREMENT BENEFIT:

| Attained Ages | Years Until Retirement Eligibility 0 | 1 | 2 | 3 | 4 | 5- 9 | 10-14 | 15-19 | 20-24 | 25-29 | 30&Over | Average Benefit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 - 35 | | | | | | | | | | | | 0 |
| 36 - 40 | | | | | | | | | 20,164 | | | 20,164 |
| 41 - 45 | | | | | | | | 30,151 | | | | 30,151 |
| 46 - 50 | | | | | | | 27,652 | | | | | 27,652 |
| 51 - 55 | | | 32,082 | | | 33,066 | | | | | | 33,030 |
| 56 - 60 | 26,490 | 27,648 | 22,547 | 15,760 | 23,863 | | | | | | | 23,952 |
| 61 - 65 | 13,648 | | | | | | | | | | | 13,648 |
| 66 & Over | | | | | | | | | | | | 0 |
| Average | 20,069 | 27,648 | 23,739 | 15,760 | 23,863 | 33,066 | 27,652 | 30,151 | 20,164 | 0 | 0 | 27,585 |

**SERVICE RETIREES:**

| Attained Ages | Completed Years Since Retirement | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5- 9 | 10-14 | 15-19 | 20-24 | 25-29 | 30&Over | Total |
| 0 - 55 | | | | | | | | | | | | 0 |
| 56 - 60 | 5 | 1 | 4 | 3 | | 1 | | | | | | 14 |
| 61 - 65 | 8 | 11 | 6 | 10 | 9 | 18 | | | | | | 62 |
| 66 - 70 | 8 | 2 | | 8 | 4 | 16 | 8 | | | | | 46 |
| 71 - 75 | | 1 | 1 | 1 | 1 | 6 | 10 | 10 | 1 | | | 31 |
| 76 - 80 | | | | | | 1 | 2 | 2 | 6 | | | 11 |
| 81 - 85 | | | | | | | 1 | 2 | 1 | 2 | | 6 |
| 86 - 90 | | | | | | 1 | | 2 | | 3 | 2 | 8 |
| 91 & Over | | | | | | | | | 1 | | | 1 |
| Totals | 21 | 15 | 11 | 22 | 14 | 43 | 21 | 16 | 9 | 5 | 2 | 179 |

**AVERAGE ANNUAL BENEFITS PAYABLE TO SERVICE RETIREES:**

| Attained Ages | Completed Years Since Retirement | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5- 9 | 10-14 | 15-19 | 20-24 | 25-29 | 30&Over | Average Benefit |
| 0 - 55 | | | | | | | | | | | | 0 |
| 56 - 60 | 34,903 | 41,165 | 50,741 | 81,075 | | 36,577 | | | | | | 49,889 |
| 61 - 65 | 65,624 | 41,703 | 51,696 | 53,320 | 49,254 | 50,532 | | | | | | 51,290 |
| 66 - 70 | 60,088 | 50,169 | | 91,033 | 91,011 | 38,890 | 32,043 | | | | | 55,477 |
| 71 - 75 | | 87,707 | 44,238 | 110,613 | 20,382 | 42,527 | 31,403 | 32,863 | 7,260 | | | 37,678 |
| 76 - 80 | | | | | | 41,540 | 31,579 | 69,990 | 24,044 | | | 35,358 |
| 81 - 85 | | | | | | | 28,420 | 97,680 | 39,139 | 58,845 | | 63,435 |
| 86 - 90 | | | | | | 56,548 | | 48,640 | | 37,214 | 29,017 | 40,438 |
| 91 & Over | | | | | | | | | 11,394 | | | 11,394 |
| Average | 56,200 | 45,863 | 50,670 | 73,423 | 59,122 | 44,689 | 31,522 | 47,578 | 22,451 | 45,867 | 29,017 | 48,619 |

DISABILITY RETIREES:

| Attained Ages | Completed Years Since Retirement | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5- 9 | 10-14 | 15-19 | 20-24 | 25-29 | 30&Over | Total |
| 0 - 55 | | | | | | | | | | | | 0 |
| 56 - 60 | | | | | | 1 | | | | | | 1 |
| 61 - 65 | | | | | | | | 1 | | | | 1 |
| 66 & Over | | | | | | | | | | | | 0 |
| Totals | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 2 |

AVERAGE ANNUAL BENEFITS PAYABLE TO DISABILITY RETIREES:

| Attained Ages | Completed Years Since Retirement | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5- 9 | 10-14 | 15-19 | 20-24 | 25-29 | 30&Over | Average Benefit |
| 0 - 55 | | | | | | | | | | | | 0 |
| 56 - 60 | | | | | | 44,228 | | | | | | 44,228 |
| 61 - 65 | | | | | | | | 25,410 | | | | 25,410 |
| 66 & Over | | | | | | | | | | | | 0 |
| Average | 0 | 0 | 0 | 0 | 0 | 44,228 | 0 | 25,410 | 0 | 0 | 0 | 34,819 |

*SURVIVING BENEFICIARIES OF FORMER MEMBERS:*

| Attained Ages | Completed Years Since Retirement: 0 | 1 | 2 | 3 | 4 | 5- 9 | 10-14 | 15-19 | 20-24 | 25-29 | 30&Over | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 - 45 | | | | | | | | | | | | 0 |
| 46 - 50 | 1 | 1 | | 1 | | | | | | | | 3 |
| 51 - 55 | 1 | | | 1 | | | | | | | | 2 |
| 56 - 60 | | | | | | | | | | | | 0 |
| 61 - 65 | 1 | 1 | | | | 1 | 1 | 2 | | | | 6 |
| 66 - 70 | 2 | | | | | | | | 1 | | | 3 |
| 71 - 75 | | | | | | | 1 | | 2 | | | 3 |
| 76 - 80 | | | | | | | 1 | | 2 | | 1 | 4 |
| 81 - 85 | 1 | | | | | | | 1 | 1 | 3 | 1 | 7 |
| 86 - 90 | | | | | | | 1 | | | | 3 | 4 |
| 91 & Over | | | | | | | | 1 | | | 5 | 6 |
| Totals | 6 | 2 | 0 | 2 | 0 | 1 | 4 | 4 | 6 | 3 | 10 | 38 |

*AVERAGE ANNUAL BENEFITS PAYABLE TO SURVIVORS OF FORMER MEMBERS:*

| Attained Ages | Completed Years Since Retirement: 0 | 1 | 2 | 3 | 4 | 5- 9 | 10-14 | 15-19 | 20-24 | 25-29 | 30&Over | Average Benefit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 - 45 | | | | | | | | | | | | 0 |
| 46 - 50 | 33,346 | 46,868 | | 26,429 | | | | | | | | 35,548 |
| 51 - 55 | 52,639 | | | 38,631 | | | | | | | | 45,635 |
| 56 - 60 | | | | | | | | | | | | 0 |
| 61 - 65 | 16,746 | 32,419 | | | | 13,789 | 12,258 | 20,043 | | | | 19,216 |
| 66 - 70 | 73,721 | | | | | | | | 17,538 | | | 54,994 |
| 71 - 75 | | | | | | | 63,591 | | 23,433 | | | 36,819 |
| 76 - 80 | | | | | | | 18,321 | | 8,060 | | 2,456 | 9,224 |
| 81 - 85 | 5,765 | | | | | | | 11,537 | 23,616 | 23,598 | 38,755 | 21,495 |
| 86 - 90 | | | | | | | 36,313 | | | | 23,882 | 26,990 |
| 91 & Over | | | | | | | | 25,959 | | | 19,148 | 20,283 |
| Average | 42,657 | 39,643 | 0 | 32,530 | 0 | 13,789 | 32,621 | 19,396 | 17,357 | 23,598 | 20,860 | 26,465 |

# EXHIBIT XI
## YEAR TO YEAR COMPARISON

| | Fiscal 2012 | Fiscal 2011 | Fiscal 2010 | Fiscal 2009 |
|---|---|---|---|---|
| Number of Active Members | 759 | 761 | 757 | 732 |
| Number of Retirees & Survivors | 219 | 201 | 186 | 176 |
| Number of Terminated Due Deferred Benefits | 89 | 91 | 94 | 93 |
| Number Terminated Due Refund | 177 | 174 | 185 | 193 |
| Active Lives Payroll | $ 55,977,999 | $ 55,359,672 | $ 53,846,265 | $ 50,472,941 |
| Retiree Benefits in Payment | $ 9,778,123 | $ 8,817,160 | $ 7,987,308 | $ 7,435,483 |
| Market Value of Assets | $ 262,386,314 | $ 252,070,535 | $ 206,726,296 | $ 182,397,138 |
| Entry Age Normal Accrued Liability | | | | |
| Active Lives | $ 199,854,225 | $ 192,401,223 | $ 181,465,537 | $ 165,707,635 |
| Retired Lives | 104,607,659 | 91,852,188 | 83,555,816 | 75,797,552 |
| Terminated Members | 17,580,426 | 16,114,427 | 15,995,667 | 16,275,424 |
| TOTAL Entry Age Normal Accrued Liability | $ 322,042,310 | $ 300,367,838 | $ 281,017,020 | $ 257,780,611 |
| Ratio of Actuarial Value of Assets to Entry Age Normal Accrued Liability | 83.20% | 84.45% | 84.74% | 85.75% |
| Actuarial Value of Assets | $ 267,941,755 | $ 253,675,141 | $ 238,147,626 | $ 221,051,999 |
| Present Value of Future Employer Normal Cost | $ 113,325,975 | $ 106,036,822 | $ 101,010,901 | $ 87,141,646 |
| Present Value of Future Employee Contributions | $ 38,884,396 | $ 33,437,115 | $ 32,774,369 | $ 28,787,858 |
| Present Value of Future Benefits | $ 420,152,126 | $ 393,149,078 | $ 371,932,896 | $ 336,981,503 |

*******************************************************************************************

| | Fiscal 2013 | Fiscal 2012 | Fiscal 2011 | Fiscal 2010 |
|---|---|---|---|---|
| Employee Contribution Rate | 8.00% * | 7.00% | 7.00% | 7.00% |
| Projected Tax Cont. as % of Proj. Payroll | 13.11% | 11.61% | 11.87% | 12.19% |
| Actuarially Req'd Net Direct Employer Cont Rate | 9.70% | 10.28% | 9.63% | 8.64% |
| Actual Employer Direct Contribution Rate | 10.25% | 9.75% | 9.00% | 5.00% |

* Employee Rate changed effective 1/01/2013

| Fiscal 2008 | Fiscal 2007 | Fiscal 2006 | Fiscal 2005 | Fiscal 2004 | Fiscal 2003 |
|---|---|---|---|---|---|
| 732 | 716 | 677 | 688 | 691 | 681 |
| 154 | 141 | 132 | 130 | 122 | 112 |
| 82 | 83 | 83 | 85 | 88 | 88 |
| 178 | 162 | 154 | 149 | 147 | 147 |
| $ 47,592,254 | $ 42,887,345 | $ 38,460,604 | $ 37,811,175 | $ 36,752,886 | $ 35,181,466 |
| $ 5,735,813 | $ 4,819,437 | $ 4,264,078 | $ 4,171,296 | $ 3,879,254 | $ 3,530,018 |
| $ 212,447,745 | $ 221,787,167 | $ 190,498,450 | $ 172,584,314 | $ 160,875,906 | $ 140,326,452 |
| $ 167,008,296 | $ 145,851,386 | $ 131,266,273 | $ 118,952,240 | $ 111,796,909 | $ 106,658,958 |
| 55,578,024 | 45,706,749 | 40,402,576 | 39,419,367 | 35,864,196 | 32,202,218 |
| 12,016,625 | 11,931,845 | 12,485,215 | 11,999,562 | 11,916,493 | 12,108,844 |
| ------------------ | ------------------ | ------------------ | ------------------ | ------------------ | ------------------ |
| $ 234,602,945 | $ 203,489,980 | $ 184,154,064 | $ 170,371,169 | $ 159,577,598 | $ 150,970,020 |
| 97.10% | 105.04% | 103.98% | 96.26% | 94.10% | 96.53% |
| $ 227,804,058 | $ 213,739,881 | $ 191,477,673 | $ 163,996,534 | $ 150,160,804 | $ 145,738,003 |
| $ 53,521,546 | $ 37,197,342 | $ 36,370,304 | $ 50,368,780 | $ 53,025,582 | $ 43,536,544 |
| $ 26,403,326 | $ 24,704,996 | $ 22,336,886 | $ 22,573,688 | $ 20,800,405 | $ 20,367,843 |
| $ 307,728,930 | $ 275,642,219 | $ 250,184,863 | $ 236,939,002 | $ 223,986.791 | $ 209,642,390 |

************************************************************************************

| Fiscal 2009 | Fiscal 2008 | Fiscal 2007 | Fiscal 2006 | Fiscal 2005 | Fiscal 2004 |
|---|---|---|---|---|---|
| 7.00% | 7.00% | 7.00% | 7.00% | 7.00% | 7.00% |
| 9.55% | 9.81% | 10.50% | 10.59% | 10.88% | 10.62% |
| 4.55% | 0.00% | 0.00% | 3.73% | 5.83% | 3.36% |
| 0.00% | 0.00% | 3.50% | 6.00% | 3.75% | 0.00% |

# SUMMARY OF PRINCIPAL PLAN PROVISIONS

The District Attorneys' Retirement System is a defined benefit pension plan that provides retirement allowances and other benefits. The following summary of plan provisions is for general informational purposes only and does not constitute a guarantee of benefits.

MEMBERSHIP - All District Attorneys', Assistant District Attorneys', (who earn more than the minimum salary specified by the board), and persons employed by this retirement system and the Louisiana District Attorneys' Association, are required to be members of the system as a condition of their employment.

CONTRIBUTION RATES - The fund is financed by employee contributions of 7.0% of salary for active members (8% effective January 1, 2013). In addition, the fund receives revenue sharing funds as appropriated by the legislature and ad valorem taxes as determined by the Public Retirement Systems' Actuarial Committee up to a maximum of .2% of the ad valorem taxes shown to be collected. In the event that the contributions from ad valorem taxes and revenue sharing funds are insufficient to provide for the gross employer actuarially required contribution, the employer is required to make direct contributions as determined by the Public Retirement Systems' Actuarial Committee.

CONTRIBUTION REFUNDS - Upon withdrawal from service, members not entitled to a retirement allowance are paid a refund of accumulated contributions upon request. Receipt of such a refund cancels all accrued rights in the system.

RETIREMENT BENEFITS - For members who joined the system before July 1, 1990, and who have elected not to be covered by the new provisions - Members are eligible to receive a normal retirement benefit if they have ten or more years of creditable service and are at least age sixty-two, or if they have eighteen or more years of service and are at least age sixty, or if they have twenty-three or more years of service and are at least age fifty-five, of if they have thirty years of service regardless of age. The normal retirement benefit is equal to 3% of the member's average final compensation for each year of creditable service. Members are eligible for early retirement at age sixty if they have at least ten years of creditable service or at age fifty-five with at least eighteen years of creditable service. Members who retire prior to age sixty with less than twenty-three years of service credit receive a retirement benefit reduced 3% for each year of age below sixty. Members who retire prior to age sixty-two who have less than eighteen years of service receive a retirement benefit reduced 3% for each year of age below sixty-two. Retirement benefits may not exceed 100% of final average compensation.

For members who joined the system after July 1, 1990, or who elected to be covered by the new provisions - Members are eligible to receive normal retirement benefits if they are age sixty and have ten years of service credit, are age fifty-five and have twenty-four years of service credit, or have thirty years of service credit regardless of age. The normal retirement benefit is equal to 3.5% of the member's final average compensation multiplied by years of membership service. A member is eligible for an early retirement benefit if he is age fifty-five and has at least eighteen years of service credit. The early retirement benefit is equal to the normal retirement benefit reduced 3% for each year the member retires in advance of normal retirement age. Benefits may not exceed 100% of average final compensation.

FINAL AVERAGE COMPENSATION - The period of final average compensation is thirty-six months plus the number of whole months elapsed since January 1, 2013, not to exceed sixty months.

OPTIONAL ALLOWANCES - Members may receive their benefits as a life annuity, or in lieu of such receive a reduced benefit according to the option selected which is the actuarial equivalent of the maximum benefit.

**Option 1** - If the member dies before he has received in annuity payments the present value of his member's annuity as it was at the time of retirement the balance is paid to his beneficiary.

**Option 2** - Upon retirement, the member receives a reduced benefit. Upon the member's death, the designated beneficiary will continue to receive the same reduced benefit.

**Option 3** - Upon retirement, the member receives a reduced benefit. Upon the member's death, the designated beneficiary will receive one-half of the members reduced benefit.

**Option 4** - Upon retirement, the member elects to receive a board-approved benefit which is actuarially equivalent to the maximum benefit.

A member may also elect to receive an actuarially reduced benefit which provides for an automatic 2 ½% annual compound increase in monthly retirement benefits based on the reduced benefit and commencing on the later of age fifty-five or retirement anniversary; this COLA is in addition to any ad hoc COLAs which are payable. This is not available to members who select a Back-DROP benefit.

DISABILITY BENEFITS - Disability benefits are awarded to active contributing members with at least ten years of service who are found to be totally disabled as a result of injuries incurred while in active service. The member receives a benefit equal to 3.5% (3% for members covered under the old retirement benefit provisions) of his average final compensation multiplied by the lesser of his actual service (not to be less than fifteen years) or projected continued service to age sixty.

SURVIVOR BENEFITS - Upon the death of a member with less than five years of creditable service, his accumulated contributions and interest thereon are paid to his spouse, if he is married, or to his designated beneficiary, if he is not married. Upon the death of any active, contributing member with five or more years of service or any member with twenty-three years of service who has not retired, automatic option 2 benefits are payable to the surviving spouse. These benefits are based on the retirement benefits accrued at the member's date of death with option factors used as if the member had continued in service to earliest normal retirement age. If a member has no surviving spouse, the surviving minor children under eighteen or disabled children are paid 80% of the member's accrued retirement benefit divided into equal shares. If a member has no surviving spouse or children, his accumulated contributions and interest are paid to his designated beneficiary. In lieu of periodic payments, the surviving spouse or children may receive a refund of the member's accumulated contributions with interest.

DEFERRED RETIREMENT OPTION PLAN – **The following provisions only apply to those members of the retirement system who elected to participate in the Deferred Retirement Option Plan prior to January 1, 2009.** In lieu of terminating employment and accepting a service retirement allowance, any member in the New Plan who is eligible for normal retirement or any member of the

Old Plan who is eligible for unreduced benefits may elect to participate in the Deferred Retirement Option Plan (DROP) for up to three years and defer the receipt of benefits. Upon commencement of participation in the plan, membership in the system continues and the member's status changes to inactive. During participation in the plan, employer contributions are payable but employee contributions are reduced to one-half of one percent. The monthly retirement benefits that would have been payable, had the person elected to cease employment and receive a service retirement allowance, are paid into the DROP account. This fund does not earn interest while a person is participating in the DROP. In addition, no cost of living increases are payable to participants until employment which made them eligible to become members of the system has been terminated for at least one full year.

Upon termination of employment prior to or at the end of the specified period of participation, a participant in the plan may receive, at his option, a lump sum from the account equal to the payments into the account or systematic disbursements from his account in any manner approved by the board of trustees. The monthly benefits that were being paid into the deferred retirement option plan fund will begin to be paid to the retiree. If a participant dies during the participation in the plan, a lump sum equal to his account balance in the plan fund is paid to his named beneficiary or, if none, to his estate. If employment is not terminated at the end of the three years, payments into the plan fund cease and the person resumes active contributing membership in the system. All amounts which remain credited to the individual's sub-account after termination of participation in the plan are invested in liquid money market funds. Interest is credited thereon as actually earned.

Back-DROP – In lieu of receiving a service retirement allowance any member of the fund who has more than sufficient service for a regular service retirement may elect to receive a "Back-DROP" benefit. The Back-DROP benefit is based upon the Back-DROP period selected and the final average compensation prior to the period selected. The Back-DROP period is the lesser of three years or the service accrued between the time a member first becomes eligible for retirement and his actual date of retirement. At retirement the member's maximum monthly retirement benefit is based upon his service, final average compensation, and plan provisions in effect on the last day of creditable service immediately prior to the commencement of the Back-DROP period. In addition to the monthly benefit at retirement, the member receives a lump-sum payment equal to the maximum monthly benefit as calculated above multiplied by the number of months in the Back-DROP period. In lieu of receiving the lump-sum payment, the member may leave the funds on deposit with the system in an interest bearing account. The surviving spouse of members eligible to retire may elect to receive benefits as though the member had elected the Back-DROP option as of the day following the date of death.

COST OF LIVING INCREASES - The board of trustees is authorized to grant retired members and widows of members who have retired an annual cost of living increase of 3% of their original benefit, (not to exceed sixty dollars per month) and all retired members and widows who are sixty-five years of age and older a 2% increase in their original benefit. In lieu of other cost of living increases the board may grant an increase to retirees in the form "X×(A&B)" where "A" is equal to the number of years of credited service accrued as retirement or death of the member or retiree and "B" is equal to the number of years since death of the member or retiree to June 30 of the initial year of increase and "X" is equal to any amount available for funding such increase up to a maximum of $1.00. In order for the board to grant any of these increases, the system must meet certain criteria detailed in the statute related to funding status and interest earnings.

## ACTUARIAL ASSUMPTIONS

In determining actuarial costs, certain assumptions must be made regarding future experience under the plan. These assumptions include the rate of investment return, mortality of plan members, rates of salary increase, rates of retirement, rates of termination, rates of disability, and various other factors which have an impact on the cost of the plan. To the extent that future experience varies from the assumptions selected for valuation, future costs will be either higher or lower than anticipated. The following chart illustrates the effect of emerging experience on the plan.

| Factor | Increase in Factor Results in |
|---|---|
| Investment Earnings Rate | Decrease in Cost |
| Annual Rate of Salary Increase | Increase in Cost |
| Rates of Retirement | Increase in Cost |
| Rates of Termination | Decrease in Cost |
| Rates of Disability | Increase in Cost |
| Rates of Mortality | Decrease in Cost |

ACTUARIAL COST METHOD: The Aggregate Actuarial Cost Method with allocation based on earnings.

VALUATION INTEREST RATE: 7.5% (Net of Investment Expense)

ACTUARIAL ASSET VALUES: Assets are valued at market value adjusted to defer four-fifths of all earnings above or below the valuation interest rate in the valuation year, three-fifths of all earnings above or below the valuation interest rate in the prior year, two-fifths of all earnings above or below the valuation interest rate from two years prior, and one-fifth of all earnings above or below the valuation interest rate from three years prior. The resulting smoothed values are subject to a corridor of 85% to 115% of the market value of assets. If the smoothed value falls outside the corridor, the actuarial value is set equal to the average of the corridor limit and the smoothed value.

ANNUAL SALARY INCREASE RATE: 6.50% (3.00% inflation / 3.50% merit)

ACTIVE MEMBER, ANNUITANT, AND BENEFICIARY MORTALITY: RP 2000 Combined Healthy Table set back 3 years for males and 1 year for females

RETIREE COST OF LIVING INCREASE: The present value of future retirement benefits is based on benefits currently being paid by the system and includes previously granted cost of living increases. The present values do not include provisions for potential future increases not yet authorized by the Board of Trustees.

INTEREST RATE ON CONTRIBUTION REFUNDS: 2%

RATES OF RETIREMENT: The table of these rates is included later in the report. These rates apply only to those individuals eligible to retire. Retirement rates for members who have completed DROP participation and are currently active are .33.

RETIREMENT LIMITATIONS: Projected retirement benefits are not subjected to IRS Section 415 limits.

RATES OF WITHDRAWAL: The rates of withdrawal are applied based upon completed years of service according to the following table:

| Service | Factor |
|---|---|
| ≤5 | 0.120 |
| 6 - 15 | 0.050 |
| 16 - 21 | 0.030 |
| >21 | 0.010 |

Note: Withdrawal rates for members eligible to retire are assumed to be zero.

MARRIAGE STATISTICS: 80% of the members are assumed to be married; husbands are assumed to be three years older than wives.

FAMILY STATISTICS: Assumptions utilized in determining the costs of various survivor benefits as listed below, are derived from the information provided in the 2000 U. S. Census:

| Member's Age | % With Children | Number of Children | Average Age |
|---|---|---|---|
| 25 | 62% | 1.7 | 6 |
| 35 | 82% | 2.1 | 10 |
| 45 | 66% | 1.8 | 13 |
| 55 | 19% | 1.4 | 15 |
| 65 | 2% | 1.4 | 15 |

DISABLED LIVES MORTALITY: RP-2000 Disabled Lives Mortality Tables for Males and Females

| | |
|---|---|
| DISABILITY RATES: | The table of these rates is included later in the report. These rates are based on 7% of the disability rates used for the 21st valuation of the Railroad Retirement System for individuals with 10-19 years of service. |
| VESTING ELECTING PERCENTAGE: | 90% of those vested elect deferred benefits in lieu of contribution refunds. |
| POST DROP RETIREMENT RATES: | 0.17 at all ages. |

# ACTUARIAL TABLES AND RATES

| Age | Male Mortality Rates | Female Mortality Rates | Retirement Rates | Disability Rates |
|---|---|---|---|---|
| 18 | 0.00027 | 0.00018 | 0.00000 | 0.00011 |
| 19 | 0.00028 | 0.00019 | 0.00000 | 0.00011 |
| 20 | 0.00030 | 0.00019 | 0.00000 | 0.00011 |
| 21 | 0.00032 | 0.00019 | 0.00000 | 0.00011 |
| 22 | 0.00033 | 0.00019 | 0.00000 | 0.00011 |
| 23 | 0.00035 | 0.00019 | 0.00000 | 0.00011 |
| 24 | 0.00036 | 0.00020 | 0.00000 | 0.00011 |
| 25 | 0.00037 | 0.00020 | 0.00000 | 0.00011 |
| 26 | 0.00037 | 0.00021 | 0.00000 | 0.00011 |
| 27 | 0.00038 | 0.00021 | 0.00000 | 0.00011 |
| 28 | 0.00038 | 0.00022 | 0.00000 | 0.00011 |
| 29 | 0.00038 | 0.00024 | 0.00000 | 0.00011 |
| 30 | 0.00038 | 0.00025 | 0.00000 | 0.00011 |
| 31 | 0.00039 | 0.00026 | 0.00000 | 0.00011 |
| 32 | 0.00041 | 0.00031 | 0.00000 | 0.00011 |
| 33 | 0.00044 | 0.00035 | 0.00000 | 0.00011 |
| 34 | 0.00050 | 0.00039 | 0.00000 | 0.00011 |
| 35 | 0.00056 | 0.00044 | 0.00000 | 0.00012 |
| 36 | 0.00063 | 0.00047 | 0.00000 | 0.00013 |
| 37 | 0.00070 | 0.00051 | 0.00000 | 0.00015 |
| 38 | 0.00077 | 0.00055 | 0.00000 | 0.00017 |
| 39 | 0.00084 | 0.00060 | 0.00000 | 0.00019 |
| 40 | 0.00090 | 0.00065 | 0.00000 | 0.00022 |
| 41 | 0.00096 | 0.00071 | 0.00000 | 0.00025 |
| 42 | 0.00102 | 0.00077 | 0.00000 | 0.00027 |
| 43 | 0.00108 | 0.00085 | 0.00000 | 0.00031 |
| 44 | 0.00114 | 0.00094 | 0.00000 | 0.00035 |
| 45 | 0.00122 | 0.00103 | 0.00000 | 0.00040 |
| 46 | 0.00130 | 0.00112 | 0.20000 | 0.00046 |
| 47 | 0.00140 | 0.00122 | 0.20000 | 0.00051 |
| 48 | 0.00151 | 0.00133 | 0.20000 | 0.00058 |
| 49 | 0.00162 | 0.00143 | 0.20000 | 0.00066 |
| 50 | 0.00173 | 0.00155 | 0.20000 | 0.00075 |
| 51 | 0.00186 | 0.00168 | 0.20000 | 0.00085 |
| 52 | 0.00200 | 0.00185 | 0.20000 | 0.00097 |
| 53 | 0.00214 | 0.00202 | 0.20000 | 0.00110 |
| 54 | 0.00245 | 0.00221 | 0.20000 | 0.00125 |
| 55 | 0.00267 | 0.00242 | 0.20000 | 0.00141 |
| 56 | 0.00292 | 0.00272 | 0.20000 | 0.00161 |
| 57 | 0.00320 | 0.00309 | 0.20000 | 0.00183 |
| 58 | 0.00362 | 0.00348 | 0.20000 | 0.00207 |
| 59 | 0.00420 | 0.00392 | 0.20000 | 0.00236 |
| 60 | 0.00469 | 0.00444 | 0.15000 | 0.00342 |
| 61 | 0.00527 | 0.00506 | 0.15000 | 0.00342 |
| 62 | 0.00595 | 0.00581 | 0.15000 | 0.00342 |
| 63 | 0.00675 | 0.00666 | 0.15000 | 0.00342 |
| 64 | 0.00768 | 0.00765 | 0.15000 | 0.00342 |
| 65 | 0.00876 | 0.00862 | 0.15000 | 0.00342 |

## PRIOR YEAR ASSUMPTIONS

| | |
|---|---|
| VALUATION INTEREST RATE: | 8% (Net of Investment Expense) |
| ANNUAL SALARY INCREASE RATE: | 6.75% (3.25% inflation / 3.5% merit) |

# GLOSSARY

**Accrued Benefit –** The pension benefit that an individual has earned as of a specific dated based on the provisions of the plan and the individual's age, service, and salary as of that date.

**Actuarial Accrued Liability –** The actuarial present value of benefits payable to members of the fund less the present value of future normal costs attributable to the members.

**Actuarial Assumptions** - Assumptions as to the occurrence of future events affecting pension costs. These assumptions include rates of mortality, withdrawal, disablement, and retirement. Also included are rates of investment earnings, changes in compensation, as well as statistics related to marriage and family composition.

**Actuarial Cost Method –** A procedure for determining the portion of the cost of a pension plan to be allocated to each year. Each cost method allocates a certain portion of the actuarial present value of benefits between the actuarial accrued liability and future normal costs. Once this allocation is made, a determination of the normal cost attributable to a specific year can be made along with the payment to amortize any unfunded actuarial accrued liability. To the extent that a particular funding method allocates a greater (lesser) portion of the actual present value of benefits to the actuarial accrued liability it will allocate less (more) to future normal costs.

**Actuarial Equivalence –** Payments or receipts with equal actuarial value on a given date when valued using the same set of actuarial assumptions.

**Actuarial Gain (Loss) –** The financial effect on the fund of the difference between the expected and actual experience of the fund. The experience may be related to investment earnings above (or below) those expected or changes in the liability structure due to fewer (or greater) than the expected numbers of retirements, deaths, disabilities, or withdrawals. In addition, other factors such as pay increases above (or below) those forecast can result in actuarial gains or losses. The effect of such gains (or losses) is to decrease (or increase) future costs.

**Actuarial Present Value** - The value, as of a specified date, of an amount or series of amounts payable or receivable thereafter, with each amount adjusted to reflect the time value of money (through accrual of interest) and the probability of payments. For example: if $600 invested today will be worth $1,000 in 10 years and there is a 50% probability that a person will live 10 years, then the actuarial present value of $1,000 payable to that person if he should survive 10 years is $300.

**Actuarial Value of Assets** - The value of cash, investments, and other property belonging to the pension plan as used by the actuary for the purpose of the actuarial valuation. This may correspond to the book value, market value, or some modification involving either or both book and market value. Adjustments to market values are often made to reduce the volatility of asset values.

**Asset Gain (Loss) -** That portion of the actuarial gain attributable to investment performance above (below) the expected rate of return in the actuarial assumptions.

**Amortization Payment** - That portion of the pension plan contribution designated to pay interest and reduce the outstanding principal balance of unfunded actuarial accrued liability. If the amortization payment is less than the accrued interest on the unfunded actuarial accrued liability the outstanding principal balance will increase.

**Contribution Shortfall (Excess)** - The difference between contributions recommended in the prior valuation and the actual amount received.

**Decrements –** Events which result in the termination of membership in the system such as retirement, disability, withdrawal, or death.

**Employer Normal Cost** - That portion of the normal cost not attributable to employee contributions. It includes both direct contributions made by the employer and contributions from other non-employee sources such as revenue sharing and revenues related to taxes.

**Funded Ratio –** A measure of the ratio of assets to liabilities of the system according to a specific definition of those two values. Typically the assets used in the measure are the actuarial value of assets; the liabilities are defined by reference to some recognized actuarial funding method. Thus the funded ratio of a plan depends not only on the financial strength of the plan but also on the funding method used to determine the liabilities and the asset valuation method used to determine the assets in the ratio.

**Normal Cost** - That portion of the actuarial present value of pension plan benefits and expenses allocated to a valuation year by the actuarial cost method. This is analogous to one year's insurance premium.

**Pension Benefit Obligation** - The actuarial present value of benefits earned or credited to date based on the members expected final average compensation at retirement. For current retirees or terminated members this is equivalent to the actuarial present value of their accrued benefit.

**Projected Benefits –** The benefits expected to be paid in the future based on the provisions of the plan and the actuarial assumptions. The projected values are based on anticipated future advancement in age and accrual of service as well as increases in salary paid to the participant.

**Unfunded Actuarial Accrued Liability** - The excess of the actuarial accrued liability over the actuarial value of assets.

**Vested Benefits** - Benefits that the members are entitled to even if they withdraw from service.

**NOTES:**