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27W457 Warrenville Road
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Actuarial Valuation
as of May 1, 2015



ALSIP FIREFIGHTERS'
PENSION FUND

GASB 67/68 Reporting

LAUTERBACH & AMEN, LLP

Actuarial GASB Disclosures Statements 67 and 68



Lauterbach & Amen, LLP

CERTIFIED PUBLIC ACCOUNTANTS

GASB 67: ALSIP FIREFIGHTERS' PENSION FUND

Fiscal Year Ending: April 30, 2015

Actuarial Valuation Date: May 1, 2015

Measurement Date: April 30, 2015

GASB 68: VILLAGE OF ALSIP

Fiscal Year Ending: April 30, 2015

Actuarial Valuation Date: May 1, 2015

Measurement Date: April 30, 2015

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LAUTERBACH & AMEN, LLP



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ACTUARIAL CERTIFICATION

This certification provides supplemental information as required by the Governmental Accounting Standards Board. The enclosed schedules were prepared by the undersigned to provide general information to assist in the preparation of the Annual Financial Report. The assumptions and methods used in the preparation of this disclosure meet the parameters set for the disclosures presented in the financial section as required by the Governmental Accounting Standards Board. Additional information is also provided solely to assist the auditors in preparation of the required footnote disclosures.

The results in this report are based on information and data submitted by the Alsip Firefighters' Pension Fund. We did not prepare the actuarial valuations for the years prior to May 1, 2015. Those Valuations were prepared by other actuaries whose reports have been furnished to us, and our disclosures are based upon those reports. An audit of the information was not performed, but high-level reviews were performed for general reasonableness as appropriate based on the purpose of the valuation. The accuracy of the results is dependent upon the accuracy and completeness of the underlying information. The results of the actuarial valuation and these supplemental disclosures rely on the information provided.

The valuation results summarized involve actuarial calculations that require assumptions about future events. Alsip Firefighters' Pension Fund selected certain assumptions, while others were the result of guidance and/or judgment. We believe that the assumptions used in the valuation are reasonable and appropriate for the purposes for which they have been used.

To the best of our knowledge, all calculations are in accordance with the applicable funding requirements, and the procedures followed and presentation of results conform to generally accepted actuarial principles and practices. The undersigned consultant of Lauterbach & Amen, LLP with actuarial credentials meets the Qualification Standards of the American Academy of Actuaries to render this Actuarial Certification. There is no relationship between Alsip Firefighters' Pension Fund and Lauterbach & Amen, LLP that impairs our objectivity.

Respectfully Submitted,

LAUTERBACH & AMEN, LLP

Todd A. Schroeder, EA



PENSION FUND NET POSITION

Statement of Net Position
Statement of Changes in Net Position



STATEMENT OF FIDUCIARY NET POSITION

	<u>2015</u>	<u>2014</u>
Assets		
Cash and Cash Equivalents	\$ 1,068,105	\$ 390,216
Total cash	<u>1,068,105</u>	<u>390,216</u>
Receivables:		
Due from Treasury	34,876	-
Investment Income - Accrued Interest	<u>57,551</u>	<u>61,702</u>
Total Receivables	<u>92,427</u>	<u>61,702</u>
Investments:		
U.S. Govt and Agency Obligations	10,352,251	9,538,390
Mutual Funds	<u>12,697,683</u>	<u>11,688,024</u>
Total Investments	<u>23,049,935</u>	<u>21,226,414</u>
Total Assets	<u>24,210,466</u>	<u>21,678,333</u>
Liabilities		
Payables:		
Expenses Due/Unpaid	-	81,401
Other	<u>844,302</u>	<u>-</u>
Total Liabilities	<u>844,302</u>	<u>81,401</u>
Net Position Restricted for Pensions	<u>\$ 23,366,164</u>	<u>\$ 21,596,932</u>

The Fiduciary Net Position of the Fund shown above is intended to be in accordance with GAAP and Government Accounting Standards Board rules. The Fair Market Value of Investments has been provided by the reporting entity, and the results are being audited by an independent auditor. The level of the assets has been reviewed for reasonableness, but we make no representation as to the accuracy of the measurement of the fair market value of the investments. The assets for 2015 are audited.



STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

	<u>2015</u>
Additions	
Contributions	
Employer	\$ 1,538,881
Member	<u>286,786</u>
Total Contributions	<u>1,825,666</u>
Investment Income	
Net Appreciation in Fair Value of Investments, Interest and Dividends	1,751,584
Less Investment Expense	<u>(96,966)</u>
Net Investment Income	<u>1,654,617</u>
Total Additions	<u>3,480,284</u>
Deductions	
Benefit payments and Refunds of Member Contributions	1,694,070
Administrative Expense	16,982
Total Deductions	<u>1,711,051</u>
Net Increase in Net Position	<u>1,769,233</u>
Net Position Restricted for Pensions	
Beginning of Year	<u>21,596,932</u>
End of Year	<u>\$ 23,366,164</u>

The Changes in Fiduciary Net Position of the Fund shown above is intended to be in accordance with GAAP and Government Accounting Standards Board rules. The changes have been provided by the reporting entity, and the results are being audited by an independent auditor. The changes have been reviewed for reasonableness, but we make no representation as to the accuracy of the measurement of the fair market value of the investments. The assets for 2015 are audited.



ACTUARIAL PENSION LIABILITY INFORMATION

Statement of Total Pension Liability
Statement of Changes in Total Pension Liability
Statement of Changes in Net Pension Liability
Deferred Outflows and Inflows of Resources



STATEMENT OF TOTAL PENSION LIABILITY

	<u>2015</u>	<u>2014</u>
Active Employees	<u>\$ 17,655,974</u>	
Inactive Employees		
Terminated Employees - Vested	-	
Retired Employees	15,125,619	
Disabled Employees	7,921,697	
Other Beneficiaries	<u>1,411,715</u>	
Total Inactive Employees	<u>24,459,031</u>	
Total Pension Liability	<u>\$ 42,115,005</u>	<u>\$ 40,320,901</u>

The Total Pension Liability (TPL) has been determined for GASB 67/68 reporting purposes only. The resulting TPL is intended to be used in the financial statement reporting of the fund and/or the Employer. The resulting liability is not intended to be a representation of the fund liability for other purposes, including but not limited to determination of cash funding requirements and recommendations. The TPL is based on data as of the Data Date shown in this report. The TPL has been determined as of the Actuarial Valuation Date and based on the assumptions shown in this report.



STATEMENT OF CHANGES IN TOTAL PENSION LIABILITY

	<u>2015</u>
Changes in Total Pension Liability	
Service Cost	\$ 725,003
Interest	2,763,171
Changes of Benefit Terms	-
Differences Between Expected and Actual Experience	-
Changes in Assumptions	-
Benefit Payments and Refunds	(1,694,070)
Net Change in Total Pension Liability	\$ 1,794,104
Total Pension Liability - Beginning	40,320,901
Total Pension Liability - Ending (a)	<u>\$ 42,115,005</u>
 Plan Fiduciary Net Position - Ending (b)	 <u>\$ 23,366,164</u>
 Employer's Net Pension Liability - Ending (a) - (b)	 <u><u>\$ 18,748,841</u></u>
 Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	 55%
 Covered-Employee Payroll	 \$ 3,011,302
Employer's Net Pension Liability as a Percentage of Employee Payroll	623%

There are no changes in Net Pension Liability related to changes in benefit terms. The changes in Net Pension Liability related to changes in assumptions and actuarial experience are noted in the table above. The plan fiduciary net position was detailed in the prior section of this report. The employer's Net Pension Liability is the excess of the Total Pension Liability over the plan fiduciary net position.

Covered employee payroll is based on total pensionable pay for the fund members during the fiscal year and is not necessarily representative of pay used to determine pension contributions or benefits.



STATEMENT OF CHANGES IN NET PENSION LIABILITY

The table below illustrates the change in the Net Pension Liability (NPL) from the prior Measurement Date to the current Measurement Date. Under Statement 68, the difference between the NPL from the prior measurement date to the current measurement date should be recognized as an expense, unless permitted to be recognized as a deferred outflow or inflow of resources.

	Increase (Decrease)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a) - (b)
Balances Beginning at 05/01/14	<u>40,320,901</u>	<u>21,596,932</u>	<u>18,723,969</u>
Changes for the year:			
Service Cost	\$ 725,003	\$ -	\$ 725,003
Interest	2,763,171	-	2,763,171
Actuarial Experience	-	-	-
Contributions - Employer	-	1,538,881	(1,538,881)
Contributions - Employee	-	286,786	(286,786)
Contributions - Other	-	-	-
Net Investment Income	-	1,654,617	(1,654,617)
Benefit payments, including refunds	(1,694,070)	(1,694,070)	-
Administrative Expense	-	(16,982)	16,982
Other Changes	-	-	-
Net Changes	<u>1,794,104</u>	<u>1,769,233</u>	<u>24,871</u>
Balances Beginning at 04/30/15	<u>\$ 42,115,005</u>	<u>\$ 23,366,164</u>	<u>\$ 18,748,841</u>

The changes in total pension liability above are described on the prior page. The plan fiduciary net position was detailed in the prior section of this report. The employer's Net Pension Liability is the excess of the Total Pension Liability over the plan fiduciary net position.



DEFERRED OUTFLOWS AND INFLOWS OF RESOURCES

The table below shows the cumulative amounts to be shown as deferred outflows and inflows of resources. Changes in total pension liability related to the difference in actual and expected experience, or changes in assumptions regarding future events, are recognized in pension expense over the expected remaining service life of all employees (active and retired) in the pension fund. Differences in projected and actual earnings over the measurement period are recognized over a 5 year period. Amounts not yet recognized are summarized below:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences Between Expected and Actual Experience	\$ -	\$ -
Changes of Assumptions	-	-
Net Difference Between Projected and Actual Earnings on Pension Plan Investments	-	123,034
Contributions Subsequent to the Measurement Date*	-	-
Total	<u>\$ -</u>	<u>\$ 123,034</u>

* Contributions subsequent to the measurement date may be recognized as a reduction to the NPL. The amount is not known as of the date of this report. Subsequent to the measurement date, the following amounts will be recognized in pension expense in the upcoming years:

Year ended April, 30:

2015	\$ 30,758
2016	30,758
2017	30,758
2018	30,760
2019	-
Thereafter	-



ACTUARIAL ASSUMPTION INFORMATION

Statement of Significant Actuarial Assumptions

Notes on Actuarial Assumptions

Development of the Discount Rate

Sensitivity of the Discount Rate



STATEMENT OF SIGNIFICANT ACTUARIAL ASSUMPTIONS

Actuarial Assumptions (Economic)

Discount Rate used for the Total Pension Liability	7.00%
Long-Term Expected Rate of Return on Plan Assets	7.00%
High Quality 20 Year Tax-Exempt G.O. Bond Rate	3.62%
Projected Individual Salary Increases	4.00% - 11.00%
Projected Increase in Total Payroll	3.50%
Consumer Price Index (Utilities)	2.50%
Inflation Rate Included	3.00%

Actuarial Assumptions (Demographic)

Mortality Table	L&A 2012 Illinois Firefighters' 100%
Retirement Rates	L&A 2012 Illinois Firefighters' 100% Capped at age 65
Disability Rates	L&A 2012 Illinois Firefighters' 100%
Termination Rates	L&A 2012 Illinois Firefighters' 100%
Percent Married	80.0%

All rates shown in the economic assumptions are assumed to be annual rates, compounded on an annual basis.

Assumption Changes

There have been no changes in assumptions from the prior year.



NOTES ON ACTUARIAL ASSUMPTIONS

INDIVIDUAL PAY INCREASES

Individual pay increases include provisions for annual cost of living increases, plus any additional increases in pensionable pay provided (step increases, longevity increases, promotions, educations, etc). Sample rates are as follows:

Service	Rate	Service	Rate
0	11.00%	8	5.00%
1	10.00%	9	5.00%
2	9.00%	10	5.00%
3	8.00%	15	4.50%
4	8.00%	20	4.50%
5	7.00%	25	4.50%
6	6.00%	30	4.00%
7	5.50%		

DEMOGRAPHIC ASSUMPTIONS

Mortality rates are based on rates developed in the L&A 2012 Mortality Table for Illinois Firefighters’.

Other demographic assumption rates are based on a review of assumptions in the L&A 2012 study for Illinois Firefighters’.

POSTEMPLOYMENT BENEFIT CHANGES

Eligibility for postemployment benefit increases is determined based on the Illinois Pension code. Tier 1 Firefighters’ retirees are provided with an annual 3.0% increase in retirement benefits by statute when eligible. Tier 2 Firefighters’ retirees are provided postemployment benefit increases based on one-half of the Consumer Price Index (Urban) for the prior September.

The CPI-U for September, 1983 was 100.7. The CPI-U for September, 2013 was 234.1. The average increase in the CPI-U for September, 1983 through September, 2013 was 2.85% (on a compounded basis).



EXPECTED RETURN ON PENSION PLAN INVESTMENTS

The long-term expected rate of return on assets shown here is from the State of Illinois Department of Insurance Actuarial Experience Study dated September 26, 2012. The best estimate of future real rates of return are developed for each of the major asset classes. Expected inflation is added back in. Adjustment is made to reflect geometric returns.

A summary of the best estimate of future real rates of returns (annual arithmetic average) are included in the table below.

<u>Asset Class</u>	<u>Long-Term Expected Rate of Return</u>	<u>Long-Term Inflation Expectations</u>	<u>Long-Term Expected Real Rate of Return</u>
US Large Cap Equity	8.30%	2.50%	5.80%
US Mid Cap Equity	9.30%	2.50%	6.80%
US Small Cap Equity	9.30%	2.50%	6.80%
Non-US Developed Large Cap Equity Un	8.40%	2.50%	5.90%
Emerging Markets Equity Unhedged	10.50%	2.50%	8.00%
US Corporate Bonds	4.20%	2.50%	1.70%
US Government Fixed Income	3.20%	2.50%	0.70%
US Cash	3.00%	2.50%	0.50%
Global Real Estate - REITS	8.30%	2.50%	5.80%
Commodities - Long Only	4.90%	2.50%	2.40%

Long-term expected real returns under GASB are expected to reflect the period of time that begins when a plan member begins to provide service to the employer and ends at the point when all benefits to the plan member have been paid. The rates provided above are intended to estimate those figures.

The expected inflation rate is 2.50% and is included in the total long-term rate of return on investments. The inflation rate is from the same source as the long-term real rates of return, and is not necessarily reflective of the inflation measures used for other purposes in the report.

Long-term rates of return may exhibit geometric properties. Geometric rates of return are equal to arithmetic rates of return when the annual returns exhibit no volatility over time. When arithmetic returns are volatile on a year-to-year basis, the actual realized geometric returns over time will be lower. The higher the volatility, the greater the difference.



MUNICIPAL BOND RATE

The municipal bond rate assumption is based on The Bond Buyer 20-Bond GO Index. The rate shown earlier in the Actuarial Assumption section is the April 30, 2015 rate. The 20-Bond GO Index is based on an average of certain general obligation municipal bonds maturing in 20 years and having an average rating equivalent of Moody's Aa2 and Standard & Poor's AA.

The 20-Bond Index consists of 20 general obligation bonds that mature in 20 years. The average rating of the 20 bonds is roughly equivalent to Moody's Investors Service's Aa2 rating and Standard & Poor's Corp.'s AA.

The indexes represent theoretical yields rather than actual price or yield quotations. Municipal bond traders are asked to estimate what a current-coupon bond for each issuer in the indexes would yield if the bond was sold at par value. The indexes are simple averages of the average estimated yields of the bonds.

DISCOUNT RATE

The discount rate used in the determination of the Total Pension Liability is based on a combination of the expected long-term rate of return on plan investments and the municipal bond rate.

Cash flow projections were used to determine the extent which the plan's future net position will be able to cover future benefit payments. To the extent future benefit payments are covered by the plan's projected net position, the expected rate of return on plan investments is used to determine the portion of the net pension liability associated with those payments. To the extent future benefit payments are not covered by the plan's projected net position, the municipal bond rate is used to determine the portion of the net pension liability associated with those payments.

The plan's projected net position is expected to cover future benefit payments in full for the current employees.

Projected benefit payments are determined during the actuarial process based on the assumptions. More details on the assumptions are in the prior section. The expected contributions are based on the funding policy of the plan. The funding policy is discussed in the next section in more detail.



SENSITIVITY OF THE DISCOUNT RATE

The Net Pension Liability has been determined using the discount rate listed in the assumption section. Below is a table illustrating the sensitivity of the Net Pension Liability to the discount rate assumption.

	1% Decrease (6.00%)	Current Discount Rate (7.00%)	1% Increase (8.00%)
Employer Net Pension Liability	\$24,611,264	\$18,748,841	\$13,907,305

The sensitivity of the Net Pension Liability to the discount rate is based primarily on two factors:

1. The duration of the plan's expected benefit payments. Younger plans with benefit payments further in the future will be more sensitive to changes in the discount rate.
2. The funded percentage of the plan (ratio of the net position to the total pension liability). The higher the funded percentage, the higher the sensitivity to the discount rate.



PARTICIPANT DATA

Participant Demographic Data
Expected Future Working Lifetime



PARTICIPANT DEMOGRAPHIC DATA

The chart below summarizes the employee count and payroll as of the Actuarial Valuation Date:

	<u>2015</u>
Inactive Plan Members or Beneficiaries Currently Receiving Benefits	33
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	0
Active Plan Members	<u>35</u>
Total	<u><u>68</u></u>
 Payroll of Active Plan Members	 <u><u>\$ 3,011,302</u></u>

Participant count is shown as of the Actuarial Valuation Date. Pay is the active pensionable pay as of the Actuarial Valuation Date.

EXPECTED FUTURE WORKING LIFETIME

The chart below summarizes the expected future working lifetime of fund members:

	<u>2015</u>
Average Future Working Career (In Years)	
Active Plan Members	12.89
Inactive Plan Members	0.00
Total	6.64

The expected future working lifetime is measured as of the Actuarial Valuation Date and is based on the demographic assumptions used in the preparation of the Actuary's report.



FUNDING POLICY

Formal Funding Policy
Informal Funding Policy



COMPONENTS OF THE ACTUARIALLY DETERMINED CONTRIBUTION

The Actuarially Determined Contribution (ADC) includes the determination of the Normal Cost contribution for active plan members, as well as provision for the payment of unfunded liability.

The actuarial funding method used in the determination of the normal cost and the actuarial liability is the Entry Age Normal Cost method (level percent of pay). The method allocates normal cost contributions by employee over the working career of the employee as a level percent of their pay.

Unfunded liability is the excess of the actuarial liability over the actuarial value of assets. The actuarially determined contribution includes a payment towards unfunded liability existing at the actuarial valuation date. The payment towards unfunded liability is set up as a level percent of payroll payment that is expected to increase during the payment period. The period of repayment as of the Actuarial Valuation Date is 18 years.

The Actuarial Value of Assets smooths gains and losses on the market value of assets over a 5 year period.

Under no circumstances will the Actuarially Determined Contribution be less than the amount determined as the Statutory Minimum Contribution under Illinois statutes.

FORMAL FUNDING POLICY

There is no Formal Funding Policy that exists between the Pension Board and the Village at this time.

INFORMAL FUNDING POLICY

In determining the most appropriate informal funding policy, GASB provides the following guidance in the Statement:

Application of professional judgment should consider the most recent five-year contribution history of the employers and nonemployer contributing entities as a key indicator of future contributions from those sources and should reflect all other known events and conditions.... the amount of projected cash flows for contributions from employers and nonemployer contributing entities should be limited to an average of contributions from those sources over the most recent five-year period and may be modified based on consideration of subsequent events. For this purpose, the basis for the average (for example, percentage of covered payroll contributed or percentage of actuarially determined contributions made) should be a matter of professional judgment.



In our review of informal funding policy the following factors are considered and described herein:

1. The five-year contribution history of the Employer (with a focus on the average contributions from those sources.)
2. All other known events and conditions
3. Consideration of subsequent events.

Five-Year Contribution History of the Employer

Employer contributions (under the informal policy) should be limited to the average over the most recent five years. In determining the basis for the average we reviewed three possibilities: (a) The average dollar contribution; (b) the average percent of pensionable pay; and (c) The average percent of the actuarial determined contribution. Please see the table below for a summary of these values:

Fiscal Year End	Employer Contributions	Most Applicable ADC	% of ADC	Covered Payroll	% of Payroll
4/30/2015	\$1,538,881	\$1,480,436	104%	\$3,011,302	51.10%
4/30/2014	\$1,301,138	\$1,214,470	107%	\$2,847,052	45.70%
4/30/2013	\$1,222,157	\$1,155,339	106%	\$2,770,376	44.12%
4/30/2012	\$1,272,947	\$1,229,708	104%	\$2,653,763	47.97%
4/30/2011	\$1,203,145	\$1,160,980	104%	\$2,467,342	48.76%

The contribution history suggests that the contribution as a percent of the Actuarially Determined Contribution is the most stable contribution, when compared to the other contribution policies reviewed.

Other Known Events and Conditions

GASB has a provision for consideration of any other known events or conditions in the most recent five-year history in applying judgement for the informal funding policy. There are no events or conditions that have been considered in the development of the informal funding policy.

Consideration of Subsequent Events

GASB has a provision for modification based on consideration of subsequent events in development of the informal funding policy. There are no subsequent events that have been considered in the development of the informal funding policy.



Informal Funding Policy – Selected

The informal funding policy that has been determined for future contributions is 104.80% of the Actuarially Determined Contribution. This represents the full future contributions expected to be made.

FUNDING POLICY – OTHER CONSIDERATIONS

Under GASB, the future contribution amount is not intended to include dollars contributed on behalf of future employees. Contributions are only intended to cover contributions towards the Normal Cost of existing employees as of the Actuarial Valuation Date as well as payment of unfunded liability on behalf of the current existing employees. Contributions under the funding policy have been adjusted as necessary to exclude dollars that would be anticipated to be contributed on behalf of future employees hired after the actuarial valuation date.

The contribution level may not pay off the unfunded liability during the active working lifetimes of current employees. In that case contributions will persist beyond the working lifetimes of current employees. To the extent a portion of the above total contribution is anticipated to pay contributions for future employee normal cost, the amount has been netted out. The remaining amount is anticipated to be paid towards the unfunded liability existing for current employees.

The actuarial determined contribution is determined annually based on the parameters previously discussed. The funding methods and procedures are assumed to continue into the future. The tax levy in the next December is assumed to be the actuarially determined contribution. Funding is assumed to go into the fund during the next full fiscal year.



SCHEDULES OF REQUIRED SUPPLEMENTARY INFORMATION

Schedule of Changes in the Net Pension Liability
Schedule of Total Pension Liability and Related Ratios
Schedule of the Actuarially Determined Contribution



SCHEDULE OF CHANGES IN THE NET PENSION LIABILITY

	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Total Pension Liability										
Service Cost	\$ 725,003									
Interest	2,763,171									
Changes of Benefit Terms	-									
Differences Between Expected and Actual Experience	-									
Changes in Assumptions	-									
Benefit Payments and Refunds	(1,694,070)									
Net Change In Total Pension Liability	1,794,104									
Total Pension Liability - Beginning	40,320,901									
Total Pension Liability - Ending (A)	42,115,005									
Plan Fiduciary Net Position										
Contributions - Employer	1,538,881									
Contributions - Member	286,786									
Net Investment Income	1,654,617									
Benefit Payments and Refunds	(1,694,070)									
Administrative Expense	(16,982)									
Other	-									
Net Change in Plan Fiduciary Net Position	1,769,233									
Plan Fiduciary Net Position - Beginning	21,596,932									
Plan Fiduciary Net Position - Ending (b)	23,366,164									
Employer Net Pension Liability - Ending (a) - (b)	18,748,841									

The current year information was developed in the completion of this report.



SCHEDULE OF TOTAL PENSION LIABILITY AND RELATED RATIO

	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Total Pension Liability - Ending (a)	\$ 42,115,005									
Plan Fiduciary Net Position - Ending (b)	23,366,164									
Employer Net Pension Liability - Ending (a) - (b)	18,748,841									
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	55.48%									
Covered-Employee Payroll	3,011,302									
Employer Net Pension Liability as a Percentage of Covered-Employee Payroll	622.62%									

Covered employee payroll shown is the pensionable pay for the fiscal year for all fund members.



SCHEDULE OF CONTRIBUTIONS

	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Actuarially Determined Contribution	\$ 1,480,436									
Contributions in Relation to the Actuarially Determined Contribution	1,538,881									
Contribution Deficiency (excess)	(58,445)									
Covered-Employee Payroll	3,011,302									
Contributions as a Percentage of Covered-Employee Payroll	51.1%									

NOTES TO SCHEDULE OF CONTRIBUTIONS

The actuarially determined contribution shown is from the April 30, 2013 actuary's report completed by Timothy W. Sharpe for the tax levy recommendation for the December, 2013 tax levy.



GASB METHODS AND PROCEDURES

GASB Methods and Procedures
Methodology for Deferred Outflows and Inflows



GASB METHODS AND PROCEDURES

	Statement 67	Statement 68
	<u>Pension Fund Financials</u>	<u>Employer Financials</u>
Fiscal Year End for Reporting	April 30, 2015	April 30, 2015
Measurement Date	April 30, 2015	April 30, 2015
Actuarial Valuation Date	May 1, 2015	May 1, 2015
Actuarial Valuation - Data Date	April 30, 2015	April 30, 2015
Asset Valuation Method	Market Value	Market Value
Actuarial Cost Method	Entry Age Normal (Level %)	Entry Age Normal (Level %)

Methodology Used in the Determination of Deferred Inflows and Outflows of Resources

Amortization Method	Straight Line	Straight Line
Amortization Period		
Actuarial Experience (TPL)	6.64 Years	6.64 Years
Changes in Assumptions	6.64 Years	6.64 Years
Asset Experience	5.00 Years	5.00 Years



SUPPLEMENTARY TABLES

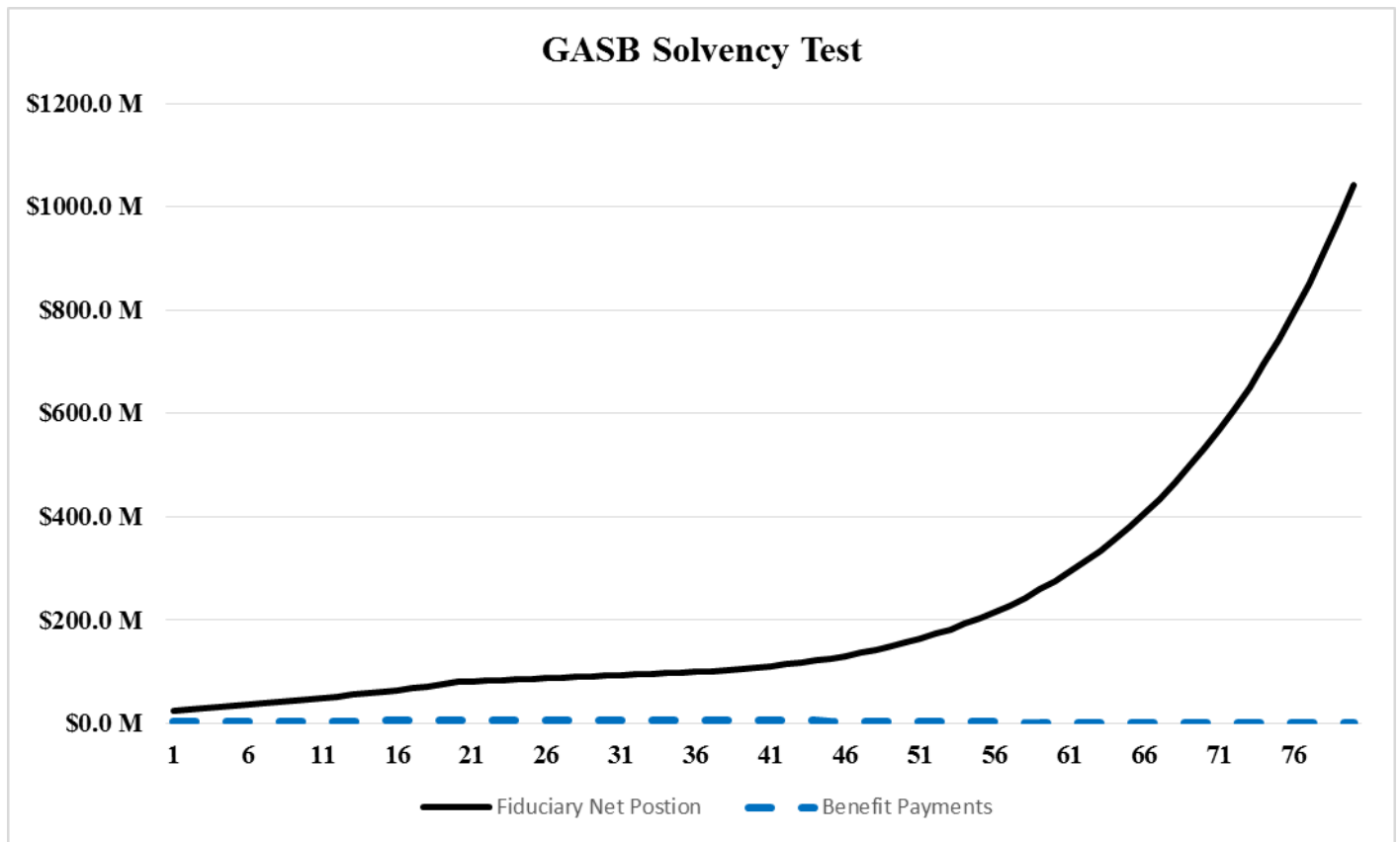
Projection of Contributions
Projection of the Pension Fund's Fiduciary Net Position
Actuarial Present Value of Projected Benefit Payments



GASB PROJECTIONS – SUMMARY AND PROCEDURE

GASB requires a solvency test to use in the determination of the discount rate each year. The Fiduciary Net Position of the fund is projected forward. To the extent the Net Position of the Fund is anticipated to be greater than \$0, benefit payments during that time period are discounted based on the expected rate of return on plan assets.

If the Fiduciary Net Position of the fund is anticipated to go to \$0 prior to the payment of future benefit payments for employees who are in the fund as of the Actuarial Valuation Date, then remaining expected future benefit payments are discounted using a high quality Municipal Bond rate as described in the assumption section of the report. Below is a chart with a high level summary of the projections:





Limitations

Projections of any type require assumptions about future events. The projections required for GASB reporting are deterministic in nature. That means that values are projected forward under one set of assumptions which can be thought of as the average result. Actual results could vary, and projections of one deterministic assumption set do not necessarily provide a framework for making risk management or funding policy decisions. Projections that deal with risk management are outside the scope of this report.

In addition, GASB requirements create results that are specific only to financial statement reporting, and should not be used or interpreted for other purposes. For example, GASB cash flow projections do not entail the total expected cash flows of the pension fund, but rather a subset of cash flows specific to members who are in the pension fund as of the Actuarial Valuation date. While the likely expectation may be that new employees are hired to replace the old, cash flows attributable to their benefits are not considered. Under GASB, when the Net Position goes to \$0, that represents only the Net Position for the assets attributable to the current fund members.

GASB also mandates certain assumptions that are made in the projection process. Most notably, future contributions under an informal funding policy. In proposing an informal funding policy, GASB suggests a focus be placed on the average contribution rate over the past 5 years. Assumed contributions noted in this section may be based on the five year average, unless a formal funding policy is in place.

Contributions reflecting informal funding policy are applied under GASB, whether or not the future results dictate a need for more or less contributions. This would not be the case with other uses for projections. Any events that are taken into account (past or future) in the informal funding policy are discussed in the “Funding Policy” section of this report.

The further you look forward with projections, the more sensitive the results are to assumptions. With projections that run out close to 80 years, a small change in an assumption will have a dramatic impact in the look of the projections on the following pages. If there is no change to the solvency of the fund as determined by GASB, big swings in the projection results may not necessarily lead to big swings in the determination of the Total Pension Liability.

We recommend the projections are not used for any other purposes, other than providing backup information for purposes of the financial statement report.

The following pages provide the detail behind the charts shown on the chart in this section.



PROJECTION OF CONTRIBUTIONS – YEARS 1 TO 30

Year	Projected Covered-Employee Payroll			Projected Contributions			
	Current Employees (a)	Future Employees (b)	Total Employee Payroll (c) = (a) + (b)	Current Employees (d) - Notes	Employer Contributions for Current Employees (e) - Notes	Contributions Related to Pay of Future Employees (f) - Notes	Total Contributions (d) + (e) + (f)
1	\$ 3,011,302	\$ -	\$ 3,011,302	\$ 284,719	\$ 2,059,013	\$ -	\$ 2,343,732
2	3,031,276	85,422	3,116,698	286,607	2,059,018	-	2,345,625
3	3,043,626	182,156	3,225,782	287,775	2,120,886	-	2,408,660
4	3,013,993	324,691	3,338,684	284,973	2,182,864	-	2,467,837
5	2,952,284	503,254	3,455,538	279,138	2,240,754	-	2,519,893
6	2,863,436	713,046	3,576,482	270,738	2,293,644	-	2,564,382
7	2,766,832	934,827	3,701,659	261,604	2,343,210	-	2,604,814
8	2,675,351	1,155,866	3,831,217	252,954	2,394,373	-	2,647,327
9	2,592,993	1,372,317	3,965,310	245,167	2,448,287	-	2,693,454
10	2,521,857	1,582,239	4,104,096	238,442	2,505,981	-	2,744,422
11	2,433,692	1,814,047	4,247,739	230,106	2,566,199	-	2,796,304
12	2,352,420	2,043,990	4,396,410	222,421	2,626,430	-	2,848,851
13	2,274,625	2,275,659	4,550,284	215,066	2,690,016	-	2,905,081
14	2,196,558	2,512,986	4,709,544	207,685	2,757,034	-	2,964,719
15	2,118,981	2,755,397	4,874,378	200,350	2,828,440	-	3,028,790
16	2,037,933	3,007,048	5,044,981	192,687	2,903,202	-	3,095,888
17	1,976,882	3,244,674	5,221,556	186,914	2,980,137	-	3,167,051
18	1,925,630	3,478,680	5,404,310	182,068	3,063,857	-	3,245,925
19	1,864,498	3,728,963	5,593,461	176,288	3,152,585	-	3,328,873
20	1,798,834	3,990,398	5,789,232	170,080	363,465	-	533,544
21	1,714,760	4,277,095	5,991,855	162,131	353,745	-	515,876
22	1,580,079	4,621,491	6,201,570	149,396	340,615	-	490,012
23	1,456,848	4,961,777	6,418,625	137,745	316,821	-	454,566
24	1,317,952	5,325,325	6,643,277	124,612	295,093	-	419,705
25	1,186,670	5,689,122	6,875,792	112,200	268,154	-	380,354
26	1,055,113	6,061,331	7,116,444	99,761	242,632	-	342,393
27	923,541	6,441,979	7,365,520	87,321	214,730	-	302,051
28	790,637	6,832,676	7,623,313	74,755	185,394	-	260,148
29	636,249	7,253,880	7,890,129	60,157	158,357	-	218,515
30	515,217	7,651,067	8,166,284	48,714	127,935	-	176,649

Column d – Contributions from employees to the pension fund (employees as of the valuation date)

Column e – Employer contributions to the fund excluding contributions for employees hired after the actuarial valuation date

Column f – Contributions from future employees to the extent they are anticipated to be greater than required to pay their total normal cost



PROJECTION OF CONTRIBUTIONS – YEARS 31 TO 60

Year	Projected Covered-Employee Payroll			Projected Contributions			
	Current Employees (a)	Future Employees (b)	Total Employee Payroll (c) = (a) + (b)	Current Employees (d) - Notes	Employer Contributions for Current Employees (e) - Notes	Contributions Related to Pay of Future Employees (f) - Notes	Total Contributions (d) + (e) + (f)
31	\$ 394,812	\$ 8,057,291	\$ 8,452,103	\$ 37,329	\$ 103,959	\$ -	\$ 141,289
32	307,767	8,440,160	8,747,927	29,099	79,346	-	108,446
33	230,366	8,823,739	9,054,105	21,781	61,981	-	83,762
34	156,708	9,214,290	9,370,998	14,817	47,111	-	61,928
35	108,463	9,590,520	9,698,983	10,255	31,653	-	41,908
36	68,011	9,970,437	10,038,448	6,430	21,719	-	28,150
37	42,765	10,347,028	10,389,793	4,043	13,356	-	17,400
38	15,235	10,738,201	10,753,436	1,440	8,847	-	10,288
39	-	11,129,806	11,129,806	-	3,510	-	3,510
40	-	11,519,349	11,519,349	-	-	-	-
41	-	11,922,527	11,922,527	-	-	-	-
42	-	12,339,815	12,339,815	-	-	-	-
43	-	12,771,709	12,771,709	-	-	-	-
44	-	13,218,718	13,218,718	-	-	-	-
45	-	13,681,374	13,681,374	-	-	-	-
46	-	14,160,222	14,160,222	-	-	-	-
47	-	14,655,829	14,655,829	-	-	-	-
48	-	15,168,784	15,168,784	-	-	-	-
49	-	15,699,691	15,699,691	-	-	-	-
50	-	16,249,180	16,249,180	-	-	-	-
51	-	16,817,901	16,817,901	-	-	-	-
52	-	17,406,528	17,406,528	-	-	-	-
53	-	18,015,756	18,015,756	-	-	-	-
54	-	18,646,308	18,646,308	-	-	-	-
55	-	19,298,929	19,298,929	-	-	-	-
56	-	19,974,391	19,974,391	-	-	-	-
57	-	20,673,495	20,673,495	-	-	-	-
58	-	21,397,067	21,397,067	-	-	-	-
59	-	22,145,965	22,145,965	-	-	-	-
60	-	22,921,073	22,921,073	-	-	-	-

Column d – Contributions from employees to the pension fund (employees as of the valuation date)

Column e – Employer contributions to the fund excluding contributions for employees hired after the actuarial valuation date

Column f – Contributions from future employees to the extent they are anticipated to be greater than required to pay their total normal cost



PROJECTION OF CONTRIBUTIONS – YEARS 61 TO 80

Year	Projected Covered-Employee Payroll			Projected Contributions			
	Current Employees (a)	Future Employees (b)	Total Employee Payroll (c) = (a) + (b)	Current Employees (d) - Notes	Employer Contributions for Current Employees (e) - Notes	Contributions Related to Pay of Future Employees (f) - Notes	Total Contributions (d) + (e) + (f)
61	\$ -	\$ 23,723,311	\$ 23,723,311	\$ -	\$ -	\$ -	\$ -
62	-	24,553,627	24,553,627	-	-	-	-
63	-	25,413,004	25,413,004	-	-	-	-
64	-	26,302,459	26,302,459	-	-	-	-
65	-	27,223,045	27,223,045	-	-	-	-
66	-	28,175,851	28,175,851	-	-	-	-
67	-	29,162,006	29,162,006	-	-	-	-
68	-	30,182,676	30,182,676	-	-	-	-
69	-	31,239,070	31,239,070	-	-	-	-
70	-	32,332,438	32,332,438	-	-	-	-
71	-	33,464,073	33,464,073	-	-	-	-
72	-	34,635,315	34,635,315	-	-	-	-
73	-	35,847,552	35,847,552	-	-	-	-
74	-	37,102,216	37,102,216	-	-	-	-
75	-	38,400,793	38,400,793	-	-	-	-
76	-	39,744,821	39,744,821	-	-	-	-
77	-	41,135,890	41,135,890	-	-	-	-
78	-	42,575,646	42,575,646	-	-	-	-
79	-	44,065,794	44,065,794	-	-	-	-
80	-	45,608,096	45,608,096	-	-	-	-

NOTES TO PROJECTION OF CONTRIBUTIONS

Total payroll is assumed to increase annually at the assumed payroll increase rate shown in the assumption section of this report. Payroll for current employees (employees active as of the actuarial valuation date) has been projected on an employee by employee basis, using expected pay increases and probability of remaining in active employment for future periods.

Employer contributions are related to current employees in the fund as of the Actuarial Valuation Date. To the extent future contributions under the Employer funding policy are made to cover the Normal Cost of providing benefits for future employees, those contributions have been excluded out for purposes of these projections and this report.

Contributions are based on the Funding Policy described in an earlier section of this report. The contributions do not factor in changes in funding policy based on an assumed Employer decision if the projections were to play out in this fashion. The only future events that have been considered were outlined in the funding policy section of the report.

Contributions from future employees have not been included. It is assumed that contributions made by future employees will not exceed the Normal Cost of their participation in the Fund. In addition, contributions by the employer on behalf of service for future employees have not been included per the GASB parameters.



PROJECTION OF THE PENSION PLAN'S FIDUCIARY NET POSITION – YEARS 1 TO 30

Year	Projected Beginning Fiduciary Net Position (a)	Projected Total Contributions (b)	Projected Benefit Payments (c)	Projected Administrative Expenses (d)	Projected Investment Earnings (e)	Projected Ending Fiduciary Net Position (a)+(b)-(c)-(d)+(e)
1	\$ 23,366,164	\$ 2,343,732	\$ 1,794,997	\$ 14,142	\$ 1,591,022	\$ 25,491,780
2	25,491,780	2,345,625	1,908,506	14,566	1,866,521	27,780,855
3	27,780,855	2,408,660	2,042,048	15,003	2,028,963	30,161,427
4	30,161,427	2,467,837	2,190,438	15,453	2,197,674	32,621,047
5	32,621,047	2,519,893	2,356,386	15,917	2,371,670	35,140,307
6	35,140,307	2,564,382	2,549,637	16,394	2,549,575	37,688,233
7	37,688,233	2,604,814	2,720,877	16,886	2,729,345	40,284,628
8	40,284,628	2,647,327	2,892,444	17,393	2,912,580	42,934,699
9	42,934,699	2,693,454	3,049,618	17,914	3,099,700	45,660,321
10	45,660,321	2,744,422	3,223,682	18,452	3,292,277	48,454,887
11	48,454,887	2,796,304	3,390,605	19,005	3,489,713	51,331,294
12	51,331,294	2,848,851	3,550,295	19,575	3,692,900	54,303,174
13	54,303,174	2,905,081	3,709,413	20,163	3,902,900	57,381,580
14	57,381,580	2,964,719	3,864,122	20,768	4,120,476	60,581,885
15	60,581,885	3,028,790	4,019,614	21,391	4,346,740	63,916,409
16	63,916,409	3,095,888	4,152,231	22,032	4,582,505	67,420,539
17	67,420,539	3,167,051	4,272,738	22,693	4,830,284	71,122,443
18	71,122,443	3,245,925	4,387,322	23,374	5,092,178	75,049,850
19	75,049,850	3,328,873	4,499,471	24,075	5,370,000	79,225,177
20	79,225,177	533,544	4,614,593	24,798	5,564,436	80,683,767
21	80,683,767	515,876	4,748,649	25,542	5,665,919	82,091,371
22	82,091,371	490,012	4,864,982	26,308	5,763,546	83,453,640
23	83,453,640	454,566	4,992,270	27,097	5,857,665	84,746,503
24	84,746,503	419,705	5,099,563	27,910	5,946,945	85,985,680
25	85,985,680	380,354	5,189,900	28,747	6,032,310	87,179,697
26	87,179,697	342,393	5,278,167	29,610	6,114,563	88,328,876
27	88,328,876	302,051	5,342,361	30,498	6,193,593	89,451,661
28	89,451,661	260,148	5,429,795	31,413	6,270,721	90,521,322
29	90,521,322	218,515	5,472,681	32,355	6,344,141	91,578,942
30	91,578,942	176,649	5,522,262	33,326	6,416,709	92,616,711

Column b – Contributions on behalf of current employees only as of the Actuarial Valuation Date.

Column d – Based on average administrative expenses in recent years and projected to increase going forward.

Column e – Based on the current expected return on assets. Does not factor in allocation changes.



PROJECTION OF THE PENSION PLAN'S FIDUCIARY NET POSITION – YEARS 31 TO 60

Year	Projected Beginning Fiduciary Net Position (a)	Projected Total Contributions (b)	Projected Benefit Payments (c)	Projected Administrative Expenses (d)	Projected Investment Earnings (e)	Projected Ending Fiduciary Net Position (a)+(b)-(c)-(d)+(e)
31	\$ 92,616,711	\$ 141,289	\$ 5,517,768	\$ 34,326	\$ 6,488,115	\$ 93,694,021
32	93,694,021	108,446	5,500,381	35,355	6,562,377	94,829,108
33	94,829,108	83,762	5,476,237	36,416	6,640,969	96,041,186
34	96,041,186	61,928	5,400,244	37,509	6,725,050	97,390,411
35	97,390,411	41,908	5,307,983	38,634	6,818,796	98,904,498
36	98,904,498	28,150	5,196,725	39,793	6,924,300	100,620,430
37	100,620,430	17,400	5,076,543	40,987	7,044,039	102,564,338
38	102,564,338	10,288	4,940,160	42,216	7,179,864	104,772,114
39	104,772,114	3,510	4,788,678	43,483	7,334,171	107,277,634
40	107,277,634	-	4,630,433	44,787	7,509,434	110,111,848
41	110,111,848	-	4,467,673	46,131	7,707,829	113,305,873
42	113,305,873	-	4,300,770	47,515	7,931,411	116,889,000
43	116,889,000	-	4,131,148	48,940	8,182,230	120,891,141
44	120,891,141	-	3,959,768	50,408	8,462,380	125,343,345
45	125,343,345	-	3,787,776	51,921	8,774,034	130,277,682
46	130,277,682	-	3,614,683	53,478	9,119,438	135,728,958
47	135,728,958	-	3,439,974	55,083	9,501,027	141,734,929
48	141,734,929	-	3,263,907	56,735	9,921,445	148,335,732
49	148,335,732	-	3,086,312	58,437	10,383,501	155,574,484
50	155,574,484	-	2,906,565	60,190	10,890,214	163,497,942
51	163,497,942	-	2,724,968	61,996	11,444,856	172,155,834
52	172,155,834	-	2,543,847	63,856	12,050,908	181,599,039
53	181,599,039	-	2,362,676	65,772	12,711,933	191,882,524
54	191,882,524	-	2,184,021	67,745	13,431,777	203,062,535
55	203,062,535	-	2,004,096	69,777	14,214,377	215,203,040
56	215,203,040	-	1,825,347	71,870	15,064,213	228,370,035
57	228,370,035	-	1,645,741	74,027	15,985,902	242,636,170
58	242,636,170	-	1,467,501	76,247	16,984,532	258,076,953
59	258,076,953	-	1,293,835	78,535	18,065,387	274,769,970
60	274,769,970	-	1,122,777	80,891	19,233,898	292,800,200

Column b – Contributions on behalf of current employees only as of the Actuarial Valuation Date.

Column d – Based on average administrative expenses in recent years and projected to increase going forward.

Column e – Based on the current expected return on assets. Does not factor in allocation changes.



PROJECTION OF THE PENSION PLAN'S FIDUCIARY NET POSITION – YEARS 61 TO 80

Year	Projected Beginning Fiduciary Net Position (a)	Projected Total Contributions (b)	Projected Benefit Payments (c)	Projected Administrative Expenses (d)	Projected Investment Earnings (e)	Projected Ending Fiduciary Net Position (a)+(b)-(c)-(d)+(e)
61	\$ 292,800,200	\$ -	\$ 960,764	\$ 83,318	\$ 20,496,014	\$ 312,252,133
62	312,252,133	-	810,097	85,817	21,857,649	333,213,868
63	333,213,868	-	671,252	88,392	23,324,971	355,779,195
64	355,779,195	-	546,922	91,043	24,904,544	380,045,774
65	380,045,774	-	437,658	93,775	26,603,204	406,117,545
66	406,117,545	-	343,733	96,588	28,428,228	434,105,452
67	434,105,452	-	264,569	99,486	30,387,382	464,128,779
68	464,128,779	-	199,532	102,470	32,489,015	496,315,792
69	496,315,792	-	147,466	105,544	34,742,105	530,804,887
70	530,804,887	-	106,477	108,711	37,156,342	567,746,042
71	567,746,042	-	75,301	111,972	39,742,223	607,300,992
72	607,300,992	-	52,159	115,331	42,511,069	649,644,571
73	649,644,571	-	35,325	118,791	45,475,120	694,965,575
74	694,965,575	-	23,450	122,355	48,647,590	743,467,361
75	743,467,361	-	15,271	126,025	52,042,715	795,368,780
76	795,368,780	-	9,789	129,806	55,675,815	850,905,000
77	850,905,000	-	6,166	133,700	59,563,350	910,328,483
78	910,328,483	-	3,842	137,711	63,722,994	973,909,924
79	973,909,924	-	2,305	141,843	68,173,695	1,041,939,471
80	1,041,939,471	-	1,375	146,098	72,935,763	1,114,727,761

NOTES TO PROJECTION OF FIDUCIARY NET POSITION

Total contributions are Employee and Employer contributions anticipated to be made under the funding policy on behalf of employees in the fund as of the Actuarial Valuation Date. The amounts shown were detailed earlier in this section.

Projected benefit payments shown represent only employees active as of the Actuarial Valuation Date. The fund will also be paying benefit payments in the future on behalf of employees hired after the Actuarial Valuation Date, but those have not been estimated for this purpose.

Projected investment earnings are based on the current expected rate of return on plan assets. Administrative expenses are not typically charged on a per employee basis. Administrative expenses shown have not been adjusted to distinguish between current employees and future employees.

The projected Net Position represents assets held or projected to be held on behalf of current employees as of the Actuarial Valuation Date. The fund will also hold assets in the future on behalf of new employees that are not shown here.



ACTUARIAL PRESENT VALUES OF PROJECTED BENEFIT PAYMENTS – YEARS 1 TO 30

Year	Projected Beginning Fiduciary Net Position	Projected Benefit Payments	Projected Benefit Payments		Present Value (PV) of Projected Benefit Payments		
			"Funded" Portion of Benefit Payments	"Unfunded" Portion of Benefit Payments	PV of "Funded" Portion of Benefit Payments (7.00%)	PV of "Unfunded" Portion of Benefit Payments (3.62%)	PV of Total Projected Payments Using the Single Discount Rate (7.00%)
1	\$ 23,366,164	\$ 1,794,997	\$ 1,794,997	\$ -	\$ 1,735,289	\$ -	\$ 1,735,289
2	25,491,780	1,908,506	1,908,506	-	1,724,320	-	1,724,320
3	27,780,855	2,042,048	2,042,048	-	1,724,275	-	1,724,275
4	30,161,427	2,190,438	2,190,438	-	1,728,573	-	1,728,573
5	32,621,047	2,356,386	2,356,386	-	1,737,879	-	1,737,879
6	35,140,307	2,549,637	2,549,637	-	1,757,388	-	1,757,388
7	37,688,233	2,720,877	2,720,877	-	1,752,727	-	1,752,727
8	40,284,628	2,892,444	2,892,444	-	1,741,352	-	1,741,352
9	42,934,699	3,049,618	3,049,618	-	1,715,866	-	1,715,866
10	45,660,321	3,223,682	3,223,682	-	1,695,143	-	1,695,143
11	48,454,887	3,390,605	3,390,605	-	1,666,278	-	1,666,278
12	51,331,294	3,550,295	3,550,295	-	1,630,613	-	1,630,613
13	54,303,174	3,709,413	3,709,413	-	1,592,238	-	1,592,238
14	57,381,580	3,864,122	3,864,122	-	1,550,136	-	1,550,136
15	60,581,885	4,019,614	4,019,614	-	1,507,022	-	1,507,022
16	63,916,409	4,152,231	4,152,231	-	1,454,899	-	1,454,899
17	67,420,539	4,272,738	4,272,738	-	1,399,181	-	1,399,181
18	71,122,443	4,387,322	4,387,322	-	1,342,714	-	1,342,714
19	75,049,850	4,499,471	4,499,471	-	1,286,950	-	1,286,950
20	79,225,177	4,614,593	4,614,593	-	1,233,530	-	1,233,530
21	80,683,767	4,748,649	4,748,649	-	1,186,322	-	1,186,322
22	82,091,371	4,864,982	4,864,982	-	1,135,874	-	1,135,874
23	83,453,640	4,992,270	4,992,270	-	1,089,339	-	1,089,339
24	84,746,503	5,099,563	5,099,563	-	1,039,954	-	1,039,954
25	85,985,680	5,189,900	5,189,900	-	989,137	-	989,137
26	87,179,697	5,278,167	5,278,167	-	940,149	-	940,149
27	88,328,876	5,342,361	5,342,361	-	889,330	-	889,330
28	89,451,661	5,429,795	5,429,795	-	844,753	-	844,753
29	90,521,322	5,472,681	5,472,681	-	795,724	-	795,724
30	91,578,942	5,522,262	5,522,262	-	750,405	-	750,405

The projected Fiduciary Net Position and the Projected Benefit Payments are based only on the current employee group as of the Actuarial Valuation Date. The development of the Projected Fiduciary Net Position was shown in more detail earlier in this section.



ACTUARIAL PRESENT VALUES OF PROJECTED BENEFIT PAYMENTS – YEARS 31 TO 60

Year	Projected Beginning Fiduciary Net Position	Projected Benefit Payments	Projected Benefit Payments		Present Value (PV) of Projected Benefit Payments		
			"Funded" Portion of Benefit Payments	"Unfunded" Portion of Benefit Payments	PV of "Funded" Portion of Benefit Payments (7.00%)	PV of "Unfunded" Portion of Benefit Payments (3.62%)	PV of Total Projected Payments Using the Single Discount Rate (7.00%)
31	\$ 92,616,711	\$ 5,517,768	\$ 5,517,768	\$ -	\$ 700,742	\$ -	\$ 700,742
32	93,694,021	5,500,381	5,500,381	-	652,836	-	652,836
33	94,829,108	5,476,237	5,476,237	-	607,448	-	607,448
34	96,041,186	5,400,244	5,400,244	-	559,831	-	559,831
35	97,390,411	5,307,983	5,307,983	-	514,268	-	514,268
36	98,904,498	5,196,725	5,196,725	-	470,550	-	470,550
37	100,620,430	5,076,543	5,076,543	-	429,596	-	429,596
38	102,564,338	4,940,160	4,940,160	-	390,705	-	390,705
39	104,772,114	4,788,678	4,788,678	-	353,949	-	353,949
40	107,277,634	4,630,433	4,630,433	-	319,862	-	319,862
41	110,111,848	4,467,673	4,467,673	-	288,429	-	288,429
42	113,305,873	4,300,770	4,300,770	-	259,489	-	259,489
43	116,889,000	4,131,148	4,131,148	-	232,949	-	232,949
44	120,891,141	3,959,768	3,959,768	-	208,677	-	208,677
45	125,343,345	3,787,776	3,787,776	-	186,555	-	186,555
46	130,277,682	3,614,683	3,614,683	-	166,383	-	166,383
47	135,728,958	3,439,974	3,439,974	-	147,982	-	147,982
48	141,734,929	3,263,907	3,263,907	-	131,223	-	131,223
49	148,335,732	3,086,312	3,086,312	-	115,965	-	115,965
50	155,574,484	2,906,565	2,906,565	-	102,066	-	102,066
51	163,497,942	2,724,968	2,724,968	-	89,429	-	89,429
52	172,155,834	2,543,847	2,543,847	-	78,024	-	78,024
53	181,599,039	2,362,676	2,362,676	-	67,726	-	67,726
54	191,882,524	2,184,021	2,184,021	-	58,509	-	58,509
55	203,062,535	2,004,096	2,004,096	-	50,177	-	50,177
56	215,203,040	1,825,347	1,825,347	-	42,712	-	42,712
57	228,370,035	1,645,741	1,645,741	-	35,990	-	35,990
58	242,636,170	1,467,501	1,467,501	-	29,992	-	29,992
59	258,076,953	1,293,835	1,293,835	-	24,713	-	24,713
60	274,769,970	1,122,777	1,122,777	-	20,043	-	20,043

The projected Fiduciary Net Position and the Projected Benefit Payments are based only on the current employee group as of the Actuarial Valuation Date. The development of the Projected Fiduciary Net Position was shown in more detail earlier in this section.



ACTUARIAL PRESENT VALUES OF PROJECTED BENEFIT PAYMENTS – YEARS 61 TO 80

Year	Projected Beginning Fiduciary Net Position	Projected Benefit Payments	Projected Benefit Payments		Present Value (PV) of Projected Benefit Payments		
			"Funded" Portion of Benefit Payments	"Unfunded" Portion of Benefit Payments	PV of "Funded" Portion of Benefit Payments (7.00%)	PV of "Unfunded" Portion of Benefit Payments (3.62%)	PV of Total Projected Payments Using the Single Discount Rate (7.00%)
61	\$ 292,800,200	\$ 960,764	\$ 960,764	\$ -	\$ 16,029	\$ -	\$ 16,029
62	312,252,133	810,097	810,097	-	12,631	-	12,631
63	333,213,868	671,252	671,252	-	9,781	-	9,781
64	355,779,195	546,922	546,922	-	7,448	-	7,448
65	380,045,774	437,658	437,658	-	5,570	-	5,570
66	406,117,545	343,733	343,733	-	4,089	-	4,089
67	434,105,452	264,569	264,569	-	2,941	-	2,941
68	464,128,779	199,532	199,532	-	2,073	-	2,073
69	496,315,792	147,466	147,466	-	1,432	-	1,432
70	530,804,887	106,477	106,477	-	966	-	966
71	567,746,042	75,301	75,301	-	639	-	639
72	607,300,992	52,159	52,159	-	413	-	413
73	649,644,571	35,325	35,325	-	262	-	262
74	694,965,575	23,450	23,450	-	162	-	162
75	743,467,361	15,271	15,271	-	99	-	99
76	795,368,780	9,789	9,789	-	59	-	59
77	850,905,000	6,166	6,166	-	35	-	35
78	910,328,483	3,842	3,842	-	20	-	20
79	973,909,924	2,305	2,305	-	11	-	11
80	1,041,939,471	1,375	1,375	-	6	-	6

NOTES TO THE ACTUARIAL PRESENT VALUE OF PROJECTED BENEFIT PAYMENTS

The projected Fiduciary Net Position and the Projected Benefit Payments are based only on the current employee group as of the Actuarial Valuation Date. The development of the Net Position was shown in more detail earlier in this section.

The Funded and Unfunded portion of the Benefit Payments is split based on the time that the Fiduciary Net Position is projected to go to \$0 (based on assets for current fund members).

The Present Value of the Funded portion and Unfunded portion of the benefit payments has been determined separately. The PV of the funded portion of the benefit payments uses the assumption for the expected rate of return on plan assets. The PV of the unfunded portion of the benefit payments has been determined using the high quality Municipal Bond Rate as of the Measurement Date as described in the Actuarial Assumption section of the report.

The discount rate used for GASB purposes is the rate that is when applied to the total Projected Benefit payments results in a present value that equals the sum of the present value of the funded and unfunded payments. The discount rate has been round to four decimal places. Therefore the resulting present value comparisons might show a slight difference due to rounding.