Gabriel Roeder Smith & Company
Consultants & Actuaries

JUDGES' RETIREMENT SYSTEM OF ILLINOIS

GASB STATEMENT NO. 67 PLAN REPORTING AND ACCOUNTING SCHEDULES

JUNE 30, 2014

GRS
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October 30, 2014

Board of Trustees
Judges' Retirement System of Illinois
Springfield, IL

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 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 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 No. 67 may produce significantly different results. This report may be provided to parties other than the Judges' Retirement System of Illinois ("JRS") only in its entirety and only with the permission of JRS.

This report is based upon information, furnished to us by JRS, 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 with this report is accurate and fairly represents the actuarial position of the Judges' Retirement System of Illinois. 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. Alex Rivera and Paul T. Wood 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.

Respectfully submitted,

Gabriel, Roeder, Smith & Company

Alex Rivera

Alex Rivera, FSA, EA, MAAA
Senior Consultant

Paul T Wood

Paul T. Wood, ASA, MAAA
Consultant

Auditor's Note – This information is subject to review by the System's auditor. Please let us know if the System's auditor recommends any changes.

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SECTION A

EXECUTIVE SUMMARY

Executive Summary
as of June 30, 2014

		2014
Actuarial Valuation Date		June 30, 2014
Pension Plan's Fiscal Year Ending Date (Measurement Date & Reporting Date)		June 30, 2014
Membership		
Number of		
- Retirees and Beneficiaries		1,100
- Inactive, Nonretired Members		19
- Active Members		951
- Total		2,070
Covered Payroll	$	172,846,373
Net Pension Liability		
Total Pension Liability	$	2,231,263,870
Plan Fiduciary Net Position		776,013,028
Net Pension Liability	$	1,455,250,842
Plan Fiduciary Net Position as a Percentage of Total Pension Liability		34.78%
Net Pension Liability as a Percentage of Covered Payroll		841.93%
Development of the Single Discount Rate		
Single Discount Rate		6.89%
Long-Term Expected Rate of Return		7.00%
Long-Term Municipal Bond Rate		4.29%
Last year ending June 30 in the 2015 to 2114 projection period for which projected benefit payments are fully funded		2057

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.

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 the plan's 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, 2014, 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) 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 7.00%; the municipal bond rate is 4.29% (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 6.89%.

Effective Date and Transition

GASB Statement No. 67 is effective for a pension plan's fiscal years beginning after June 15, 2013; however, earlier application is encouraged by the GASB. For JRS, 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	$	32,055,593
Receivables		
Contributions:		
Participants	$	1,895
Employer - GRF Fund		5,283,670
Other Accounts		201,243
Total Receivables	$	5,486,808
Investments		
Held in the Illinois State Board of Investment		
Commingled Fund at fair value	$	738,704,938
Securities lending collateral with State Treasurer		13,475,000
Total Investments	$	752,179,938
Property and equipment, net of accumulated depreciation	$	8,389
Total Assets	$	789,730,728
Liabilities		
Payables		
Benefits payable	$	-
Refunds payable		158,990
Adminstrative expenses payable		83,710
Participants' deferred service credit accounts		-
Due to the State of Illinois		-
Securities lending collateral with State Treasurer		13,475,000
Total Liabilities	$	13,717,700
Net Position Restricted for Pensions	$	776,013,028

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

		2014
Additions		
Contributions		
Participants	$	15,918,732
Employing state agencies and appropriations		126,815,881
Total Contributions	$	142,734,613
Investment Income		
Net investments income	$	18,263,906
Interest earned on cash balances		105,612
Net appreciation in fair value of investments		91,689,469
Net Investment Income	$	110,058,987
Total Additions	$	252,793,600
Deductions		
Benefits		
Retirement annuities	$	97,116,965
Survivors' annuities		21,474,000
Disability benefits		-
Lump-sum benefits		-
Total Benefits	$	118,590,965
Refunds		687,923
Administrative		831,652
Total Deductions	$	120,110,540
Net Increase in Net Position	$	132,683,060
Net Position Restricted for Pensions		
Beginning of Year	$	643,329,968
End of Year	$	776,013,028

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 Including Pension Plan Administrative Expense	$ 57,138,961
Interest on the Total Pension Liability	145,993,903
Benefit Changes	-
Difference between Expected and Actual Experience	4,490,010
Assumption Changes	-
Benefit Payments	(118,590,965)
Refunds	(687,923)
Pension Plan Administrative Expense	(831,652)
Net Change in Total Pension Liability	87,512,334
Total Pension Liability - Beginning	2,143,751,536
Total Pension Liability - Ending (a)	$ 2,231,263,870
Plan Fiduciary Net Position	
Employer Contributions	$ 126,815,881
Employee Contributions	15,918,732
Pension Plan Net Investment Income	110,058,987
Benefit Payments	(118,590,965)
Refunds	(687,923)
Pension Plan Administrative Expense	(831,652)
Other	-
Net Change in Plan Fiduciary Net Position	132,683,060
Plan Fiduciary Net Position - Beginning	643,329,968
Plan Fiduciary Net Position - Ending (b)	$ 776,013,028
Net Pension Liability - Ending (a) - (b)	1,455,250,842
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	34.78 %
Covered Employee Payroll	$ 172,846,373
Net Pension Liability as a Percentage of Covered Employee Payroll	841.93 %

10 fiscal years will be built prospectively.

Please see the following page for additional notes relating to the Schedule of Changes in Net Pension Liability and Related Ratios.

Schedules of Required Supplementary Information

Additional Notes to the Schedule of Changes in Net Pension Liability and Related Ratios Multiyear

Beginning of year Total Pension Liability for fiscal year 2014 uses a single discount rate of 6.91%. The single discount rate of 6.91% was based on a long-term expected rate of return on pension plan investments of 7.00% used in the June 30, 2013, funding valuation and a long-term municipal bond rate as of June 27, 2013, of 4.63%.

End of year Total Pension Liability for fiscal year 2014 uses a single discount rate of 6.89%. The single discount rate of 6.89% was based on a long-term expected rate of return on pension plan investments of 7.00% used in the June 30, 2014, funding valuation and a long-term municipal bond rate as of June 26, 2014, of 4.29%.

Difference between actual and expected experience includes impact of the change in the single discount rate from 6.91% to 6.89% based on the long-term expected rate of return on pension plan investments of 7.00% used in the June 30, 2014, funding valuation and the long-term municipal bond rate of 4.63% as of June 27, 2013, and 4.29% as of June 26, 2014, respectively. This change was measured using the actuarial assumptions used in the June 30, 2014, funding valuation.

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	$ 2,231,263,870	$ 776,013,028	$ 1,455,250,842	34.78%	$ 172,846,373	841.93%

** Covered payroll shown is the amount in force as of the actuarial valuation date and likely differs from actual payroll paid during the fiscal year.*

10 fiscal years will be built prospectively.

Schedule of Contributions Multiyear
Last 10 Fiscal Years

Fiscal Year	Actuarially Determined Contribution*	Actual Contribution**	Contribution Deficiency (Excess)	Covered Payroll***	Actual Contribution as a % of Covered Payroll	Statutory Contribution	Statutory Contribution Deficiency/(Excess)
7/1/04 - 6/30/05	$ 57,749,460	$ 32,043,009	$ 25,706,451	$ 128,700,000	24.90%	$ 31,991,000	$ 52,009
7/1/05 - 6/30/06	62,927,993	29,337,911	33,590,082	135,400,000	21.67%	29,189,400	148,511
7/1/06 - 6/30/07	73,371,653	35,236,800	38,134,853	142,900,000	24.66%	35,236,800	-
7/1/07 - 6/30/08	75,134,070	46,977,961	28,156,109	143,700,000	32.69%	46,872,500	105,461
7/1/08 - 6/30/09	78,386,597	59,983,000	18,403,597	155,645,000	38.54%	59,983,000	-
7/1/09 - 6/30/10	86,916,418	78,509,810	8,406,608	161,164,000	48.71%	78,832,000	(322,190)
7/1/10 - 6/30/11	95,490,182	62,694,460	32,795,722	169,155,000	37.06%	62,377,000	317,460
7/1/11 - 6/30/12	110,923,357	63,644,099	47,279,258	171,498,000	37.11%	63,628,000	16,099
7/1/12 - 6/30/13	125,576,795	88,239,564	37,337,231	177,006,000	49.85%	88,210,000	29,564
7/1/13 - 6/30/14	125,061,595	126,815,881	(1,754,286)	172,846,373	73.37%	126,808,000	7,881

**The JRS Statutory Funding Policy does not conform to Actuarial Standards of Practice, therefore, the actuarially determined contribution is equal to the normal cost plus an amount to amortize the unfunded actuarial accrued liability as a level percentage of total payroll. The amortization period for fiscal years prior to 2007 is 40 years and the amortization period for fiscal years 2007 and beyond is 30 years.*

*** The actual contributions for FYE 6/30/2005 through 6/30/2012 were obtained from the comprehensive annual financial report. The actual contribution for FYE 6/30/2013 through 6/30/2014 was provided by the System.*

**** Covered payroll shown is the amount in force as of the actuarial valuation date and likely differs from actual payroll paid during the fiscal year.*

Notes to Schedule of Contributions

Valuation Date:	June 30, 2014
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 the contributions will be made.

Methods and Assumptions Used to Determine Contribution Rates as of the Valuation Date:

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	3.00 percent
Salary Increases	A salary increase assumption of 3.75 percent per annum, compounded annually, was used. This 3.75 percent salary increase assumption includes an inflation component of 3.00 percent per annum, a productivity component of 0.60 percent per annum, and a merit/promotion component of 0.15 percent per annum. Postretirement benefit increases of 3.00 percent, compounded, for Tier 1 and 3.00 percent or the annual change in the Consumer Price Index, whichever is less, compounded, for Tier 2.
Investment Rate of Return	7.00 percent as of the June 30, 2014, valuation.
Retirement Age	Age-based table of rates that are specific to the type of eligibility condition.
Mortality	RP-2000 Combined Healthy Mortality Table, sex distinct, projected to 2015 (static table) setback 3 years for males and 2 years for females.

Other Information:

Notes	The statutory contribution for fiscal year ending June 30, 2014, was determined based on the results of the June 30, 2012, valuation. Similarly, the statutory contributions for fiscal years ending June 30, 2015 and June 30, 2016, were determined based on the results of the valuations performed two years prior. All other contributions are projected using current assumptions.

Methods and Assumptions Used for Accounting Purposes as of the Valuation Date:

Actuarial Cost Method	Entry Age Normal
Discount Rate	6.91 percent as of June 30, 2013, valuation. 6.89 percent as of June 30, 2014, valuation.

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 JRS.

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 based on information provided by the Illinois State Board of Investments (ISBI) in conjunction with its investment consultant, Marquette Associates, Inc. ISBI and Marquette Associates, Inc. provided the simulated average 10-year annualized geometric return for each major asset class. These returns are combined to produce the long-term expected rate of return by weighting the expected future rates of return by the target asset allocation percentage. For each major asset class that is included in the pension plan's target asset allocation as of June 30, 2014, the 10-year simulated real rates of return are summarized in the following table:

Asset Allocation

Asset Class	Target Allocation	10-Year Simulated Real Rate of Return
Domestic Equity	30.00%	5.69%
International Equity	20.00%	6.23%
Fixed Income Plus Cash	20.00%	1.62%
Private Equity	5.00%	10.10%
Real Estate	10.00%	5.50%
InfraStructure	5.00%	6.00%
Hedge Funds	10.00%	4.00%
Total	100.00%	5.03%

Single Discount Rate

A single discount rate of 6.89% 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 7.00% and a municipal bond rate of 4.29%. The projection of cash flows used to determine this single discount rate 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 difference between actuarially determined contribution rates and the member rate. Based on these assumptions, the pension plan's fiduciary net position and future contributions were sufficient to finance the benefit payments through the year 2057. As a result, the long-term expected rate of return on pension plan investments was applied to projected benefit payments through the year 2057, 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 6.89%, 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 5.89%	Current Single Discount Rate Assumption 6.89%	1% Increase 7.89%
$1,699,450,405	$1,455,250,842	$1,247,287,577

Summary of Population Statistics

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	1,100
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	19
Active Plan Members	951
Total Plan Members	2,070

Additional information about the member data used is included in the June 30, 2014, actuarial valuation report.

SECTION E

SUMMARY OF BENEFITS

Summary of Retirement System Plan Provisions (As of June 30, 2014)

1. Participation. Participation in the system is mandatory when a person first becomes a judge, unless an "Election Not to Participate" is filed by the judge within 30 days of the date of notification of this option.

2. Member Contributions. All members of the system are required to contribute to the system the following percentage of their salaries:

Retirement Annuity	7.5%
Automatic Annuity Increase	1.0
Survivor's Annuity	2.5
Total	11.0%

   All judges who become participants after December 31, 1992, are required to make contributions toward the survivor's annuity unless they file an election not to participate in the survivor's annuity benefit, in which case the total participant contribution rate is 8.5% of salary.

3. Discontinuance of Contributions. A participant who becomes eligible to receive the maximum rate of annuity may elect to discontinue contributions and have his or her benefits "fixed" based upon the final rate of salary immediately prior to the effective date of such election. This election, once made, is irrevocable.

4. Election to Contribute Only on Increases in Salary. A participant who has attained age 60 and continues to serve as a judge after becoming eligible to receive the maximum rate of annuity and has not elected to discontinue contributing to the system may elect to make contributions based only on the amount of the increases in salary received by the judge on or after the date of the election.

5. Retirement Annuity – Eligibility. A judge who has at least 10 years of service may retire with an unreduced retirement annuity upon attainment of age 60. A judge with at least 6 years of service may retire with an unreduced retirement annuity upon attainment of age 62.

   A judge with at least 10 years of service may retire upon attainment of age 55, with the amount of the retirement annuity reduced 1/2 of 1% for each month that the judge is under age 60 if the judge has less than 28 years of service. This penalty for retirement before age 60 is reduced by 5/12 of 1% for every month of service in the System in excess of 20 years.

6. Retirement Annuity – Amount. The retirement annuity is determined according to the following formula based upon the final rate of salary:
   - 3 1/2% for each of the first 10 years of service; plus
   - 5% for each year of service in excess of 10

   The maximum retirement annuity is 85% of the final rate of salary.

7. Automatic Increase In Retirement Annuity. Annual automatic increases of 3% of the current amount of retirement annuity are provided. The initial increase is effective in the month of January of the year next following the year in which the first anniversary of retirement occurs.

8. Temporary Total Disability. A member with at least 2 years of service who becomes totally disabled and unable to perform his or her duties as a judge is entitled to a temporary disability benefit equal to 50% of salary payable during the period of disability but not beyond the end of the term of office.

9. Total and Permanent Disability. A member with at least 10 years of service who becomes totally and permanently disabled while serving as a judge is eligible to commence receiving his or her retirement annuity without reduction regardless of age.

10. Survivor's Annuity – Participation and Eligibility. A married judge, an unmarried judge who becomes a participant after December 31, 1992, or a judge who marries after becoming a participant is subject to the provisions relating to the survivor's annuity unless he or she files a written notice of election not to participate in the survivor's annuity.

    An active judge who is not contributing for the survivor's annuity and later marries or remarries may receive partial credit for the survivor's annuity thereby providing a prorated benefit for his or her spouse by contributing to the survivor's annuity benefit prospectively from the date of marriage.

    A surviving spouse without children is eligible for survivor benefits at age 50 or over provided marriage to the member had been in effect for at least 1 year immediately prior to the member's death.

    A surviving spouse with unmarried eligible children of the member is eligible for a survivor's annuity benefit at any age provided the above marriage requirements have been met. When all children are disqualified because of death, marriage or attainment of age 18, or age 22 in the case of a full-time student, the spouse's benefit is suspended if the spouse is under age 50 until the attainment of such age.

    Children of the member who are under age 18 or under age 22 and a full-time student or who are over age 18 and dependent because of a physical or mental disability are eligible for survivor benefits. Legally adopted children are eligible for survivor benefits on the same basis as other children.

    If the member dies in service as a judge, the member must have at least 1 1/2 years of service credit for survivor's annuity eligibility. If death occurs after termination of service, the deceased member must have at least 10 years of service credit for survivor's annuity eligibility.

11. Survivor's Annuity – Amount. (a) Upon the death of an annuitant, his or her surviving spouse shall be entitled to a survivor's annuity of 66 2/3% of the annuity the annuitant was receiving immediately prior to his or her death.

(b) Upon the death of a judge while in service, the surviving spouse shall receive a survivor's annuity of 66 2/3% of the annuity earned by the judge as of the date of death, or 7 1/2% of the judge's last salary, whichever is greater.

(c) Upon the death of a former judge who had terminated service with at least 10 years of service, his or her surviving spouse shall be entitled to a survivor's annuity of 66 2/3% of the annuity earned by the deceased member as of the date of death.

(d) Upon the death of an annuitant, a judge in service, or a former judge who had terminated service with at least 10 years of service, each surviving child unmarried and under the age of 18, or age 22 in the case of a full-time student, or disabled shall be entitled to a child's annuity in an amount equal to 5% of the decedent's final salary, not to exceed in total for all such children the greater of 20% of final salary or 66 2/3% of the earned retirement annuity.

(e) Survivor's annuities are subject to annual automatic increases of 3% of the current amount of annuity.

12. Refund of Contributions. A participant who ceases to be a judge may apply for and receive a refund of his or her total contributions to the system, provided he or she is not then eligible to receive a retirement annuity.

    A participant who becomes unmarried, either before or after retirement, is entitled to a refund of contributions made for the survivor's annuity.

<u>Judges Who First Become Participants On or After January 1, 2011</u>

The following changes to the above provisions apply to judges who first become participants on or after January 1, 2011:

1. The highest salary for annuity purposes is equal to the average monthly salary obtained by dividing the participant's total salary during the 96 consecutive months of service within the last 120 months of service in which the total compensation was the highest by the number of months in that period.

2. The required contributions shall not exceed the contributions that would be due on the highest salary for annuity purposes.

3. For 2011, the final average salary is limited to the Social Security wage base of $106,800. Limitations for future years shall automatically be increased or decreased, as applicable, by a percentage change in the Consumer Price Index-U during the preceding 12 month calendar year. According to the Public Pension Division of the Illinois Department of Insurance, the annual salary limitation for 2014 is $113,550.53.

4. A participant is eligible to retire with unreduced benefits after attainment of age 67 with at least 8 years of service credit. However, a participant may elect to retire at age 62 with at least 8 years of service credit and receive a retirement annuity reduced by one-half of 1% for each month that his or her age is under 67.

5. The annual retirement annuity provided is equal to 3% of the participant's final average salary for each year of service. The maximum retirement annuity payable shall be 60% of the participant's final average salary.

6. Automatic annual increases are provided in the retirement annuity then being paid equal to 3% or the annual change in the Consumer Price Index for all Urban Consumers, whichever is less. Such increases are payable in the January next following attainment of age 67 and in January of each year thereafter.

7. Automatic annual increases are provided in the survivor annuity then being paid equal to 3% or the annual change in the Consumer Price Index for all Urban Consumers, whichever is less. Such increases are payable on each January 1 occurring on or after attainment of age 67.

8. The retirement annuity being paid is suspended when an annuitant accepts full time employment in a position covered under the Judges' Retirement System or any other article of the Illinois Pension Code. Upon termination of the employment, the retirement annuity shall resume and, if appropriate, be recalculated.

9. Salary and COLA development for members hired on or after January 1, 2011, are shown in the table below:

Year Ending	CPI-U	COLA	Maximum Annual Pensionable Earnings
2011		3.00%	$106,800.00
2012	3.90%	3.00%	$110,004.00
2013	2.00%	2.00%	$112,204.08
2014	1.20%	1.20%	$113,550.53

SECTION F

ACTUARIAL COST METHOD AND ACTUARIAL ASSUMPTIONS

Valuation Methods — Calculation of the Total Pension Liability

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 Statutory Contributions, Actuarial Cost Method Adopted June 30, 1989, by Statute

The projected unit credit normal cost method is used. Under this method, the projected pension at retirement age is first calculated and the value thereof at the individual member's current or attained age is determined. The normal cost for the member for the current year is equal to the value so determined divided by the member's projected service at retirement. The normal cost for the plan for the year is the sum of the individual normal costs.

The actuarial liability at any point in time is the value of the projected pensions at that time less the value of future normal costs.

For ancillary benefits for active members, in particular death and survivor benefits, termination benefits, and the postretirement increases, the same procedure as outlined above is followed.

Estimated annual administrative expenses are added to the normal cost.

For valuation purposes, as well as projection purposes, an actuarial value of assets is used.

Appropriation Requirements Under P.A. 88-0593

The law governing the System under P.A. 88-0593 provides that:

For fiscal years 2011 through 2045, the minimum contribution to the System for each fiscal year shall be an amount determined to be sufficient to cause the total assets of the System to equal 90 percent of the total actuarial liabilities of the System by the end of fiscal year 2045. In making these determinations, the required contribution shall be calculated each year as a level-percentage-of-payroll over the years remaining to and including fiscal year 2045 and shall be determined under the projected unit credit actuarial cost method. For fiscal years 1997 through 2010, the minimum contribution to the System, as a percentage of the payroll, shall be increased in equal annual increments so that by fiscal year 2010, the contribution rate is at the same level as the contribution rate for fiscal years 2011 through 2045.

Actuarial Assumptions

Actuarial assumptions are set by the Board of Trustees. Additional information regarding the rationale for the assumptions may be found in the experience review of the Judges' Retirement System for the five-year period ending June 30, 2012.

Mortality

Post-Retirement Mortality

RP-2000 Combined Healthy Mortality Table, sex distinct, projected to 2015 (static table) setback 3 years for males and 2 years for females. The mortality table used is a static table with the provision for future mortality improvement in the projection to 2015 which is in sync with the next scheduled experience study.

Pre-Retirement Mortality

Based on a percentage of 85 percent for males and 70 percent for females of post-retirement mortality.

Interest

7.00 percent per annum, compounded annually, net of investment expenses.

General Inflation

3.00 percent per annum, compounded annually.

This assumption serves as a basis for the determination of the Tier Two pay cap growth and annual increases that are equal to the lesser of 3.0 percent or the annual change in the consumer price index-u during the preceding 12-month calendar year.

Marriage Assumption

75.0 percent of active and retired participants are assumed to be married.

Termination

Illustrative rates of withdrawal from the plan are as follows:

Age Based Withdrawal	
	Male & Female
30	0.0128
35	0.0110
40	0.0094
45	0.0076
50	0.0058
55	0.0042
60	0.0024
65	0.0007

It is assumed that terminated employees will not be rehired. The rates apply only to employees who have not fulfilled the service requirement necessary for retirement at any given age.

Salary Increases

A salary increase assumption of 3.75 percent per annum, compounded annually, was used. This 3.75 percent salary increase assumption includes an inflation component of 3.00 percent per annum, a productivity component of 0.60 percent per annum, and a merit/promotion component of 0.15 percent per annum.

Disability

No assumption for disability.

Employee Contribution Election

For purposes of the valuation, it is assumed that all judges elect to contribute only on increases in salary when they become eligible for this provision.

Population Projection

For purposes of determining annual appropriation as a percent of total covered payroll, the size of the active group is assumed to remain level at the number of actives as of the valuation date. New entrants are assumed to enter with an average age and average pay as disclosed below. The new entrant profile is based on the averages for all current active members. The average increase in uncapped payroll for the projection period is 3.5 percent per annum.

New Entrant Profile

Age Group	No.	Capped Salary
Under 20		
20-24		
25-29	1	$ 113,551
30-34	34	3,860,718
35-39	121	13,739,614
40-44	229	26,003,071
45-49	212	24,072,712
50-54	163	18,508,736
55-59	96	10,900,851
60-64	51	5,791,076
65-69	5	567,753
70 & Over		
Total	912	$ 103,558,082
Avg. Salary		$ 113,551
Avg. Age		46.73
Percent Male		68.63%

Retirement

Employees are assumed to retire in accordance with the rates shown below. The rates apply only to employees who have fulfilled the service requirement necessary for retirement at any given age.

Retirement Rates	
Age	Male & Female
60	22.00%
61 - 70	11.00%
71	12.00%
72	14.00%
73	16.00%
74	18.00%
75 - 79	20.00%
80	100.00%

Early Retirement Rates	
Age	Male & Female
55	8.00%
56	8.00%
57	8.00%
58	8.00%
59	8.00%

Assets

The Plan Fiduciary Net Position is used for GASB reporting purposes. The asset method used to project contributions is prescribed by statute. A description of this method can be found in the June 30, 2014, actuarial valuation report.

Expenses

As estimated and advised by JRS staff, based on current expenses and are expected to increase in relation to the projected capped payroll. Expenses are included in the service cost.

Spouse's Age

The female spouse is assumed to be four years younger than the male spouse.

Decrement Timing

All decrements are assumed to occur beginning of year.

Decrement Relativity

Decrement rates are used directly from the experience study, without adjustment for multiple decrement table effects.

Decrement Operation

Turnover decrements do not operate after member reaches retirement eligibility.

Eligibility Testing

Eligibility for benefits is determined based upon the age nearest birthday and service on the date the decrement is assumed to occur.

Assumptions as a result of Public Act 96-0889

Members hired after December 31, 2010, are assumed to make contributions on salary up to the final average compensation cap in a given year until this plan provision or administrative procedure is clarified. State contributions, expressed as a percentage of pay, are calculated based upon capped pay. Retirement rates for tier two members to account for the change in retirement age, as follows:

Retirement Rates	
Age	Male & Female
62	30.00%
63	10.00%
64	13.00%
65	16.00%
66	20.00%
67	30.00%
68	11.00%
69 - 71	12.00%
72	14.00%
73	16.00%
74	18.00%
75 - 79	20.00%
80	100.00%

Projection Methodology

Appropriation Requirements Under P.A. 93-0002 and P.A. 96-0043

State Contributions under P.A. 93-0002

In general, for each year during the life of the GOB program, the state contributions to the System are to be calculated as follows:

1. Calculation of the contribution maximum
    a. A projection of contributions will be made from the valuation date to June 30, 2045. Such projection will be based on hypothetical asset values determined using the following assumptions:
        i) That the System had received no portion of the general obligation bond proceeds in excess of the scheduled contributions for the remainder of fiscal 2003 and for the entirety of 2004,
        ii) That hypothetical state contributions had been made each fiscal year from 2005 through the valuation date, based on the funding process in place prior to P.A. 93-0002 (without regard to prior state minimum requirements),
        iii) That the actual amounts of member contributions and the actual cash outflows (benefit payments, refunds and administrative expenses) for each year prior to the valuation date were realized, and
        iv) That the hypothetical fund earned returns in each prior fiscal year equal to the rate of total return actually earned by the retirement fund in that year.
    b. The hypothetical asset values developed in a., above, will not exceed the actual assets of the fund.
    c. A projection of maximum contributions for each year of the GOB program will be performed each year, by reducing the contributions produced in a., above, by the respective amount of debt service allocated to the System for each year.
2. Calculation of the contribution with GOB proceeds
    a. The basic projection of state contributions from the valuation date through June 30, 2045, will be made, taking into account all assets of the System, including the GOB proceeds.
    b. State contribution rates (expressed as a percentage of covered pay), in the pattern required by the funding sections of the statutes, are calculated.
    c. In those projections, the dollars of state contributions which are added to assets each year during the GOB program are limited by the contribution maximum. Because the bonds are to be liquidated by the end of fiscal 2033, there is no contribution maximum thereafter.

State Contributions under P.A. 96-0043

The following is an excerpt from the Illinois Compiled statutes 40 ILCS 5/18-131:

> (d) For purposes of determining the required State contribution to the System, the value of the System's assets shall be equal to the actuarial value of the System's assets, which shall be calculated as follows:
>
>> As of June 30, 2008, the actuarial value of the System's assets shall be equal to the market value of the assets as of that date. In determining the actuarial value of the System's assets for fiscal years after June 30, 2008, any actuarial gains or losses from investment return incurred in a fiscal year shall be recognized in equal annual amounts over the 5-year period following that fiscal year.
>
> (e) For purposes of determining the required State contribution to the system for a particular year, the actuarial value of assets shall be assumed to earn a rate of return equal to the system's actuarially assumed rate of return.

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 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 municipal bond 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) 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 7.00%; the municipal bond rate is 4.29%; and the resulting single discount rate is 6.89%.

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 calculated under the Entry Age Normal cost method for future hires are not included (nor are their liabilities).

Total administrative expenses are assumed to increase at the same rate of payroll increases. 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 Ending June 30, 2014

Year Ended	Payroll for Current Employees	Contributions from Current Employees	Service Cost and Expense Contributions	UAL Contributions	Total Contributions	Admin Expenses
2014	$ 172,846,373					
2015	157,458,837	$ 16,246,714	$ 42,181,075	$ 91,800,907	$ 150,228,697	$ 978,700
2016	151,369,733	15,289,114	40,808,661	90,626,237	146,724,013	919,703
2017	144,320,938	14,143,406	39,669,910	89,628,310	143,441,627	884,137
2018	136,814,666	13,207,880	37,931,986	90,301,693	141,441,559	842,965
2019	129,501,611	12,225,075	36,088,675	90,331,150	138,644,901	799,122
2020	121,296,443	11,292,873	34,245,120	91,157,785	136,695,778	756,407
2021	111,865,095	10,414,662	32,053,334	93,301,164	135,769,160	708,481
2022	103,468,539	9,267,636	29,694,549	95,437,432	134,399,616	653,394
2023	95,084,918	8,264,856	27,560,130	97,688,743	133,513,728	604,350
2024	87,088,120	7,422,284	25,310,429	100,141,356	132,874,069	555,382
2025	79,475,823	6,591,445	23,219,193	102,633,283	132,443,921	508,674
2026	72,208,461	5,833,573	21,181,872	105,199,836	132,215,282	464,211
2027	64,934,487	4,922,822	19,423,765	107,679,518	132,026,105	421,763
2028	58,035,015	3,779,138	17,955,953	110,006,569	131,741,660	379,276
2029	51,709,613	2,988,072	16,292,667	112,777,811	132,058,550	338,977
2030	45,695,141	2,408,882	14,633,482	115,742,426	132,784,790	302,031
2031	40,327,829	1,596,626	13,333,941	117,898,195	132,828,761	266,901
2032	35,048,031	1,354,824	11,709,996	121,353,188	134,418,007	235,551
2033	30,240,485	1,131,314	10,129,441	125,505,925	136,766,680	204,712
2034	25,870,687	944,470	8,711,913	129,851,292	139,507,676	176,632
2035	22,198,855	820,865	7,381,347	133,862,618	142,064,830	151,108
2036	18,942,778	692,974	6,299,820	137,955,620	144,948,414	129,661
2037	15,933,811	603,405	5,317,162	142,191,375	148,111,941	110,643
2038	13,343,191	508,628	4,442,533	146,549,623	151,500,785	93,068
2039	11,184,632	427,730	3,694,327	151,022,914	155,144,971	77,936
2040	9,275,868	362,268	3,065,075	155,626,952	159,054,296	65,328
2041	7,740,987	309,230	2,495,878	160,352,821	163,157,929	54,179
2042	6,286,259	264,341	2,048,210	165,211,200	167,523,750	45,214
2043	5,072,456	221,401	1,625,686	170,196,292	172,043,379	36,717
2044	4,072,838	181,239	1,294,355	175,313,647	176,789,240	29,628
2045	3,144,279	151,681	1,012,695	180,572,646	181,737,022	23,789
2046	2,375,231	121,949	756,756	19,469,977	20,348,682	18,365
2047	1,784,833	95,293	553,010	18,824,632	19,472,934	13,874
2048	1,259,245	73,252	404,739	18,265,202	18,743,193	10,425
2049	937,954	54,687	275,570	17,725,653	18,055,910	7,355
2050	640,332	41,780	200,996	17,170,049	17,412,825	5,479
2051	385,900	30,235	130,277	16,652,132	16,812,644	3,740
2052	224,516	20,073	70,094	16,182,196	16,272,363	2,254
2053	122,107	12,532	37,497	15,744,432	15,794,461	1,311
2054	71,603	8,209	15,553	15,355,943	15,379,705	713
2055	46,361	6,025	5,439	15,018,863	15,030,327	418
2056	20,065	3,619	4,089	14,734,110	14,741,818	271
2057	16,108	2,207	(218)	14,510,969	14,512,958	117
2058	12,892	1,772	(178)	14,342,780	14,344,374	94
2059	10,277	1,418	(141)	14,228,556	14,229,833	75
2060	8,161	1,130	(112)	14,166,777	14,167,795	60
2061	-	898	(89)	14,154,283	14,155,092	48
2062	-	-	-	14,188,910	14,188,910	-
2063	-	-	-	14,268,079	14,268,079	-
2064	-	-	-	14,389,079	14,389,079	-

Single Discount Rate Development
Projection of Plan Fiduciary Net Position Ending June 30, 2014

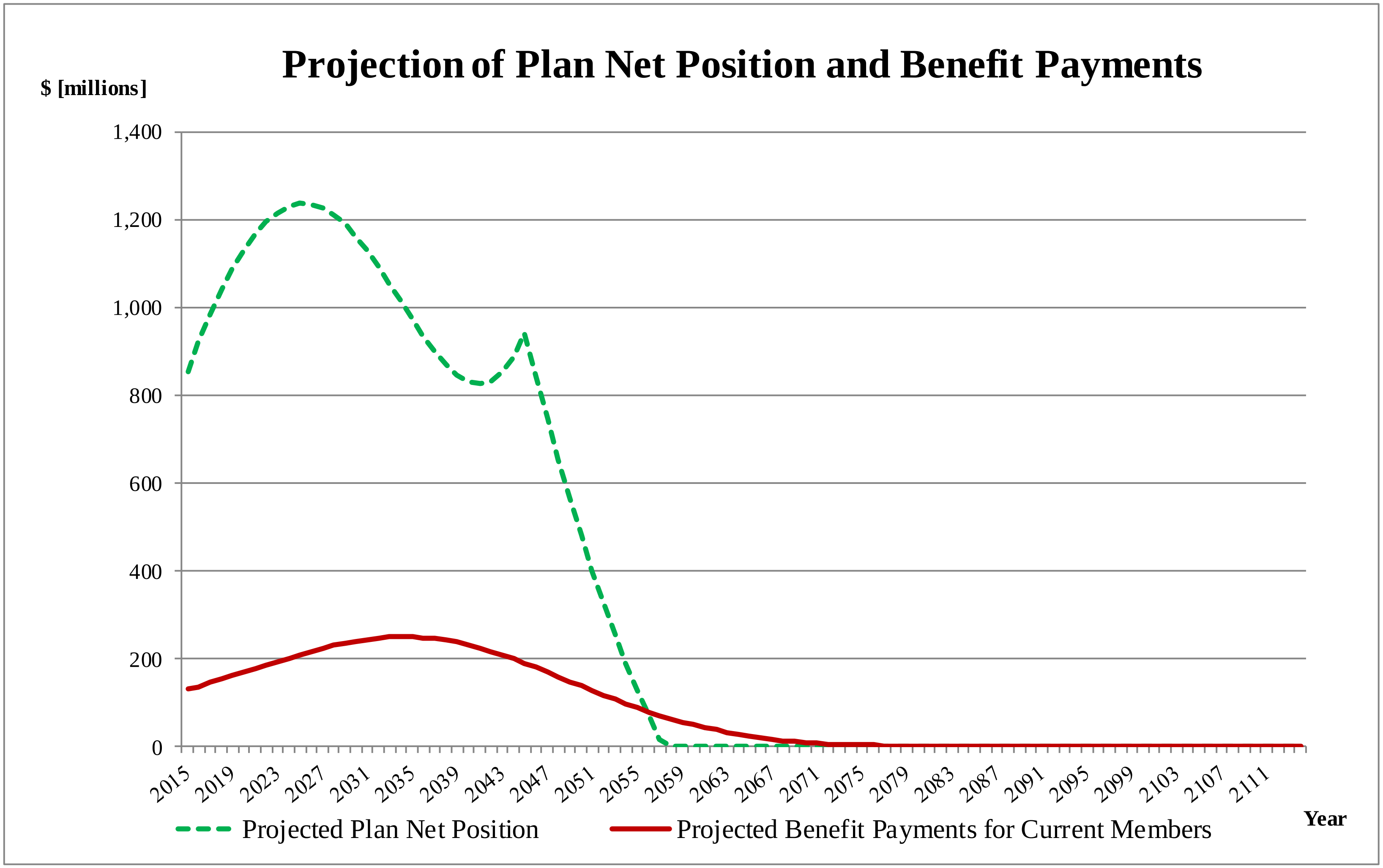
Year Ended	Projected Beginning Plan Net Position	Projected Total Contributions	Projected Benefit Payments	Projected Administrative Expenses	Projected Investment Earnings at 7.00%
	(a)	(b)	(c)	(d)	(e)
2015	$ 776,013,028	$ 150,228,697	$ 129,021,585	$ 978,700	$ 55,016,932
2016	851,258,371	146,724,013	136,515,272	919,703	59,907,704
2017	920,455,113	143,441,627	144,450,349	884,137	64,366,728
2018	982,928,983	141,441,559	152,608,161	842,965	68,391,803
2019	1,039,311,219	138,644,901	160,612,918	799,122	71,968,413
2020	1,088,512,492	136,695,778	168,859,202	756,407	75,063,168
2021	1,130,655,830	135,769,160	177,288,064	708,481	77,692,946
2022	1,166,121,391	134,399,616	185,445,340	653,394	79,849,632
2023	1,194,271,905	133,513,728	193,514,825	604,350	81,513,719
2024	1,215,180,177	132,874,069	201,291,537	555,382	82,689,392
2025	1,228,896,719	132,443,921	208,983,162	508,674	83,371,702
2026	1,235,220,507	132,215,282	216,116,597	464,211	83,562,583
2027	1,234,417,564	132,026,105	222,931,446	421,763	83,266,842
2028	1,226,357,302	131,741,660	229,228,769	379,276	82,477,620
2029	1,210,968,537	132,058,550	234,650,135	338,977	81,226,158
2030	1,189,264,134	132,784,790	239,446,248	302,031	79,568,085
2031	1,161,868,729	132,828,761	243,197,184	266,901	77,524,066
2032	1,128,757,472	134,418,007	246,275,695	235,551	75,156,114
2033	1,091,820,347	136,766,680	248,321,549	204,712	72,581,996
2034	1,052,642,761	139,507,676	249,265,842	176,632	69,902,352
2035	1,012,610,315	142,064,830	248,941,477	151,108	67,200,106
2036	972,782,666	144,948,414	247,541,075	129,661	64,560,313
2037	934,620,657	148,111,941	245,099,108	110,643	62,082,500
2038	899,605,348	151,500,785	241,542,197	93,068	59,871,023
2039	869,341,891	155,144,971	236,858,081	77,936	58,039,662
2040	845,590,507	159,054,296	231,194,896	65,328	56,706,871
2041	830,091,449	163,157,929	224,465,975	54,179	55,995,047
2042	824,724,271	167,523,750	216,963,725	45,214	56,028,010
2043	831,267,093	172,043,379	208,605,544	36,717	56,929,401
2044	851,597,611	176,789,240	199,533,746	29,628	58,828,219
2045	887,651,697	181,737,022	189,931,788	23,789	61,852,834
2046	941,285,977	20,348,682	179,842,972	18,365	60,401,500
2047	842,174,821	19,472,934	169,371,314	13,874	53,794,050
2048	746,056,618	18,743,193	158,731,116	10,425	47,406,894
2049	653,465,164	18,055,910	147,914,519	7,355	41,274,128
2050	564,873,328	17,412,825	137,177,277	5,479	35,420,084
2051	480,523,481	16,812,644	126,602,607	3,740	29,858,857
2052	400,588,635	16,272,363	116,240,557	2,254	24,601,417
2053	325,219,604	15,794,461	106,194,676	1,311	19,654,833
2054	254,472,910	15,379,705	96,528,936	713	15,020,893
2055	188,343,859	15,030,327	87,301,536	418	10,697,345
2056	126,769,576	14,741,818	78,564,895	271	6,677,834
2057	69,624,063	14,512,958	70,320,751	117	2,953,443
2058	16,769,596	14,344,374	62,594,929	94	-
2059	-	14,229,833	55,395,210	75	-
2060	-	14,167,795	48,721,240	60	-
2061	-	14,155,092	42,569,110	48	-
2062	-	14,188,910	36,929,262	-	-
2063	-	14,268,079	31,800,159	-	-
2064	-	14,389,079	27,171,271	-	-

Single Discount Rate Development
Present Values of Projected Benefits Ending June 30, 2014

Year Ended	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)
2015	$ 776,013,028	$ 129,021,585	$ 129,021,585	$ -	$ 124,729,874	$ -
2016	851,258,371	136,515,272	136,515,272	-	123,340,462	-
2017	920,455,113	144,450,349	144,450,349	-	121,971,721	-
2018	982,928,983	152,608,161	152,608,161	-	120,429,959	-
2019	1,039,311,219	160,612,918	160,612,918	-	118,455,020	-
2020	1,088,512,492	168,859,202	168,859,202	-	116,389,541	-
2021	1,130,655,830	177,288,064	177,288,064	-	114,204,954	-
2022	1,166,121,391	185,445,340	185,445,340	-	111,644,566	-
2023	1,194,271,905	193,514,825	193,514,825	-	108,881,007	-
2024	1,215,180,177	201,291,537	201,291,537	-	105,847,262	-
2025	1,228,896,719	208,983,162	208,983,162	-	102,702,645	-
2026	1,235,220,507	216,116,597	216,116,597	-	99,260,093	-
2027	1,234,417,564	222,931,446	222,931,446	-	95,691,665	-
2028	1,226,357,302	229,228,769	229,228,769	-	91,957,705	-
2029	1,210,968,537	234,650,135	234,650,135	-	87,974,343	-
2030	1,189,264,134	239,446,248	239,446,248	-	83,899,521	-
2031	1,161,868,729	243,197,184	243,197,184	-	79,639,075	-
2032	1,128,757,472	246,275,695	246,275,695	-	75,371,203	-
2033	1,091,820,347	248,321,549	248,321,549	-	71,025,536	-
2034	1,052,642,761	249,265,842	249,265,842	-	66,631,426	-
2035	1,012,610,315	248,941,477	248,941,477	-	62,191,326	-
2036	972,782,666	247,541,075	247,541,075	-	57,795,770	-
2037	934,620,657	245,099,108	245,099,108	-	53,481,888	-
2038	899,605,348	241,542,197	241,542,197	-	49,257,712	-
2039	869,341,891	236,858,081	236,858,081	-	45,142,505	-
2040	845,590,507	231,194,896	231,194,896	-	41,180,528	-
2041	830,091,449	224,465,975	224,465,975	-	37,366,327	-
2042	824,724,271	216,963,725	216,963,725	-	33,754,621	-
2043	831,267,093	208,605,544	208,605,544	-	30,331,102	-
2044	851,597,611	199,533,746	199,533,746	-	27,114,083	-
2045	887,651,697	189,931,788	189,931,788	-	24,120,840	-
2046	941,285,977	179,842,972	179,842,972	-	21,345,409	-
2047	842,174,821	169,371,314	169,371,314	-	18,787,417	-
2048	746,056,618	158,731,116	158,731,116	-	16,455,289	-
2049	653,465,164	147,914,519	147,914,519	-	14,330,801	-
2050	564,873,328	137,177,277	137,177,277	-	12,421,043	-
2051	480,523,481	126,602,607	126,602,607	-	10,713,584	-
2052	400,588,635	116,240,557	116,240,557	-	9,193,185	-
2053	325,219,604	106,194,676	106,194,676	-	7,849,235	-
2054	254,472,910	96,528,936	96,528,936	-	6,668,042	-
2055	188,343,859	87,301,536	87,301,536	-	5,636,103	-
2056	126,769,576	78,564,895	78,564,895	-	4,740,256	-
2057	69,624,063	70,320,751	70,320,751	-	3,965,272	-
2058	16,769,596	62,594,929	31,113,970	31,480,959	1,639,688	5,063,979
2059	-	55,395,210	-	55,395,210	-	8,544,241
2060	-	48,721,240	-	48,721,240	-	7,205,713
2061	-	42,569,110	-	42,569,110	-	6,036,852
2062	-	36,929,262	-	36,929,262	-	5,021,621
2063	-	31,800,159	-	31,800,159	-	4,146,292
2064	-	27,171,271	-	27,171,271	-	3,397,018

Single Discount Rate Development
PVs of Projected Benefits Ending June 30, 2014 (continued)

Year Ended	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)
2065	$ -	$ 23,032,072	$ -	$ 23,032,072	$ -	$ 2,761,076
2066	-	19,364,125	-	19,364,125	-	2,225,874
2067	-	16,147,102	-	16,147,102	-	1,779,732
2068	-	13,356,092	-	13,356,092	-	1,411,551
2069	-	10,962,692	-	10,962,692	-	1,110,943
2070	-	8,933,814	-	8,933,814	-	868,098
2071	-	7,231,357	-	7,231,357	-	673,766
2072	-	5,818,540	-	5,818,540	-	519,829
2073	-	4,659,708	-	4,659,708	-	399,174
2074	-	3,718,215	-	3,718,215	-	305,419
2075	-	2,960,157	-	2,960,157	-	233,149
2076	-	2,354,346	-	2,354,346	-	177,806
2077	-	1,873,775	-	1,873,775	-	135,691
2078	-	1,494,676	-	1,494,676	-	103,786
2079	-	1,197,516	-	1,197,516	-	79,731
2080	-	965,201	-	965,201	-	61,620
2081	-	783,904	-	783,904	-	47,987
2082	-	642,562	-	642,562	-	37,717
2083	-	531,935	-	531,935	-	29,939
2084	-	444,201	-	444,201	-	23,973
2085	-	373,774	-	373,774	-	19,342
2086	-	315,890	-	315,890	-	15,674
2087	-	267,780	-	267,780	-	12,740
2088	-	226,680	-	226,680	-	10,341
2089	-	191,192	-	191,192	-	8,364
2090	-	160,426	-	160,426	-	6,729
2091	-	133,370	-	133,370	-	5,364
2092	-	109,669	-	109,669	-	4,229
2093	-	89,385	-	89,385	-	3,305
2094	-	71,988	-	71,988	-	2,553
2095	-	57,354	-	57,354	-	1,950
2096	-	45,245	-	45,245	-	1,475
2097	-	35,302	-	35,302	-	1,104
2098	-	27,293	-	27,293	-	818
2099	-	20,906	-	20,906	-	601
2100	-	15,838	-	15,838	-	436
2101	-	11,883	-	11,883	-	314
2102	-	8,797	-	8,797	-	223
2103	-	6,416	-	6,416	-	156
2104	-	4,603	-	4,603	-	107
2105	-	3,236	-	3,236	-	72
2106	-	2,238	-	2,238	-	48
2107	-	1,504	-	1,504	-	31
2108	-	983	-	983	-	19
2109	-	640	-	640	-	12
2110	-	385	-	385	-	7
2111	-	195	-	195	-	3
2112	-	67	-	67	-	1
2113	-	2	-	2	-	0
2114	-	-	-	-	-	-
				Totals	$ 2,615,529,603	$ 52,498,598


Projection of Plan Net Position and Benefit Payments
$ [millions]
1,400
1,200
1,000
800
600
400
200
0
2015
2019
2023
2027
2031
2035
2039
2043
2047
2051
2055
2059
2063
2067
2071
2075
2079
2083
2087
2091
2095
2099
2103
2107
2111
Year
Projected Plan Net Position
Projected Benefit Payments for Current Members

SECTION H

GLOSSARY OF TERMS

GLOSSARY OF TERMS

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.
Accrued Service	Service credited under the system which was rendered before the date of the actuarial valuation.
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 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 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.
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.

GLOSSARY OF TERMS

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

GLOSSARY OF TERMS

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.
GASB	The Governmental Accounting Standards Board is an organization that exists in order to promulgate accounting standards for governmental entities.
Fiduciary Net Position	The fiduciary net position is the value of the assets of the trust.
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.
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.

GLOSSARY OF TERMS

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.

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.