Gabriel Roeder Smith & Company
Consultants & Actuaries

STATE UNIVERSITIES
RETIREMENT SYSTEM OF ILLINOIS

GASB STATEMENT NO. 67 PLAN REPORTING AND ACCOUNTING SCHEDULES
JUNE 30, 2014

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October 10, 2014

The Board of Trustees
State Universities Retirement System of Illinois

Dear Board Members:

This report provides information required by the Retirement System in connection with the Governmental Accounting Standards Board (GASB) Statement No. 67 "Financial Reporting for Pension Plans."

Our actuarial calculations for this report were prepared for the purpose of complying with the requirements of GASB Statement No. 67. These calculations have been made on a basis that is consistent with our understanding of these accounting standards.

Our calculation of the liability associated with the benefits described in this report was performed for the purpose of satisfying the requirements of GASB Statement No. 67. The calculation of the plan's liability for this report may not be applicable for funding purposes of the plan. A calculation of the plan's liability for purposes other than satisfying the requirements of GASB Statement No. 67 may produce significantly different results. This report may be provided to parties other than the State Universities Retirement System of Illinois ("SURS") only in its entirety and only with the permission of SURS.

This report is based upon information, furnished to us by SURS, concerning retirement and ancillary benefits, active members, deferred vested members, retirees and beneficiaries and financial data. If your understanding of this information is different, please let us know. This information was checked for internal consistency, but it was not otherwise audited.

To the best of our knowledge, the information contained in this report is accurate and fairly represents the actuarial position of the State Universities Retirement System of Illinois calculated in accordance with the requirements of GASB Statement No. 67. All calculations have been made in conformity with generally accepted actuarial principles and practices as well as with the Actuarial Standards of Practice issued by the Actuarial Standards Board. **Leslie Thompson** and **Amy Williams** are members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. The undersigned are independent of the plan sponsor.

Respectfully submitted,

By Leslie Thompson
Leslie Thompson
FSA, EA, MAAA

By Amy Williams
Amy Williams
ASA, MAAA

Auditor’s Note – This information is presented in draft form for review by the Plan’s auditor. Please let us know if there are any items that the auditor changes so that we may maintain consistency with the Plan’s financial statements.

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SECTION A

EXECUTIVE SUMMARY

Executive Summary
as of June 30, 2014

		2014
Actuarial Valuation Date		June 30, 2013
Pension Plan's Fiscal Year Ending Date (Measurement Date & Reporting Date)		June 30, 2014
Membership		
Number of		
- Retirees and Beneficiaries		57,229
- Inactive, Nonretired Members		74,569
- Active Members		70,556
- Total		202,354
Covered Payroll	$	3,522,245,937
Net Pension Liability		
Total Pension Liability	$	39,182,306,271
Plan Fiduciary Net Position		17,391,323,132
Net Pension Liability	$	21,790,983,139
Plan Fiduciary Net Position as a Percentage of Total Pension Liability		44.39%
Net Pension Liability as a Percentage of Covered Payroll		618.67%
Development of the Single Discount Rate		
Single Discount Rate		7.09%
Long-Term Expected Rate of Return		7.25%
Long-Term Municipal Bond Rate		4.29%
Last year ending June 30 in the 2013 to 2114 projection period for which projected benefit payments are fully funded		2065

Excludes SMP.

Long-term Municipal Bond Rate is based on the weekly rate of the 20-Year Bond Buyer Index as published by the Federal Reserve closest to but not later than the measurement date.

Covered employee payroll is equal to the defined benefit payroll from 6/30/2014 valuation rolled forward with one year of wage inflation at 3.75%.

DISCUSSION

Accounting Standard

For pension plans that are administered through trusts or equivalent arrangements, Governmental Accounting Standards Board (GASB) Statement No. 67, "Financial Reporting for Pension Plans," replaces the requirements of Statement No. 25, "Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans," and Statement No. 50, "Pension Disclosures." Statement No. 67 establishes standards of financial reporting for separately issued financial reports and specifies the required approach for measuring the pension liability of employers and non-employer contributing entities for benefits provided through the pension plan.

The following discussion provides a summary of the information that is required to be disclosed under this new accounting standard. A number of these disclosure items are provided in this report. However, certain information, such as notes regarding accounting policies and investments, is not included in this report, and your internal staff will be responsible for preparing that information to comply with this accounting standard.

Financial Statements

Statement No. 67 requires defined benefit pension plans to present two financial statements – a statement of fiduciary net position and a statement of changes in fiduciary net position.

The *statement of fiduciary net position* presents the following items as of the end of the pension plan's reporting period, such as:

- Assets;
- Deferred inflows and outflows of resources;
- Liabilities; and
- Fiduciary net position (assets, plus deferred outflows, minus liabilities, minus deferred inflows).

The *statement of changes in fiduciary net position* presents the following for the plan's reporting period:

- Additions, such as contributions and investment income;
- Deductions, such as benefit payments and expenses; and
- Net increase or decrease in the fiduciary net position (the difference between additions and deductions).

Notes to Financial Statements

Statement No. 67 also requires the notes of the plan's financial statements to include additional disclosure information. This disclosure information should include:

- A description of the types of benefits provided by the plan, as well as automatic or ad hoc COLAs;
- The number and classes of employees covered by the benefit terms;
- The composition of the pension plan's board and the authority under which benefit terms may be amended;
- A description of the plan's funding policy, which includes member and employer contribution requirements;
- The pension plan's investment policies;
- A description of how fair value is determined;
- Concentrations of investments greater than or equal to 5%;
- Annual money-weighted rate of return on pension plan investments;
- The portion of the present value of benefits to be provided through the pension plan to current active and inactive plan members;
- The pension plan's fiduciary net position;
- The net pension liability;
- The pension plan's fiduciary net position as a percentage of the total pension liability;
- Significant assumptions and methods used to calculate the total pension liability;
- Inputs to the discount rates; and
- Certain information about mortality assumptions and the dates of experience studies.

Required Supplementary Information

Statement No. 67 requires a 10-year fiscal history of:

- Sources of changes in the net pension liability;
- Information about the components of the net pension liability and related ratios, including the pension plan's fiduciary net position as a percentage of the total pension liability, and the net pension liability as a percent of covered-employee payroll;
- Comparison of the actual employer contributions to the actuarially determined contributions based on normal cost plus 30-year open period amortization of the unfunded actuarial accrued liability as a level percentage of total payroll for fiscal years 2014 and prior. (The actuarially determined contributions are higher than the System's statutory funding policy.); and
- The annual money-weighted rate of return on pension plan investments for each year.

While the first two tables may be built prospectively as the information becomes available, sufficient information is currently available for the third and fourth tables.

Measurement of the Net Pension Liability

The net pension liability is to be measured as the total pension liability, less the amount of the pension plan's fiduciary net position. In actuarial terms, this will be the accrued liability less the market value of assets (not the smoothed actuarial value of assets that is often encountered in actuarial valuations performed to determine the employer's contribution requirement).

Timing of the Valuation

An actuarial valuation to determine the total pension liability is required to be performed at least every two years. If the actuarial valuation is not calculated as of the plan's fiscal year end, the total pension liability is required to be rolled forward from the actuarial valuation date to the pension plan's fiscal year end.

The total pension liability shown in this report is based on an actuarial valuation performed as of June 30, 2013 and a measurement date of **June 30, 2014**.

Single Discount Rate

Projected benefit payments are required to be discounted to their actuarial present values using a single discount rate that reflects (1) a long-term expected rate of return on pension plan investments (to the extent that the plan's fiduciary net position is projected to be sufficient to pay benefits) and (2) a tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA credit rating (which is published by the Federal Reserve) as of the measurement date (to the extent that the contributions for use with the long-term expected rate of return are not met).

For the purpose of this valuation, the expected rate of return on pension plan investments is 7.250**%**; the municipal bond rate is 4.290% (based on the weekly rate closest to but not later than the measurement date of the 20-Year Bond Buyer Index as published by the Federal Reserve); and the resulting single discount rate is 7.090%.

Effective Date and Transition

GASB Statement No. 67 is first effective for a pension plan's fiscal years beginning after June 15, 2013; however, earlier application is encouraged by the GASB. For SURS, GASB Statement No. 67 is therefore effective for fiscal year July 1, 2013 through June 30, 2014.

SECTION B

FINANCIAL STATEMENTS

Statement of Fiduciary Net Position
as of June 30, 2014

		2014
Assets		
Cash and short-term Investments	$	792,286,594
Receivables		
Participants	$	8,890,114
Federal, trust funds, and other		109,240,672
Pending investment sales		444,237,505
Interest and dividends		40,106,288
Total Receivables	$	602,474,579
Prepaid expenses	$	124,042
Investments, at fair value		
Equity investments	$	11,949,682,690
Fixed income investments		4,070,551,894
Real estate investments		635,941,600
Mutual fund and variable annuities		-
Total Investments	$	16,656,176,184
Securities lending collateral	$	664,501,026
Capital assets, at cost, net of accum deprec		
$18,437,341 and $17,989,458 respectively	$	6,143,069
Total Assets	$	18,721,705,494
Liabilities		
Benefits payable	$	9,869,469
Refunds payable		5,319,941
Securities lending collateral		664,335,138
Payable to brokers for unsettled trades		635,098,360
Administrative expenses payable		15,759,454
Total Liabilities	$	1,330,382,362
Net Position Restricted for Pensions	$	17,391,323,132

Statement of Changes in Fiduciary Net Position for Year Ended June 30, 2014

		2014
Additions		
Contributions		
Employer	$	1,502,863,618
Participant		283,081,326
Total Contributions	$	1,785,944,944
Investment Income		
Net Appreciation in Fair Value of Investments	$	2,403,714,880
Interest		97,719,525
Dividends		214,220,387
Securities lending		4,147,244
	$	2,719,802,036
Less Investment Expense		
Asset management expense		51,526,391
Securities lending expense		375,242
Net Investment Income	$	2,667,900,403
Total Additions	$	4,453,845,347
Deductions		
Benefit payments	$	2,002,869,428
Refunds of contributions		82,897,092
Administrative Expense		13,857,522
Total Deductions	$	2,099,624,042
Net Increase in Net Position	$	2,354,221,305
Net Position Restricted for Pensions		
Beginning of Year	$	15,037,101,827
End of Year	$	17,391,323,132

SECTION C

REQUIRED SUPPLEMENTARY INFORMATION

Schedules of Required Supplementary Information

Schedule of Changes in Net Pension Liability and Related Ratios Multiyear

Fiscal year ending June 30,	2014
Total Pension Liability	
Service Cost	$ 675,257,078
Interest on the Total Pension Liability	2,643,353,237
Benefit Changes	-
Difference between Expected and Actual Experience	-
Assumption Changes	130,585,622
Benefit Payments	(2,002,869,428)
Refunds	(82,897,092)
Net Change in Total Pension Liability	1,363,429,417
Total Pension Liability - Beginning	37,818,876,854
Total Pension Liability - Ending (a)	$ 39,182,306,271
Plan Fiduciary Net Position	
Employer Contributions	$ 1,502,863,618
Employee Contributions	283,081,326
Pension Plan Net Investment Income	2,667,900,403
Benefit Payments	(2,002,869,428)
Refunds	(82,897,092)
Pension Plan Administrative Expense	(13,857,522)
Other	-
Net Change in Plan Fiduciary Net Position	2,354,221,305
Plan Fiduciary Net Position - Beginning	15,037,101,827
Plan Fiduciary Net Position - Ending (b)	$ 17,391,323,132
Net Pension Liability - Ending (a) - (b)	21,790,983,139
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	44.39 %
Covered Employee Payroll	$ 3,522,245,937
Net Pension Liability as a Percentage of Covered Employee Payroll	618.67 %

10 fiscal years will be built prospectively.
Covered employee payroll is equal to the defined benefit payroll from 6/30/2014 valuation rolled forward with one year of wage inflation at 3.75%.
Beginning of year Total Pension Liability for fiscal year 2014 uses a single discount rate of 7.12% and end of year total pension liability uses a single discount rate of 7.09%.
Assumption changes includes impact of the change in the single discount rate from 7.12% to 7.09% from the beginning total pension liability as of June 30, 2013 to ending total pension liability as of June 30, 2014 based on the long-term municipal bond rate of 4.63% as of June 27, 2013, and 4.29% as of June 26, 2014.

Schedules of Required Supplementary Information

Schedule of the Net Pension Liability Multiyear

FY Ending June 30,	Total Pension Liability	Plan Net Position	Net Pension Liability	Plan Net Position as a % of Total Pension Liability	Covered Payroll	Net Pension Liability as a % of Covered Payroll
2014	$ 39,182,306,271	$ 17,391,323,132	$ 21,790,983,139	44.39%	$3,522,245,937	618.67%

10 fiscal years will be built prospectively.

Covered employee payroll is equal to the defined benefit payroll from 6/30/2014 valuation rolled forward with one year of wage inflation at 3.75%.

Schedule of Contributions Multiyear
Last 10 Fiscal Years

($ in 000s)

FY Ending June 30,	Actuarially Determined Contribution	Actual Contribution	Contribution Deficiency (Excess)	Covered Payroll	Actual Contribution as a % of Covered Payroll
2005	$ 607,765	$ 285,400	$ 322,365	$ 2,939,185	9.71%
2006	662,041	180,000	482,041	3,054,100	5.89%
2007	705,900	261,100	444,800	3,180,985	8.21%
2008	707,537	344,900	362,637	3,303,220	10.44%
2009	874,032	451,600	422,432	3,463,922	13.04%
2010	1,003,331	696,600	306,731	3,491,071	19.95%
2011	1,259,048	773,595	485,453	3,460,838	22.35%
2012	1,443,348	985,815	457,533	3,477,166	28.35%
2013	1,549,287	1,401,481	147,806	3,533,858	39.66%
2014	1,560,524	1,502,864	57,660	3,522,246	42.67%

For fiscal years 2014 and prior, the Actuarially Determined Contribution is equal to normal cost plus 30-year open period amortization of the unfunded actuarial accrued liability as a level percentage of total payroll.

Covered employee payroll is equal to defined benefit payroll from the actuarial valuation as of the same date and rolled forward with one year of wage inflation at 3.75%.

Notes to Schedule of Contributions

Valuation Date:	June 30, 2013
Notes	Actuarially determined contribution rates are calculated as of June 30, which is 12 months prior to the beginning of the fiscal year in which contributions will be made.

Methods and Assumptions Used to Determine Contribution Rates:

Actuarial Cost Method	Projected Unit Credit
Amortization Method	The Statutory Contributions is equal to the level percentage of pay contributions determined so that the Plan attains a 90% funded ratio by the end of 2045.
Remaining Amortization Period	Not Applicable. An amortization payment is not directly calculated. The amortization payment is the difference between the total statutory contribution and the employer normal cost contribution.
Asset Valuation Method	5 Year smoothed market.
Inflation	2.75%.
Salary Increases	3.75% to 12.00% including inflation.
Investment Rate of Return	7.25% beginning with the actuarial valuation as of June 30, 2014.
Retirement Age	Experience-based table of rates. Last updated for the 2011 valuation pursuant to an experience study of the period 2006 - 2010.
Mortality	RP2000 Combined Mortality table, projected with Scale AA to 2017, sex-distinct, with rates multiplied by 0.80 for males and 0.85 for females.

Other Information:

Notes	Benefit changes as a result of Senate Bill 1/Public Act 98-0599 were not recognized in the Total Pension Liability as of June 30, 2014. The statutory contribution for fiscal year ending June 30, 2014 was determined in the valuation as of June 30, 2012 and the statutory contribution for fiscal year ending June 30, 2015 was determined in the valuation as of June 30, 2013. All other contributions are projected using current assumptions.

Schedule of Investment Returns Multiyear
Last 10 Fiscal Years

FY Ending June 30,	Annual Return[1]
2005	
2006	
2007	
2008	
2009	
2010	
2011	
2012	
2013	
2014	

[1] *Annual money-weighted rate of return, net of investment expenses*

To be calculated by SURS.

SECTION D

NOTES TO FINANCIAL STATEMENTS

Long-Term Expected Return on Plan Assets

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return were adopted by the plan's trustees after considering input from the plan's investment consultant(s) and actuary(s). For each major asset class that is included in the pension plan's target asset allocation as of June 30, 2013, these best estimates are summarized in the following table:

Asset Allocation

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
U.S. Equity	26%	5.89%
Non-U.S. Equity	21%	6.40%
Global Equity	8%	8.70%
Core Fixed Income	19%	1.51%
Emerging Market Debt	3%	1.51%
Treasury-Inflation Protected Securities	4%	1.16%
Private Equity	6%	9.15%
Real Estate	6%	4.17%
REITS	4%	6.40%
Opportunity Fund / Infrastructure	1%	3.83%
Commodities	2%	3.83%
Total	100%	5.12%

To be verified or provided by SURS' investment consultant.

Single Discount Rate

A single discount rate of 7.090% was used to measure the total pension liability. This single discount rate was based on an expected rate of return on pension plan investments of 7.250% and a municipal bond rate of 4.290%. The projection of cash flows used to determine this single discount rate were the amounts of contributions attributable to current plan members and assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the statutory contribution rates under the System's funding policy. Based on these assumptions, the pension plan's fiduciary net position and future contributions were sufficient to finance the benefit payments through the year 2065. As a result, the long-term expected rate of return on pension plan investments was applied to projected benefit payments through the year 2065, and the municipal bond rate was applied to all benefit payments after that date.

Regarding the sensitivity of the net pension liability to changes in the single discount rate, the following presents the plan's net pension liability, calculated using a single discount rate of 7.090%, as well as what the plan's net pension liability would be if it were calculated using a single discount rate that is 1-percentage-point lower or 1-percentage-point higher:

Sensitivity of Net Pension Liability to the Single Discount Rate Assumption

1% Decrease 6.09%	Current Single Discount Rate Assumption 7.09%	1% Increase 8.09%
$26,583,701,134	$21,790,983,139	$17,796,570,836

Summary of Population Statistics

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	57,229
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	74,569
Active Plan Members	70,556
Total Plan Members	202,354

Excludes SMP.

SECTION E

SUMMARY OF BENEFITS

It should be noted that the purpose of this Appendix is to describe the benefit structures of SURS for which actuarial values have been generated. There is no description of the Self Managed Plan (SMP) and many portions of the defined plans are described in a manner which is not legally complete or precise.

It is not our intent to provide an exhaustive description of all benefits provided under SURS or the policies and procedures utilized by SURS staff. A more precise description of the provisions of SURS is contained in the Member's Guide, published by SURS staff. Of course, the statute is controlling.

General

Plans

There are two defined benefit plans available under SURS, the Traditional Plan and the Portable Plan, and one defined contribution plan, the Self Managed Plan (SMP). A Member must select one of these plans within the first six months of participation. If no choice is made in that time, the Traditional Plan is deemed chosen. A new tier of benefits was established for members hired on or after January 1, 2011. Members hired before January 1, 2011, ("Tier 1 members") are not subject to a pay cap. Members hired on or after January 1, 2011, ("Tier 2 members") are eligible to choose one of the benefit plans. Tier 2 members that participate in the Traditional and Portable Plans are subject to the pay cap established under Public Act 96-0889. The pay cap history is as follows:

Year	CPI-U	½ CPI-U	Pensionable Pay Cap
2011			$106,800.00
2012	3.90%	1.95%	$108,882.60
2013	2.00%	1.00%	$109,971.43
2014	1.20%	0.60%	$110,631.26

The pay cap is calculated annually by the Illinois Department of Insurance.

The Self Managed Plan is a defined contribution plan under which members contribute 8.0% of compensation and the State contributes 7.6% of compensation. A portion of the employer contribution is used to fund disability benefits for SMP participants. Members hired on or after January 1, 2011, who participate in the SMP are not subject to the pay cap established under Public Act 96-0889.

The provisions of the defined benefit plans are identical in many areas. The description below is primarily of the Traditional Plan. Where different, the Portable plan provisions will be described in *italics.*

Member Contributions

Most members contribute a total of 8% of compensation. Police officers and firefighters contribute a total of 9.5% of compensation, with the additional 1.5% allocated to the retirement annuity.

The total contribution is broken down as follows:

	Police/Fire	All Others
Retirement Annuity	8.0%	6.5%
Survivor Benefits	1.0%	1.0%
Annual Increases in Retirement Benefits	0.5%	0.5%
Total Contribution	9.5%	8.0%

Portable Plan members contribute a total of 8% of compensation, but the breakdown set out above does not apply.

The retirement annuity portion of the total contribution (8.0% of compensation for police officers and firefighters and 6.5% of compensation for all others) is annuitized for the money purchase formula (Rule 2) calculation.

Contributions for members hired on or after January 1, 2011, are assumed not to be made on pay in excess of $106,800 in 2011 ($110,631 in 2014), increased by the lesser of 3% and 1/2 of the increase in CPI-U as measured in the preceding 12-month calendar year.

Since January 1, 1981, the member contributions under SURS have been “picked up” by employers.

Effective Rate of Interest

The Effective Rate of Interest (“ERI”) is the interest rate that is applied to member contribution balances. Effective for the 2006 fiscal year, the ERI for the purpose of determining the money purchase benefit is established by the State Comptroller annually. The ERI for other purposes such as the calculation of purchases of service credit, refunds for excess contributions, portable plan refunds and lump sum portable retirements is determined by the SURS Board annually and certified to the Governor. For purposes of the actuarial valuation, the assumed ERI is 7.00%.

For the purposes of withdrawal of contributions at termination or death by Traditional Plan Members, this rate is not greater than 4.5% by statute.

Retirement Benefits

Normal Retirement:

Eligibility

For police officers and firefighters, separation from service on or after the attainment of the earlier of:

1. Age 55 with 20 years of service, or
2. Age 50 with 25 years of service.

For other members hired before January 1, 2011, separation from service on or after attainment of the earlier of:

1. Age 62 with 5 years of service,
2. Age 60 with 8 years of service, and
3. 30 years of service regardless of age.

For members hired on or after January 1, 2011, separation from service on or after attainment age 67 with 10 years of service.

Initial Benefit Amount

There are 3 alternate formulae. The initial benefit is the largest produced by one of the three:

1. General Formula: The following percentages of high 4 consecutive year average compensation for each year of service:

Year of Service	General	Police/Fire
1st 10 Years	2.20 %	2.25 %
Next 10 Years	2.20	2.50
Over 20	2.20	2.75

   For members hired on or after January 1, 2011, the above percentages of high final eight consecutive year average compensation within the last 10 years of service for each year of service. The pay cap for 2010 through 2013 is shown in the table on the previous page. We have assumed the limit applies to individual pay amounts that are used to develop the final average compensation.

2. Money Purchase Formula:

   a) The member contributions for retirement benefits (8.0% of compensation for police officers and firefighters and 6.5% of compensation for all others) accumulated with interest at the ERI, plus

   b) An imputed employer contribution match at $1.40 per dollar of member contribution accumulated with interest at the ERI.

   c) The total of the accumulations in (a) and (b) is converted into an annuity using a life annuity factor that takes into account neither the automatic 50% spousal survivor benefit nor the automatic annual increases.

   Members hired on or after July 1, 2005 no longer receive the Money Purchase Formula under the plan.

3. Minimum Benefit – A benefit for each year of service, up to 30, based on final annual pay, as follows:

Under 3,500	$ 8
$3,500 - $4,500	9
$4,500 - $5,500	10
$5,500 - $6,500	11
$6,500 - $7,500	12
$7,500 - $8,500	13
$8,500 - $9,500	14
Over $9,500	15

Minimum Retirement Annuity – No retiree shall receive a retirement annuity less than $25 per month for each year of service up to 30. The comparable benefit for survivor benefit recipients is $17.50 per month for each year of service up to 30.

Maximum Benefit

80% of high 4-year average compensation for members hired before January 1, 2011, and 80% of final 8-year average for members hired on or after January 1, 2011.

Contribution waivers are applicable to members whose benefits are capped at 80% of final average compensation. Member contributions made once the maximum benefit is achieved are refunded to the member with interest (at the Effective Rate of Interest).

The present value of the benefits for pay increases in excess of 6% during the last four years prior to retirement will be paid by the employer. The employer will pay this amount in a lump sum to the Retirement System.

Benefit Duration

The Normal Retirement benefit is payable for the lifetime of the retired member. If the retiree under the Traditional Plan has a spouse at date of retirement and if that spouse survives the retiree the spouse will receive, upon the death of the retiree, a survivor benefit equal to 50% of the monthly benefit being paid to the retiree as of the date of death. Such benefit will continue for the lifetime of the surviving spouse.

The survivor benefit for members hired on or after January 1, 2011, is equal to 66 2/3% of the monthly benefit being paid to the retiree as of the date of death.

For retirees under the Portable Plan, the normal form of benefit is a single-life annuity for unmarried participants and a reduced 50% joint and survivor benefit for married participants. With spousal consent, a member may designate a contingent annuitant to receive a joint and survivor annuity or elect a single-life annuity or lump sum distribution. Those providing a joint and survivor annuity will have their benefit reduced to cover the cost of the option. The available joint and survivor options are 50%, 75% and 100%. A member may elect the 75% or 100% spousal joint and survivor annuity without consent.

Portable Plan members may also elect to receive their retirement benefit as a lump sum equal to member contributions with an equal employer match (if have at least five years of service), accumulated with interest (at the Effective Rate of Interest that is certified annually by the SURS Board).

Annual Increases

For members hired before January 1, 2011, each January 1 subsequent to retirement date the monthly benefit being paid each retiree shall be increased by 3%. The adjustment for the first January after retirement shall be proportional based on the portion of the year retired.

For members hired on or after January 1, 2011, each January 1 subsequent to retirement date the monthly benefit being paid each retiree shall be increased fifty percent of the Consumer Price Index ("CPI") up to a maximum of 3% applied to the original benefit. The first increase will be granted upon the later of the attainment of age 67 or the first anniversary of the commencement of the annuity.

The historical development of the Annual Increase as determined by the Illinois Department of Insurance for members hired on or after January 1, 2011, can be found in the following table.

Year	CPI-U	½ CPI-U	Annual Increase
2011			3.00%
2012	3.90%	1.95%	1.95%
2013	2.00%	1.00%	1.00%
2014	1.20%	0.60%	0.60%

Early Retirement

Eligibility

For members hired before January 1, 2011, other than police and fire employees, separation from service on or after attainment of age 55 with 8 years of service but not eligible for Normal Retirement. For members hired on or after January 1, 2011, separation from service on or after attainment of age 62 with 10 years of service but not eligible for Normal Retirement.

Benefits

The benefit amounts and all terms of benefit payment are the same as that for Normal Retirement, except that the benefit amounts calculated under the General Formula and the Minimum Formula shall be reduced by .5% for each month by which the retirement date precedes the 60th birthday for members hired before January 1, 2011. The Minimum Formula shall be reduced by .5% for each month by which the retirement date precedes the 67th birthday for members hired on or after January 1, 2011.

Benefits on Death before Retirement

Survivor Benefits

Traditional Plan

Eligibility

Payable to eligible survivor(s) (spouse, child, or dependent parent) for the death of an active member with at least 1.5 years of service or a terminated member with at least 10 years of service. For this purpose, service under the State Employees' Retirement System, the Teachers' Retirement System of the State of Illinois, and the Public School Teachers' Pension Fund of Chicago is recognized.

Benefits

For members hired before January 1, 2011, an annuity to the eligible survivor(s) equal to the greater of:

1. 50% of the benefit accrued to the date of the death of the member, and
2. The lowest applicable benefit from the following list:
   a) $400 per month to a single eligible survivor or $600 per month to two or more eligible survivors
   b) 30% (one survivor), or 60% (two survivors), or 80% (three or more survivors) of the member's final rate of earnings.
   c) If member inactive, 80% of base retirement annuity.

For members hired on or after January1, 2011, an annuity to the survivor(s) equal to 66 2/3% of the benefit accrued to the date of the death of the member.

Benefit Duration

Surviving spouse
May receive a lifetime benefit commencing at the later of the member's date of death and the spouse's attainment of age 50. May be payable at the date of death if a dependent child in their care is also receiving benefits.

Dependent child
Payable to unmarried child(ren) under age 18 (over 18 if disabled prior to age 18), and children age 18-22 if a qualified full-time student.

Dependent parent
Payable until dependency conditions are not met, so long as they were dependent upon the member at the time of their death.

Annual Increases

For members hired before January 1, 2011, each January 1 subsequent to retirement date the monthly benefit being paid each survivor annuity recipient shall be increased by 3%. The adjustment for the first January after retirement shall be proportional.

For members hired on or after January 1, 2011, each January 1 subsequent to retirement date the monthly benefit being paid each survivor annuity recipient shall be increased fifty percent of the Consumer Price Index ("CPI") up to a maximum of 3% of the originally granted survivor annuity. The first increase will be granted upon January 1 following the first anniversary of the commencement of the annuity.

Portable Plan

Eligibility

Payable to an eligible spouse for the death of an active or inactive member with at least 1.5 years of SURS service.

Benefits

An annuity to the eligible spouse equal to 50% of the member's earned retirement benefit after the reductions to pay for the cost of providing the pre-retirement survivor annuity. (Applicable to both Tier 1 and Tier 2 members.)

Benefit Duration

Surviving spouse
May receive a lifetime benefit commencing at the member's earliest retirement age.

Annual Increases

For members hired before January 1, 2011, each January 1 subsequent to retirement date the monthly benefit being paid each survivor annuity recipient shall be increased by 3%. The adjustment for the first January after retirement shall be proportional.

For members hired on or after January 1, 2011, each January 1 subsequent to retirement date the monthly benefit being paid each survivor annuity recipient shall be increased fifty percent of the Consumer Price Index ("CPI") up to a maximum of 3% of the originally granted survivor annuity. The first increase will be granted upon January 1 following the first anniversary of the commencement of the annuity.

Lump Sum Death Benefit

Eligibility

Death of member prior to retirement.

Traditional Plan

Benefit

With Eligible Survivor

- Refund of accumulated member contributions for retirement and annual adjustment at 4.5% interest

Without Eligible Survivor

- Refund of the total accumulated member contribution at 4.5% interest, and
- $5,000 to a dependent beneficiary or $2,500 to a non-dependent beneficiary

Portable Plan

Benefit

With Eligible Spouse

- Refund of total accumulated member contributions at the full Effective Rate of Interest, plus, if the member has at least 1.5 years of service at death, a like amount of imputed employer contributions – less the actuarial equivalent of the Pre-Retirement Survivor Annuity.

Without Eligible Spouse

- Refund of total accumulated member contributions at the full Effective Rate of Interest, plus, if the member has at least 1.5 years of service at death, a like amount of imputed employer contributions.

Benefits on Death After Retirement

In addition to survivor/spouse benefits payable from the System, the following death benefit is payable if a member does not have an eligible survivor/spouse/contingent annuitant:

- The greater of the total accumulated member contributions or $1,000.

Benefits For Disability

Disability Benefit

Eligibility

Disablement after completing 2 years of service. The service requirement is waived if the disablement is accidental.

Disability definition – inability to perform the duties of "own occupation."

Pregnancy and childbirth are, by definition, disablement.

Benefit

50% of the basic compensation paid at date of disablement. This base benefit level is offset dollar for dollar by each of the following:

1. Earnings while disabled in excess of the disability benefit.
2. Other disability insurance either fully or partially employer provided.
3. Worker's compensation benefits.

Duration of Benefit

Benefits become payable on the later of the termination of salary and sick leave, or the 61st day after disablement and continue to the earlier of the following:

1. Recovery or death.
2. Benefits paid equal 50% of total compensation during the period of SURS service.
3. If disablement occurs prior to age 65, the disability benefit may not continue past the August 31 following 70th birthday.
4. If disablement occurs at or after attainment of age 65, completion of 5 years in disablement.

Survivor and death benefits are payable if a member dies while receiving disability benefits.

If, at discontinuance of the disability benefit, the member is eligible for a retirement benefit (based on service, which includes the period of disability and may also include time receiving a disability retirement annuity), the member may retire and receive that benefit. The member may commence the retirement benefit once age and service requirements are met. The early retirement reduction does not apply for members that began first participating prior to January 1, 2011 (Tier 1). The benefit is based on the greatest of 3 formulas (General Formula, Money Purchase, and Minimum Benefit), subject to applicable maximums. Contributions are not made during the disability period. However, accumulated contributions continue to accrue interest.

Annual Increases

Each January 1 subsequent to retirement date the monthly benefit being paid each retiree shall be increased by 3%. The adjustment for the first January after retirement shall be proportional.

Disability Retirement Annuity

Eligibility

Continuing disablement after discontinuation of the disability benefit as a result of reaching the "50% of total earnings" limitation. Disability is defined in accordance with the Social Security disability definition.

Benefit

35% of the compensation being earned at disablement.

Duration of Benefit

Benefits become payable upon discontinuance of the disability benefit and continue to the earlier of the following:

1. Recovery or death
2. Election to receive a retirement benefit

Survivor and death benefits are payable if a member dies while receiving a disability retirement annuity.

Annual Increases

Each January 1 subsequent to retirement date the monthly benefit being paid each retiree shall be increased by 3%. The adjustment for the first January after retirement shall be proportional.

For members hired on or after January 1, 2011, if the member converts to a service retirement annuity (item 2 above), each January 1 subsequent to retirement date the monthly benefit being paid each retiree shall be increased fifty percent of the Consumer Price Index ("CPI") up to a maximum of 3% of the originally granted benefit. The first increase will be granted upon the later of the attainment of age 67 or the first anniversary of the commencement of the annuity.

Benefits for Deferred Members

Eligibility

For members hired before January 1, 2011, separation from employment with at least 5 years of service and separation from employment with at least 10 years of service for members hired on or after January 1, 2011.

Benefit

Benefit as defined for normal retirement purposes, but calculated based on final average compensation and service at date of termination.

Commencement of Benefit

Benefits commence when member reaches the age condition for either normal or early retirement.

Annual Increases

For members hired before January 1, 2011, each January 1 subsequent to retirement date the monthly benefit being paid each retiree shall be increased by 3%. The adjustment for the first January after retirement shall be proportional.

For members hired on or after January 1, 2011, each January 1 subsequent to retirement date the monthly benefit being paid each retiree shall be increased fifty percent of the Consumer Price Index ("CPI") up to a maximum of 3% applied to the original benefit. The first increase will be granted upon the later of the attainment of age 67 or the first anniversary of the commencement of the annuity.

SECTION F

ACTUARIAL COST METHOD AND ACTUARIAL ASSUMPTIONS

Valuation Methods – Calculation of the Total Pension Liability Entry Age Normal Method

Actuarial Cost Method - Normal cost and the allocation of benefit values between service rendered before and after the valuation date were determined using an **Individual Entry-Age Actuarial Cost Method** having the following characteristics:

(i) The annual normal cost for each individual active member, payable from the date of employment to the date of retirement, is sufficient to accumulate the value of the member's benefit at the time of retirement;

(ii) Each annual normal cost is a constant percentage of the member's year by year projected covered pay.

Valuation Methods – Calculation of the Contributions Projected Unit Credit Method

The Projected Unit Credit Method is mandated under Section 15-155 as the funding method to be used for all purposes under SURS.

The concept of this method is that funding of benefits should occur as benefits are accrued (earned) by active members of SURS.

The Normal Cost ("NC") for a fiscal year under this method is the actuarial present value of all benefits expected to be accrued during the fiscal year. The Actuarial Accrued Liability ("AAL") under this method is the actuarial present value of all benefits accrued to the valuation date. To the extent that the assets of the fund are insufficient to cover the AAL, an Unfunded Actuarial Accrued Liability ("UAAL") develops. Under the classical application of this method, the contribution for a year is the NC for that year plus an amount to amortize the UAAL.

Under Section 15-155, the employer/State contribution is determined such that the assets of SURS reach 90% of the AAL by the end of FY 2045.

This contribution is determined as a level percentage of pay for all years except that the contribution rates through 2010 shall grade in equal steps to the desired level contribution rate. *We have assumed the contribution would be based on pensionable (capped) payroll for members hired on or after January 1, 2011 ("Tier 2 members")*. Pensionable pay does not include amounts in excess of the pay cap ($110,631 in 2014, increased by the lesser of 3% and 1/2 of the increase in CPI-U as measured in the preceding 12-month calendar year) that is applicable to members hired on or after January 1, 2011, participating in the defined benefit plans.

Actuarial Assumptions
(Most Adopted Effective with the June 30, 2011, Actuarial Valuation)

Rate of Investment Return. For all purposes under the system the rate of investment return is assumed to be 7.25% per annum beginning with the **June 30, 2014**, valuation. This assumption is net of investment expenses.

Price Inflation (Increase in Consumer Price Index "CPI"). The assumed rate is 2.75% per annum.

Effective Rate of Interest. The actuarial valuation assumed rate credited to member accounts is 7.00% per annum, beginning with the June 30, 2013, actuarial valuation.

Cost of living adjustment "COLA." The assumed rate is 3.00% per annum for members hired before January 1, 2011, based on the benefit provision of 3.00% annual compound increases. The assumed rate is 1.375% for members hired on or after January 1, 2011, based on the benefit provision of increases equal to ½ of the increase in CPI with a maximum increase of 3.00%.

Annual Compensation Increases. Each member's compensation is assumed to increase by 3.75% each year, 2.75% reflecting salary inflation and 1.00% reflecting standard of living increases. That rate is increased for members with less than 34 years of service. The total assumed increase follows:

Service Year	Total Increase
0	12.00%
1	10.00%
2	8.50%
3	7.25%
4	6.50%
5	6.25%
6	6.00%
7	5.75%
8	5.50%
9-13	5.00%
14-19	4.75%
19-33	4.25%
34+	3.75%

Payroll Growth. The assumed rate of total payroll growth is 3.75%.

Covered Payroll is equal to the defined benefit payroll at the valuation date increased by one year of wage inflation at 3.75%.

Actuarial Assumptions (Most Adopted Effective with the June 30, 2011, Actuarial Valuation)

(CONTINUED)

Mortality. The mortality assumption for retirees, beneficiaries and disabilities is based on the RP2000 Combined Mortality table, projected with Scale AA to 2017, sex-distinct, with rates multiplied by 0.80 for males and 0.85 for females. The assumed mortality rates for active members are 85 percent of the postretirement assumption for males and 60 percent for females. *Based on the most recent experience study, the current mortality assumption has an estimated margin of 10% for future mortality improvements.*

Sample Mortality Rates

	Postretirement		**Preretirement**	
Age	**Male**	**Female**	**Male**	**Female**
35	0.0568%	0.0335%	0.0483%	0.0201%
40	0.0753%	0.0464%	0.0640%	0.0278%
45	0.0966%	0.0726%	0.0821%	0.0436%
50	0.1256%	0.1064%	0.1068%	0.0639%
55	0.2093%	0.2015%	0.1779%	0.1209%
60	0.4103%	0.3946%	0.3488%	0.2367%
65	0.8018%	0.7576%	0.6815%	0.4546%
70	1.3740%	1.3068%	1.1679%	0.7841%
75	2.3817%	2.0841%	2.0244%	1.2505%

Future Life Expectancy (years)

	Postretirement		**Preretirement**	
Age	**Male**	**Female**	**Male**	**Female**
35	48.87	50.62	50.37	55.85
40	44.02	45.72	45.50	50.91
45	39.19	40.84	40.65	45.99
50	34.39	36.00	35.83	41.10
55	29.64	31.23	31.04	36.26
60	25.02	26.62	26.39	31.53
65	20.65	22.26	21.95	26.99
70	16.60	18.22	17.81	22.70
75	12.85	14.52	13.96	18.69

Actuarial Assumptions (Most Adopted Effective with the June 30, 2011, Actuarial Valuation)
(CONTINUED)

Disability. A table of disability incidence with rates follows:

Age	Males/Females	Age	Males/Females
20	0.050%	50	0.270%
21	0.053%	51	0.285%
22	0.055%	52	0.300%
23	0.058%	53	0.315%
24	0.060%	54	0.330%
25	0.063%	55	0.345%
26	0.065%	56	0.360%
27	0.068%	57	0.375%
28	0.070%	58	0.390%
29	0.073%	59	0.405%
30	0.075%	60	0.420%
31	0.078%	61	0.435%
32	0.080%	62	0.450%
33	0.083%	63	0.465%
34	0.085%	64	0.480%
35	0.095%	65	0.495%
36	0.105%	66	0.510%
37	0.115%	67	0.525%
38	0.125%	68	0.540%
39	0.135%	69	0.555%
40	0.145%	70	0.570%
41	0.155%	71	0.570%
42	0.165%	72	0.570%
43	0.175%	73	0.570%
44	0.185%	74	0.570%
45	0.195%	75	0.570%
46	0.210%	76	0.570%
47	0.225%	77	0.570%
48	0.240%	78	0.570%
49	0.255%	79	0.570%

Disability rates apply during the retirement eligibility period.

Actuarial Assumptions
(Most Adopted Effective with the June 30, 2011, Actuarial Valuation)
(CONTINUED)

Retirement. Upon eligibility, active members are assumed to retire as follows:

	Members Hired Before January 1, 2011 and Eligible for		Members Hired on or after January 1, 2011 and Eligible for	
Age	Normal Retirement	Early Retirement	Normal Retirement	Early Retirement
Under 50	40.0%	-	-	-
50	38.0	-	-	-
51	38.0	-	-	-
52	38.0	-	-	-
53	38.0	-	-	-
54	34.0	-	-	-
55	32.0	7.0%	-	-
56	26.0	5.0	-	-
57	26.0	4.5	-	-
58	26.0	5.5	-	-
59	26.0	6.0	-	-
60	11.0	-	-	-
61	11.0	-	-	-
62	13.0	-	-	35.0%
63	13.0	-	-	15.0
64	13.0	-	-	15.0
65	17.0	-	-	15.0
66	15.0	-	-	15.0
67	15.0	-	50.0%	-
68	15.0	-	35.0	-
69	15.0	-	30.0	-
70-79	30.0	-	30.0	-
80+	100.0	-	100.0	-

Members that retire are assumed to elect the most valuable option on a present value basis – refund of contributions (or portable lump sum retirement, if applicable) or a retirement annuity.

Actuarial Assumptions
(Most Adopted Effective with the June 30, 2011, Actuarial Valuation)
(CONTINUED)

General Turnover. A table of termination rates based on experience in the 2006-2010 period. The assumption is a table of turnover rates by years of service. A sample of these rates follows:

Years of Service	All Members
0	22.0%
1	22.0
2	16.0
3	14.0
4	12.0
5	10.5
6	9.0
7	7.5
8	6.5
9	6.0
10	5.5
11	4.5
12	4.0
13	3.7
14	3.2
15	3.0
16	2.6
17	2.3
18	2.1
19	2.0
20	1.7
21	1.5
22	1.5
23	1.5
24	1.5
25	1.5
26	1.5
27	1.5
28	1.5
29	1.5

Part time members with less than 3 years of service (all members classified as part time for valuation purposes) are assumed to terminate at the valuation date.

Members that terminate with at least 5 years of service (10 years of service for Tier 2 members) are assumed to elect the most valuable option on a present value basis – refund of contributions or a deferred benefit.

Termination rate for 29 years of service used for Tier 2 members until retirement eligibility is met.

Actuarial Assumptions
(Most Adopted Effective with the June 30, 2011, Actuarial Valuation)
(CONTINUED)

Operational Expenses. The amount of operational expenses for administration incurred in the latest fiscal year are supplied by SURS staff and incorporated in the Normal Cost.

Marital Status. Members are assumed to be married in the following proportions:

Age	Males	Females
20	25 %	40 %
30	70	75
40	80	80
50	85	80
60	85	70

Spouse Age. The female spouse is assumed to be 3 years younger than the male spouse.

Benefit Commencement Age. Inactive members eligible for a deferred benefit are assumed to commence benefits at their earliest normal retirement age. For Tier 1 members this is age 62 with at least 5 years of service, age 60 with at least 8 years of service, or immediately if at least 30 years of service. For Tier 2 members, this is age 67 with 10 or more years of service.

Load on Final Average Salary. No load is assumed to account for higher than assumed pay increases in final years of employment before retirement.

Load on Liabilities for Service Retirees With Non-finalized Benefits. A load of 10% on liabilities for service retirees whose benefits have not been finalized as of the valuation date is assumed to account for finalized benefits that on average are 10% higher than 100% of the preliminary estimated benefit.

Valuation of Inactives. An annuity benefit is estimated based on information provided by staff for Tier 1 inactive members with five or more years of service and Tier 2 members with 10 or more years of service.

Assumption for Missing Data. Members with an unknown gender are assumed to be female. Active and inactive members with an unknown date of birth are assumed to be 30 years old at the valuation. An assumed spouse date of birth is calculated for current service retirees in the traditional plan for purposes of calculating future survivor benefits. The female spouse is assumed to be 3 years younger than the male spouse. 70% of current total male retirees and 80% of current total female retirees in the traditional plan that have not elected a survivor refund are assumed to have a spouse at the valuation date.

Actuarial Assumptions
(Most Adopted Effective with the June 30, 2011, Actuarial Valuation)
(CONTINUED)

Reciprocal Service. Reciprocal service is included for current inactive members for purposes of determining vesting eligibility and eligibility age to commence benefits. The recently updated actuarial assumptions (including retirement and termination rates) were based on SURS service only.

Therefore, reciprocal service was not included for current active members. Reciprocal service will be collected and analyzed in the future and will be considered in the next experience review.

Projection Assumptions. The number of total active members will remain the same as the total number of active members in the current valuation throughout the projection period.

15% of total future hires will elect to participate in the Self Managed Plan.

New entrants have an average age of 37.4 and average capped pay of $37,110 and average uncapped pay of $38,446 (2014 dollars). These values are based on the average age and average pay of current members. The range profile is based on the age at hire and assumed pay at hire (using the actuarial assumptions, inflated to 2014 dollars) of current active members with service between one and four years.

SMP Contribution Assumptions. The projected SMP contributions are equal to 7.6% of SMP payroll, plus estimated SMP expenses minus SMP employer forfeitures. Estimated SMP expenses for FY 2015 are $486,184 and SMP employer forfeitures used to reduce the certified contributions for FY 2016 are $3,451,060. Estimated SMP expenses for FY 2016 and after are assumed to increase by 2.75%. Estimated SMP employer forfeitures used to reduce the certified contributions for FY 2017 and after are assumed to be 7.5% of the gross SMP employer contribution.

SECTION G

CALCULATION OF THE SINGLE DISCOUNT RATE

CALCULATION OF THE SINGLE DISCOUNT RATE

GASB Statement No. 67 includes a specific requirement for the discount rate that is used for the purpose of the measurement of the Total Pension Liability. This rate considers the ability of the fund to meet benefit obligations in the future. To make this determination, employer contributions, employee contributions, benefit payments, expenses and investment returns are projected into the future. The Plan Net Position (assets) in future years can then be determined and compared to its obligation to make benefit payments in those years. As long as assets attributable to current plan members are projected to be on hand in a future year, the assumed valuation discount rate is used. In years where assets are not projected to be sufficient to meet benefit payments, the use of a "risk-free" rate is required, as described in the following paragraph.

The *single discount rate* (SDR) is equivalent to applying these two rates to the benefits that are projected to be paid during the different time periods. The SDR reflects (1) the long-term expected rate of return on pension plan investments (during the period in which the fiduciary net position is projected to be sufficient to pay benefits) and (2) a tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA credit rating (which is published by the Federal Reserve) as of the measurement date (to the extent that the contributions for use with the long-term expected rate of return are not met).

For the purpose of this valuation, the expected rate of return on pension plan investments is 7.250%; the municipal bond rate is 4.290%; and the resulting single discount rate is 7.090%.

The tables in this section provide background for the development of the single discount rate.

The **Projection of Contributions** table shows the development of expected contributions in future years. Total employer contributions are calculated based on the System's funding policy of level percentage of payroll contributions needed to attain a funded status of 90% in 2045 under the Projected Unit Credit cost method. Normal Cost contributions for future hires are not included (nor are their liabilities). Normal cost is calculated under the Entry Age Normal cost method.

Total administrative expenses are assumed to increase by 3.75% per year. Total administrative expenses are allocated between current and future hires by total payroll.

The **Projection of Plan Fiduciary Net Position** table shows the development of expected asset levels in future years.

The **Present Values of Projected Benefit Payments** table shows the development of the Single Discount Rate (SDR). It breaks down the benefit payments into present values for funded and unfunded portions and shows the equivalent total at the SDR.

Single Discount Rate Development
Projection of Contributions from June 30, 2013

Year	Contributions from Current Employees	Service Cost and Expense Contributions	UAL Contributions	Total Contributions	Admin Expenses
0					
1	$ 266,860,094	$ 402,886,111	$ 1,118,850,205	$ 1,788,596,410	$ 13,559,076
2	251,459,765	379,245,943	1,165,068,793	1,795,774,502	12,965,986
3	237,741,132	357,861,162	1,269,332,783	1,864,935,077	12,421,987
4	225,672,707	337,991,644	1,296,268,404	1,859,932,755	11,940,088
5	214,669,350	319,515,361	1,353,275,767	1,887,460,478	11,500,009
6	204,302,427	302,094,498	1,394,427,125	1,900,824,051	11,082,095
7	194,330,618	285,428,740	1,446,460,362	1,926,219,720	10,674,676
8	184,755,726	269,348,796	1,499,433,035	1,953,537,556	10,271,245
9	175,481,274	253,929,457	1,552,917,583	1,982,328,313	9,872,104
10	166,579,425	239,039,384	1,607,361,458	2,012,980,267	9,481,439
11	157,959,318	224,694,671	1,657,816,924	2,040,470,914	9,097,530
12	149,638,865	210,799,073	1,707,812,119	2,068,250,057	8,719,579
13	141,601,807	197,438,699	1,764,362,185	2,103,402,691	8,347,346
14	133,798,736	184,585,859	1,822,362,988	2,140,747,582	7,978,544
15	126,234,985	172,190,876	1,876,919,576	2,175,345,437	7,613,601
16	118,718,115	160,221,990	1,932,980,930	2,211,921,035	7,242,561
17	111,178,766	148,429,774	1,985,674,288	2,245,282,828	6,862,211
18	103,602,230	136,757,131	2,040,524,057	2,280,883,418	6,471,532
19	96,049,910	125,223,302	2,102,709,562	2,323,982,774	6,073,807
20	88,818,342	113,973,716	2,172,600,522	2,375,392,580	5,685,020
21	81,689,623	103,304,724	2,263,099,885	2,448,094,232	5,293,448
22	74,542,158	93,007,058	2,329,177,560	2,496,726,776	4,891,447
23	67,487,207	83,058,613	2,396,182,467	2,546,728,288	4,485,438
24	60,424,941	73,553,241	2,464,237,823	2,598,216,005	4,068,949
25	53,499,376	64,322,585	2,533,755,188	2,651,577,149	3,650,835
26	46,916,170	55,501,042	2,604,928,208	2,707,345,420	3,244,748
27	40,716,937	47,283,512	2,677,457,381	2,765,457,830	2,854,026
28	35,505,195	39,741,662	2,752,414,000	2,827,660,857	2,521,300
29	31,139,790	33,482,369	2,829,138,569	2,893,760,728	2,239,857
30	27,402,137	28,317,199	2,907,254,390	2,962,973,726	1,996,612
31	24,090,838	24,010,874	2,986,374,632	3,034,476,344	1,778,650
32	21,058,762	20,347,308	3,066,375,512	3,107,781,582	1,576,026
33	18,176,807	17,191,589	383,622,102	418,990,498	1,379,635
34	15,537,112	14,363,233	386,522,856	416,423,200	1,196,535
35	13,098,054	11,901,020	389,091,511	414,090,585	1,023,985
36	10,819,450	9,756,946	391,888,513	412,464,909	859,168
37	8,747,553	7,862,944	394,895,942	411,506,439	705,979
38	6,877,266	6,232,875	398,249,458	411,359,599	564,413
39	5,316,801	4,807,461	401,946,244	412,070,506	443,942
40	4,038,210	3,648,298	406,068,788	413,755,296	343,221
41	2,984,903	2,731,553	410,649,569	416,366,026	258,366
42	2,148,449	1,995,023	415,684,097	419,827,569	189,467
43	1,501,332	1,422,053	421,128,737	424,052,122	134,944
44	1,029,183	983,212	426,977,875	428,990,269	94,317
45	698,906	665,263	433,199,000	434,563,170	65,324
46	467,365	447,077	439,794,511	440,708,953	44,565
47	309,481	294,120	446,741,389	447,344,990	30,115
48	204,204	189,999	454,001,833	454,396,036	20,283
49	133,769	121,199	461,561,544	461,816,512	13,565
50	86,226	76,144	469,399,201	469,561,571	8,929

Year 1 is the year beginning June 30, 2013, and ending June 30, 2014.

Single Discount Rate Development
Projection of Plan Fiduciary Net Position from June 30, 2013

Year	Projected Beginning Plan Net Position	Projected Total Contributions	Projected Benefit Payments	Projected Administrative Expenses	Projected Investment Earnings at 7.25%
	(a)	(b)	(c)	(d)	(e)
1	$ 15,037,101,827	$ 1,788,596,410	$ 2,113,337,244	$ 13,559,076	$ 1,078,141,074
2	15,776,942,991	1,795,774,502	2,184,069,855	12,965,986	1,129,537,140
3	16,505,218,791	1,864,935,077	2,284,943,233	12,421,987	1,181,227,035
4	17,254,015,684	1,859,932,755	2,391,527,079	11,940,088	1,231,557,747
5	17,942,039,018	1,887,460,478	2,501,985,431	11,500,009	1,278,501,475
6	18,594,515,531	1,900,824,051	2,615,028,902	11,082,095	1,322,270,731
7	19,191,499,316	1,926,219,720	2,730,915,176	10,674,676	1,362,343,674
8	19,738,472,859	1,953,537,556	2,840,866,887	10,271,245	1,399,070,557
9	20,239,942,840	1,982,328,313	2,950,454,498	9,872,104	1,432,563,705
10	20,694,508,255	2,012,980,267	3,061,009,244	9,481,439	1,462,687,813
11	21,099,685,652	2,040,470,914	3,171,554,089	9,097,530	1,489,118,809
12	21,448,623,756	2,068,250,057	3,278,263,330	8,719,579	1,511,619,127
13	21,741,510,030	2,103,402,691	3,379,924,533	8,347,346	1,530,497,886
14	21,987,138,728	2,140,747,582	3,474,923,612	7,978,544	1,546,265,704
15	22,191,249,859	2,175,345,437	3,565,501,435	7,613,601	1,559,082,990
16	22,352,563,250	2,211,921,035	3,600,027,299	7,242,561	1,570,864,428
17	22,528,078,854	2,245,282,828	3,679,849,948	6,862,211	1,581,948,117
18	22,668,597,641	2,280,883,418	3,755,111,893	6,471,532	1,590,737,075
19	22,778,634,708	2,323,982,774	3,822,604,053	6,073,807	1,597,860,159
20	22,871,799,781	2,375,392,580	3,881,971,376	5,685,020	1,604,345,061
21	22,963,881,026	2,448,094,232	3,932,863,015	5,293,448	1,611,811,677
22	23,085,630,473	2,496,726,776	3,979,052,300	4,891,447	1,620,739,848
23	23,219,153,350	2,546,728,288	4,018,556,510	4,485,438	1,630,808,587
24	23,373,648,276	2,598,216,005	4,050,363,568	4,068,949	1,642,725,244
25	23,560,157,008	2,651,577,149	4,073,401,689	3,650,835	1,657,341,996
26	23,792,023,629	2,707,345,420	4,085,735,029	3,244,748	1,675,713,757
27	24,086,103,029	2,765,457,830	4,087,731,467	2,854,026	1,699,047,042
28	24,460,022,408	2,827,660,857	4,073,605,646	2,521,300	1,728,886,557
29	24,940,442,877	2,893,760,728	4,043,362,035	2,239,857	1,767,158,411
30	25,555,760,124	2,962,973,726	4,000,186,766	1,996,612	1,815,780,369
31	26,332,330,841	3,034,476,344	3,946,092,683	1,778,650	1,876,562,730
32	27,295,498,582	3,107,781,582	3,882,238,144	1,576,026	1,951,284,658
33	28,470,750,652	418,990,498	3,810,141,859	1,379,635	1,943,301,856
34	27,021,521,513	416,423,200	3,730,190,288	1,196,535	1,840,995,365
35	25,547,553,254	414,090,585	3,643,458,204	1,023,985	1,737,144,763
36	24,054,306,413	412,464,909	3,551,761,946	859,168	1,632,098,169
37	22,546,248,377	411,506,439	3,455,212,460	705,979	1,526,173,964
38	21,028,010,340	411,359,599	3,354,857,620	564,413	1,419,675,732
39	19,503,623,638	412,070,506	3,250,279,138	443,942	1,312,911,948
40	17,977,883,013	413,755,296	3,141,428,226	343,221	1,206,236,153
41	16,456,103,014	416,366,026	3,029,148,336	258,366	1,100,002,042
42	14,943,064,380	419,827,569	2,913,895,279	189,467	994,537,305
43	13,443,344,509	424,052,122	2,795,278,894	134,944	890,184,630
44	11,962,167,423	428,990,269	2,673,598,080	94,317	787,310,368
45	10,504,775,663	434,563,170	2,549,038,929	65,324	686,285,250
46	9,076,519,831	440,708,953	2,422,649,466	44,565	587,457,785
47	7,681,992,537	447,344,990	2,295,349,877	30,115	491,125,290
48	6,325,082,825	454,396,036	2,167,714,449	20,283	397,546,647
49	5,009,290,776	461,816,512	2,040,299,396	13,565	306,954,232
50	3,737,748,559	469,561,571	1,913,553,576	8,929	219,557,581

Year 1 is the year beginning June 30, 2013, and ending June 30, 2014.

Single Discount Rate Development
Present Values of Projected Benefits from June 30, 2013

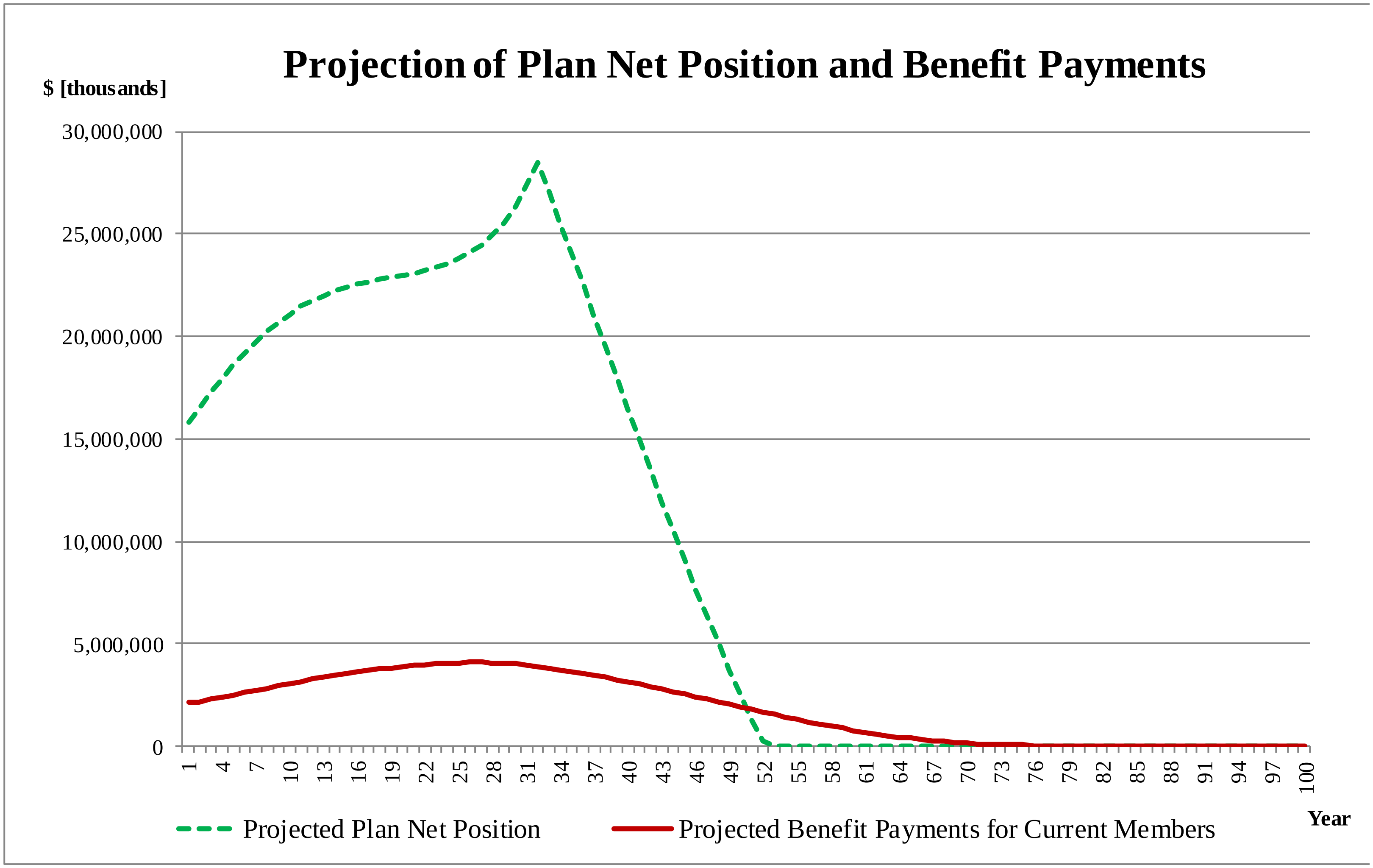
Year	Projected Beginning Plan Net Position	Projected Benefit Payments	Funded Portion of Benefit Payments	Unfunded Portion of Benefit Payments	Present Value of Funded Benefit Payments using Expected Return Rate (v)	Present Value of Unfunded Benefit Payments using Municipal Bond Rate (vf)
(a)	(b)	(c)	(d)	(e)	(f)=(d)*v^((a)-.5)	(g)=(e)*vf ^((a)-.5)
1	$ 15,037,101,827	$ 2,126,896,320	$ 2,126,896,320	$ -	$ 2,053,750,440	$ -
2	15,776,942,991	2,197,035,842	2,197,035,842	-	1,978,067,879	-
3	16,505,218,791	2,297,365,219	2,297,365,219	-	1,928,576,141	-
4	17,254,015,684	2,403,467,167	2,403,467,167	-	1,881,254,886	-
5	17,942,039,018	2,513,485,440	2,513,485,440	-	1,834,376,677	-
6	18,594,515,531	2,626,110,997	2,626,110,997	-	1,787,013,871	-
7	19,191,499,316	2,741,589,852	2,741,589,852	-	1,739,482,358	-
8	19,738,472,859	2,851,138,132	2,851,138,132	-	1,686,702,552	-
9	20,239,942,840	2,960,326,602	2,960,326,602	-	1,632,911,210	-
10	20,694,508,255	3,070,490,683	3,070,490,683	-	1,579,186,511	-
11	21,099,685,652	3,180,651,619	3,180,651,619	-	1,525,261,977	-
12	21,448,623,756	3,286,982,909	3,286,982,909	-	1,469,699,296	-
13	21,741,510,030	3,388,271,879	3,388,271,879	-	1,412,576,545	-
14	21,987,138,728	3,482,902,156	3,482,902,156	-	1,353,872,330	-
15	22,191,249,859	3,573,115,036	3,573,115,036	-	1,295,048,807	-
16	22,352,563,250	3,607,269,860	3,607,269,860	-	1,219,047,055	-
17	22,528,078,854	3,686,712,159	3,686,712,159	-	1,161,672,657	-
18	22,668,597,641	3,761,583,424	3,761,583,424	-	1,105,141,615	-
19	22,778,634,708	3,828,677,860	3,828,677,860	-	1,048,814,689	-
20	22,871,799,781	3,887,656,396	3,887,656,396	-	992,980,013	-
21	22,963,881,026	3,938,156,463	3,938,156,463	-	937,882,212	-
22	23,085,630,473	3,983,943,747	3,983,943,747	-	884,649,485	-
23	23,219,153,350	4,023,041,948	4,023,041,948	-	832,943,017	-
24	23,373,648,276	4,054,432,518	4,054,432,518	-	782,696,706	-
25	23,560,157,008	4,077,052,524	4,077,052,524	-	733,858,680	-
26	23,792,023,629	4,088,979,777	4,088,979,777	-	686,252,265	-
27	24,086,103,029	4,090,585,494	4,090,585,494	-	640,113,522	-
28	24,460,022,408	4,076,126,946	4,076,126,946	-	594,732,850	-
29	24,940,442,877	4,045,601,892	4,045,601,892	-	550,376,737	-
30	25,555,760,124	4,002,183,379	4,002,183,379	-	507,664,282	-
31	26,332,330,841	3,947,871,333	3,947,871,333	-	466,923,050	-
32	27,295,498,582	3,883,814,170	3,883,814,170	-	428,295,454	-
33	28,470,750,652	3,811,521,493	3,811,521,493	-	391,909,775	-
34	27,021,521,513	3,731,386,823	3,731,386,823	-	357,734,392	-
35	25,547,553,254	3,644,482,189	3,644,482,189	-	325,783,401	-
36	24,054,306,413	3,552,621,114	3,552,621,114	-	296,104,299	-
37	22,546,248,377	3,455,918,438	3,455,918,438	-	268,572,785	-
38	21,028,010,340	3,355,422,033	3,355,422,033	-	243,135,497	-
39	19,503,623,638	3,250,723,080	3,250,723,080	-	219,626,071	-
40	17,977,883,013	3,141,771,447	3,141,771,447	-	197,916,137	-
41	16,456,103,014	3,029,406,702	3,029,406,702	-	177,937,259	-
42	14,943,064,380	2,914,084,746	2,914,084,746	-	159,593,130	-
43	13,443,344,509	2,795,413,838	2,795,413,838	-	142,744,973	-
44	11,962,167,423	2,673,692,397	2,673,692,397	-	127,300,132	-
45	10,504,775,663	2,549,104,253	2,549,104,253	-	113,163,849	-
46	9,076,519,831	2,422,694,032	2,422,694,032	-	100,281,629	-
47	7,681,992,537	2,295,379,992	2,295,379,992	-	88,589,062	-
48	6,325,082,825	2,167,734,732	2,167,734,732	-	78,007,138	-
49	5,009,290,776	2,040,312,961	2,040,312,961	-	68,458,550	-
50	3,737,748,559	1,913,562,506	1,913,562,506	-	59,865,451	-

Year 1 is the year beginning June 30, 2013, and ending June 30, 2014.

Single Discount Rate Development
PVs of Projected Benefits from June 30, 2013 (continued)

Year	Projected Beginning Plan Net Position	Projected Benefit Payments	Funded Portion of Benefit Payments	Unfunded Portion of Benefit Payments	Present Value of Funded Benefit Payments using Expected Return Rate (v)	Present Value of Unfunded Benefit Payments using Municipal Bond Rate (vf)
(a)	(b)	(c)	(d)	(e)	(f)=(d)*v^((a)-.5)	(g)=(e)*vf ^((a)-.5)
51	$ 2,513,305,207	$ 1,787,889,377	$ 1,787,889,377	$ -	$ 52,152,718	$ -
52	1,338,561,153	1,663,686,983	1,338,561,153	325,125,830	36,406,357	37,372,668
53	-	1,541,335,408	-	1,541,335,408	-	169,885,813
54	-	1,421,267,035	-	1,421,267,035	-	150,207,969
55	-	1,303,936,276	-	1,303,936,276	-	132,138,993
56	-	1,189,830,567	-	1,189,830,567	-	115,615,771
57	-	1,079,445,846	-	1,079,445,846	-	100,575,025
58	-	973,280,140	-	973,280,140	-	86,952,982
59	-	871,838,635	-	871,838,635	-	74,686,149
60	-	775,591,896	-	775,591,896	-	63,708,085
61	-	684,988,350	-	684,988,350	-	53,951,286
62	-	600,399,307	-	600,399,307	-	45,343,614
63	-	522,128,875	-	522,128,875	-	37,810,376
64	-	450,380,549	-	450,380,549	-	31,273,050
65	-	385,265,542	-	385,265,542	-	25,651,225
66	-	326,776,212	-	326,776,212	-	20,861,989
67	-	274,795,568	-	274,795,568	-	16,821,795
68	-	229,093,337	-	229,093,337	-	13,447,217
69	-	189,341,635	-	189,341,635	-	10,656,716
70	-	155,139,498	-	155,139,498	-	8,372,535
71	-	126,021,894	-	126,021,894	-	6,521,357
72	-	101,491,670	-	101,491,670	-	5,035,930
73	-	81,035,297	-	81,035,297	-	3,855,501
74	-	64,143,528	-	64,143,528	-	2,926,286
75	-	50,331,149	-	50,331,149	-	2,201,700
76	-	39,143,124	-	39,143,124	-	1,641,852
77	-	30,166,439	-	30,166,439	-	1,213,277
78	-	23,032,018	-	23,032,018	-	888,230
79	-	17,417,197	-	17,417,197	-	644,064
80	-	13,043,231	-	13,043,231	-	462,480
81	-	9,669,347	-	9,669,347	-	328,747
82	-	7,094,034	-	7,094,034	-	231,268
83	-	5,149,720	-	5,149,720	-	160,977
84	-	3,698,368	-	3,698,368	-	110,853
85	-	2,626,548	-	2,626,548	-	75,488
86	-	1,844,155	-	1,844,155	-	50,822
87	-	1,278,264	-	1,278,264	-	33,778
88	-	874,458	-	874,458	-	22,157
89	-	589,506	-	589,506	-	14,322
90	-	390,018	-	390,018	-	9,086
91	-	252,965	-	252,965	-	5,651
92	-	160,472	-	160,472	-	3,437
93	-	99,283	-	99,283	-	2,039
94	-	59,389	-	59,389	-	1,170
95	-	34,602	-	34,602	-	653
96	-	19,663	-	19,663	-	356
97	-	10,843	-	10,843	-	188
98	-	5,732	-	5,732	-	95
99	-	2,253	-	2,253	-	36
100	-	-	-	-	-	-
				Totals	$ 42,237,108,374	$ 1,221,775,059

Year 1 is the year beginning June 30, 2013, and ending June 30, 2014.



Year 1 is the year beginning June 30, 2013, and ending June 30, 2014.

SECTION H

GLOSSARY OF TERMS

GLOSSARY OF TERMS

Accrued Service	Service credited under the system which was rendered before the date of the actuarial valuation.
Actuarial Accrued Liability (AAL)	The AAL is the difference between the actuarial present value of all benefits and the actuarial value of future normal costs. The definition comes from the fundamental equation of funding which states that the present value of all benefits is the sum of the Actuarial Accrued Liability and the present value of future normal costs. The AAL may also be referred to as "accrued liability" or "actuarial liability."
Actuarial Assumptions	These assumptions are estimates of future experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and compensation increases. Actuarial assumptions are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (compensation increases, payroll growth, inflation and investment return) consist of an underlying real rate of return plus an assumption for a long-term average rate of inflation.
Actuarial Cost Method	A mathematical budgeting procedure for allocating the dollar amount of the actuarial present value of the pension trust benefits between future normal cost and actuarial accrued liability. The actuarial cost method may also be referred to as the actuarial funding method.
Actuarial Equivalent	A single amount or series of amounts of equal actuarial value to another single amount or series of amounts, computed on the basis of appropriate actuarial assumptions.
Actuarial Gain (Loss)	The difference in liabilities between actual experience and expected experience during the period between two actuarial valuations is the gain (loss) on the accrued liabilities.
Actuarial Present Value (APV)	The amount of funds currently required to provide a payment or series of payments in the future. The present value is determined by discounting future payments at predetermined rates of interest and probabilities of payment.
Actuarial Valuation	The actuarial valuation report determines, as of the actuarial valuation date, the service cost, total pension liability, and related actuarial present value of projected benefit payments for pensions.
Actuarial Valuation Date	The date as of which an actuarial valuation is performed.

GLOSSARY OF TERMS

Actuarially Determined Contribution (ADC) or Annual Required Contribution (ARC) A calculated contribution into a defined benefit pension plan for the reporting period, most often determined based on the funding policy of the plan. Typically the Actuarially Determined Contribution has a normal cost payment and an amortization payment.

Amortization Method The method used to determine the periodic amortization payment may be a level dollar amount, or a level percent of pay amount. The period will typically be expressed in years, and the method will either be "open" (meaning, reset each year) or "closed" (the number of years remaining will decline each year.

Amortization Payment The amortization payment is the periodic payment required to pay off an interest-discounted amount with payments of interest and principal.

Cost-of-Living Adjustments Postemployment benefit changes intended to adjust benefit payments for the effects of inflation.

Cost-Sharing Multiple-Employer Defined Benefit Pension Plan (cost-sharing pension plan) A multiple-employer defined benefit pension plan in which the pension obligations to the employees of more than one employer are pooled and pension plan assets can be used to pay the benefits of the employees of any employer that provides pensions through the pension plan.

Covered-Employee Payroll The payroll of covered employees, which is typically only the pensionable pay and does not include pay above any pay cap.

Deferred Inflows and Outflows The deferred inflows and outflows of pension resources are amounts used under GASB Statement No. 68 in developing the annual pension expense. Deferred inflows and outflows arise with differences between expected and actual experiences; changes of assumptions. The portion of these amounts not included in pension expense should be included in the deferred inflows or outflows of resources.

Deferred Retirement Option Program (DROP) A program that permits a plan member to elect a calculation of benefit payments based on service credits and salary, as applicable, as of the DROP entry date. The plan member continues to provide service to the employer and is paid for the service by the employer after the DROP entry date; however, the pensions that would have been paid to the plan member are credited to an individual member account within the defined benefit pension plan until the end of the DROP period. Other variations for DROP exist and will be more fully detailed in the plan provision section of the valuation report.

GLOSSARY OF TERMS

Discount Rate

For GASB purposes, the discount rate is the single rate of return that results in the present value of all projected benefit payments to be equal to the sum of the funded and unfunded projected benefit payments, specifically:

1. The benefit payments to be made while the pension plans' fiduciary net position is projected to be greater than the benefit payments that are projected to be made in the period and;
2. The present value of the benefit payments not in (1) above, discounted using the municipal bond rate.

Entry Age Actuarial Cost Method (EAN)

The EAN is a funding method for allocating the costs of the plan between the normal cost and the accrued liability. The actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated on a level basis (either level dollar or level percent of pay) over the earnings or service of the individual between entry age and assumed exit ages(s). The portion of the actuarial present value allocated to a valuation year is the normal cost. The portion of this actuarial present value not provided for at a valuation date by the actuarial present value of future normal costs is the actuarial accrued liability. The sum of the accrued liability plus the present value of all future normal costs is the present value of all benefits.

Fiduciary Net Position

The fiduciary net position is the value of the assets of the trust.

GASB

The Governmental Accounting Standards Board is an organization that exists in order to promulgate accounting standards for governmental entities.

Long-Term Expected Rate of Return

The long-term rate of return is the expected return to be earned over the entire trust portfolio based on the asset allocation of the portfolio.

Money-Weighted Rate of Return

The money-weighted rate of return is a method of calculating the returns that adjusts for the changing amounts actually invested. For purposes of GASB Statement No. 67, money-weighted rate of return is calculated as the internal rate of return on pension plan investments, net of pension plan investment expense.

Multiple-Employer Defined Benefit Pension Plan

A multiple-employer plan is a defined benefit pension plan that is used to provide pensions to the employees of more than one employer.

Municipal Bond Rate

The Municipal Bond Rate is the discount rate to be used for those benefit payments that occur after the assets of the trust have been depleted.

GLOSSARY OF TERMS

Net Pension Liability (NPL)	The NPL is the liability of employers and non-employer contribution entities to plan members for benefits provided through a defined benefit pension plan.
Non-employer Contribution Entities	Non-employer contribution entities are entities that make contributions to a pension plan that is used to provide pensions to the employees of other entities. For purposes of the GASB Accounting statement plan members are not considered non-employer contribution entities.
Normal Cost	The actuarial present value of the pension trust benefits allocated to the current year by the actuarial cost method.
Other Postemployment Benefits (OPEB)	All postemployment benefits other than retirement income (such as death benefits, life insurance, disability, and long-term care) that are provided separately from a pension plan, as well as postemployment healthcare benefits regardless of the manner in which they are provided. Other post-employment benefits do not include termination benefits.
Real Rate of Return	The real rate of return is the rate of return on an investment after adjustment to eliminate inflation.
Service Cost	The service cost is the portion of the actuarial present value of projected benefit payments that is attributed to a valuation year.
Total Pension Expense	The total pension expense is the sum of the following items that are recognized at the end of the employer's fiscal year: 1. Service Cost 2. Interest on the Total Pension Liability 3. Current-Period Benefit Changes 4. Employee Contributions (made negative for addition here) 5. Projected Earnings on Plan Investments (made negative for addition here) 6. Pension Plan Administrative Expense 7. Other Changes in Plan Fiduciary Net Position 8. Recognition of Outflow (Inflow) of Resources due to Liabilities 9. Recognition of Outflow (Inflow) of Resources due to Assets
Total Pension Liability (TPL)	The TPL is the portion of the actuarial present value of projected benefit payments that is attributed to past periods of member service.
Unfunded Actuarial Accrued Liability (UAAL)	The UAAL is the difference between actuarial accrued liability and valuation assets.

GLOSSARY OF TERMS

Valuation Assets	The valuation assets are the assets used in determining the unfunded liability of the plan. For purposes of the GASB Statement No. 67, the valuation asset is equal to the market value of assets.