

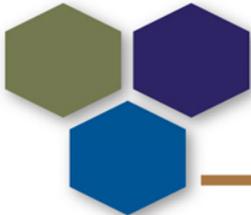
Judges' Retirement System of Illinois

Valuation Results as of June 30, 2015

October 30, 2015



Gabriel Roeder Smith & Company
Consultants & Actuaries
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Agenda

◆ Valuation Results

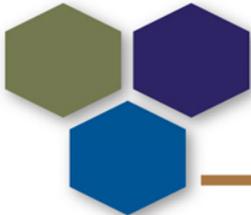
- ▶ Changes since last year
- ▶ Funded status
- ▶ Change in funded ratio
- ▶ Cash flow comparison
- ▶ Contribution requirement
- ▶ Contribution shortfall

◆ Summary

◆ GASB Nos. 67 and 68 Results

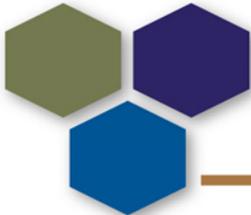
◆ Appendix A: Projection Results: Phase-in of investment losses in the Actuarial Value of Assets (AVA)

◆ Appendix B: Membership Data



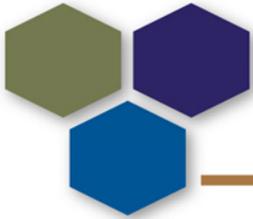
Valuation Results: Changes Since Last Year

- ◆ Public Act 99-0232 (Effective August 3, 2015)
 - ▶ Mandates the five state systems to conduct actuarial experience studies every 3 years as opposed to 5 years
 - Next JRS experience study would occur after the June 30, 2015, valuation
- ◆ Board adopted policy for calculating the Actuarially Determined Contribution (ADC) for accounting purposes only
 - ▶ Under policy, ADC is equal to the normal cost plus a 25-year level percent of capped payroll closed-period amortization of the unfunded actuarial liability as of June 30, 2015



Valuation Results: Funded Status (\$ in millions)

	<u>June 30, 2014</u>	<u>June 30, 2015</u>
Actuarial Accrued Liability	\$2,229.3	\$2,314.1
Market Value of Assets (MVA)	\$776.0	\$833.9
Unfunded Actuarial Accrued Liability - MVA Basis	\$1,453.3	\$1,480.2
Funded Ratio - MVA Basis	34.81%	36.04%
Actuarial Value of Assets (AVA)	\$705.3	\$804.2
Unfunded Actuarial Accrued Liability - AVA Basis	\$1,524.0	\$1,510.0
Funded Ratio - AVA Basis	31.64%	34.75%

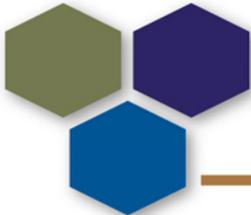


Valuation Results: Change in Funded Ratio

Change in Funded Ratio

Funded Ratio 6/30/2014	31.64%
Expected ¹	2.47%
Contribution Shortfall	-0.51%
Liability Experience	-0.01%
Asset Experience (10.76% Return on AVA)	<u>1.16%</u>
Funded Ratio 6/30/2015	34.75%

¹ *Assumes total contributions equal to normal cost plus interest*

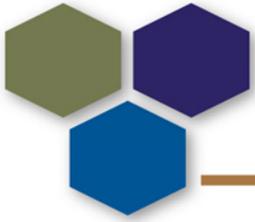


Valuation Results: Cash Flow Comparison (\$ in millions)

Cash Flow Comparison

	FYE 2015	Projected FYE 2016	Projected FYE 2017	Projected FYE 2018	Projected FYE 2019
Employer Contribution	\$134.0	\$132.1	\$131.3	\$131.4	\$130.7
Employee Contribution	\$15.4	\$14.6	\$14.4	\$14.4	\$14.4
Benefits	(\$126.6)	(\$137.0)	(\$144.6)	(\$152.8)	(\$160.9)
Expenses	(\$1.0)	(\$1.1)	(\$1.1)	(\$1.1)	(\$1.1)
Net Cash Flow	\$21.8	\$8.6	\$0.0	(\$8.1)	(\$16.9)

- Beginning in 2018, benefits exceed State and employee contributions.
- From 2018 to 2033, the percentage of investment income needed to pay ongoing benefits increases from approximately 12.3 percent to 90.0 percent.
- This implies that a lower level of investment income is projected to be available for potential asset growth.



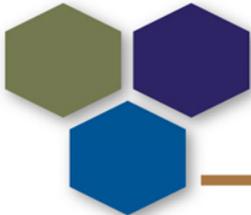
Valuation Results: Contribution Requirements (\$ in millions)

FY 2017 State contribution

	<u>Amount</u>	<u>Rate</u>
Basic Funding	\$ 131.3	79.683%

Compares to FY 2016 contribution

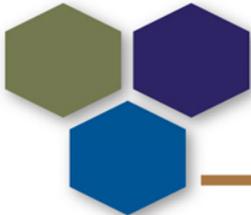
	<u>Amount</u>	<u>Rate</u>
Basic Funding	\$ 132.1	80.072%



Valuation Results: Contribution Shortfalls (\$ in millions)

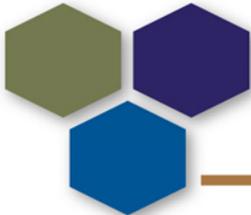
<u>FY 2017</u>	<u>Amount</u>	<u>Rate</u>
Annual Determined Contribution	\$ 152.7	92.646%
Basic funding	<u>131.3</u>	<u>79.683%</u>
Difference	\$ 21.4	12.963%
<u>FY 2016</u>	<u>Amount</u>	<u>Rate</u>
Annual Determined Contribution	\$ 121.4	73.586%
Basic funding	<u>132.1</u>	<u>80.072%</u>
Difference	\$ (10.7)	-6.486%

- ◆ The Annual Required Contribution (ARC) for FY 2016, is based on an open 30-year level percent of payroll amortization policy.
- ◆ The term ARC is no longer in the GASB Statements, thus the Board adopted a policy for developing an Actuarially Determined Contribution (ADC) beginning with the June 30, 2015, valuation which determines the FY 2017 ADC
 - ▶ Under this policy, the ADC is equal to the normal cost plus a 25-year level percent of capped payroll closed-period amortization of the unfunded actuarial liability.



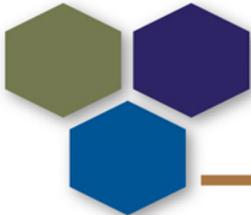
Summary

- ◆ 4.58% investment returns increased the funded ratio on a MVA Basis
- ◆ Recognition of deferred investment gains increase the funded ratio on an AVA basis
- ◆ Contribution requirement decreased due to deferred investment gains in the AVA
- ◆ Funded ratio grows slowly through 2033 to 51 percent and then increases rapidly to 90 percent in 2045



GASB Nos. 67 and 68 Results

- ◆ GASB Statements Nos. 67 and 68 de-link financial reporting from funding
- ◆ GASB Statement No. 67 replaced GASB Statement No. 25 for pension plan financial reporting, effective with fiscal year ending June 30, 2014
- ◆ GASB Statement No. 68 replaced GASB Statement No. 27 for employer financial reporting, effective with fiscal year ending June 30, 2015
 - ▶ Required information under GASB Statements Nos. 67 and 68 is provided in a separate report
 - ▶ Total Pension Liability (TPL) is calculated using the Entry Age Normal actuarial cost method and a single discount rate of 6.85 percent

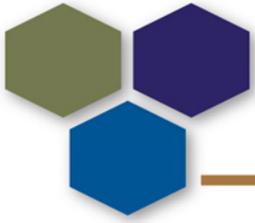


GASB Nos. 67 and 68 Results

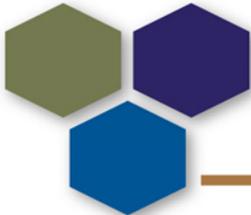
<u>Statutory Requirements</u>	
Actuarial Cost Method	Projected Unit Credit
Discount Rate	7.00%
Valuation Date	June 30, 2015
Actuarial Accrued Liability	\$2,314.1
Actuarial Value of Assets	\$804.2
Unfunded Actuarial Accrued Liability	\$1,510.0
Funded Ratio	34.75%
Covered Payroll	\$177.2
Unfunded Actuarial Accrued Liability as a Percentage of Covered Employee Payroll	852.29%
Total FY 2015 Employer Contribution	\$134.0

<u>GASB 67/68 Requirements</u>	
Actuarial Cost Method	Entry Age Normal
Single Discount Rate	6.85%
Measurement Date	June 30, 2015
Total Pension Liability	\$2,352.9
Plan Fiduciary Net Position	\$833.9
Net Pension Liability	\$1,519.0
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	35.44%
Covered Payroll	\$177.2
Net Pension Liability as a Percentage of Covered Employee Payroll	857.41%
Total FY 2015 Pension Expense	\$153.7

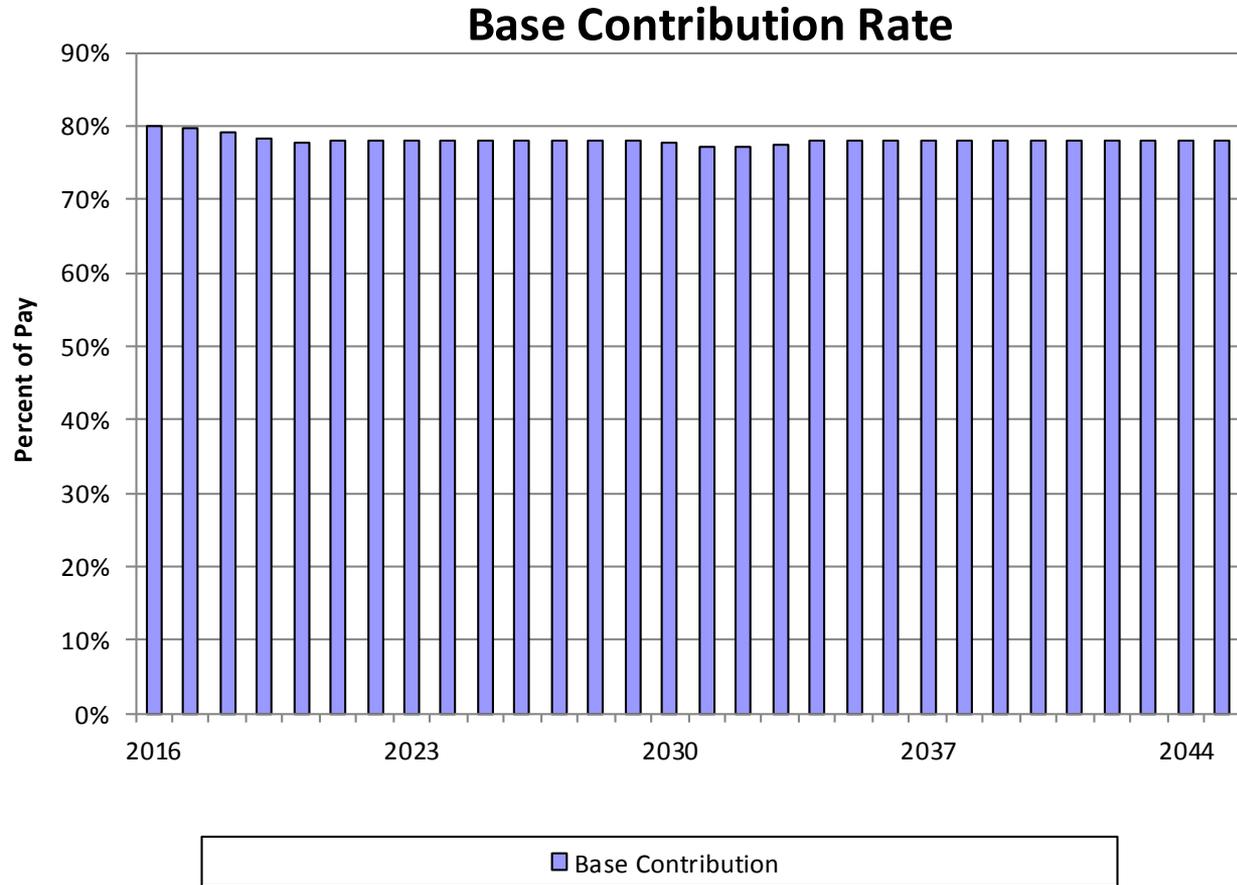
Dollars in millions

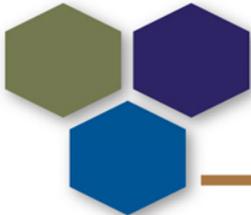


Appendix A: Projection Results: Phase-in of investment losses in the AVA

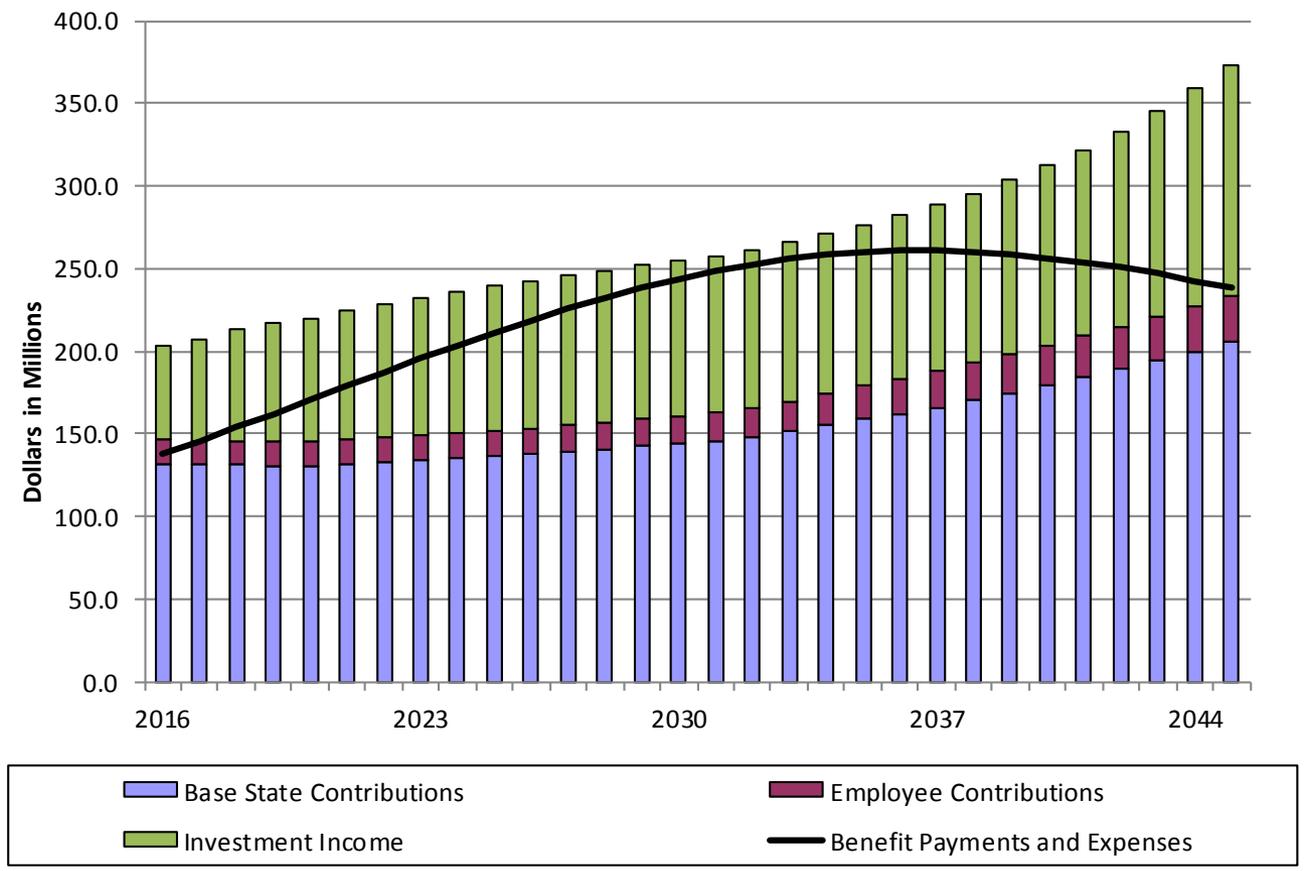


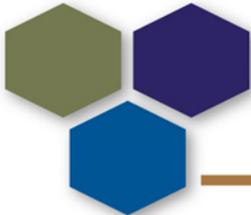
Projection Results: Phase-in of investment losses in the AVA: Contributions - Rate



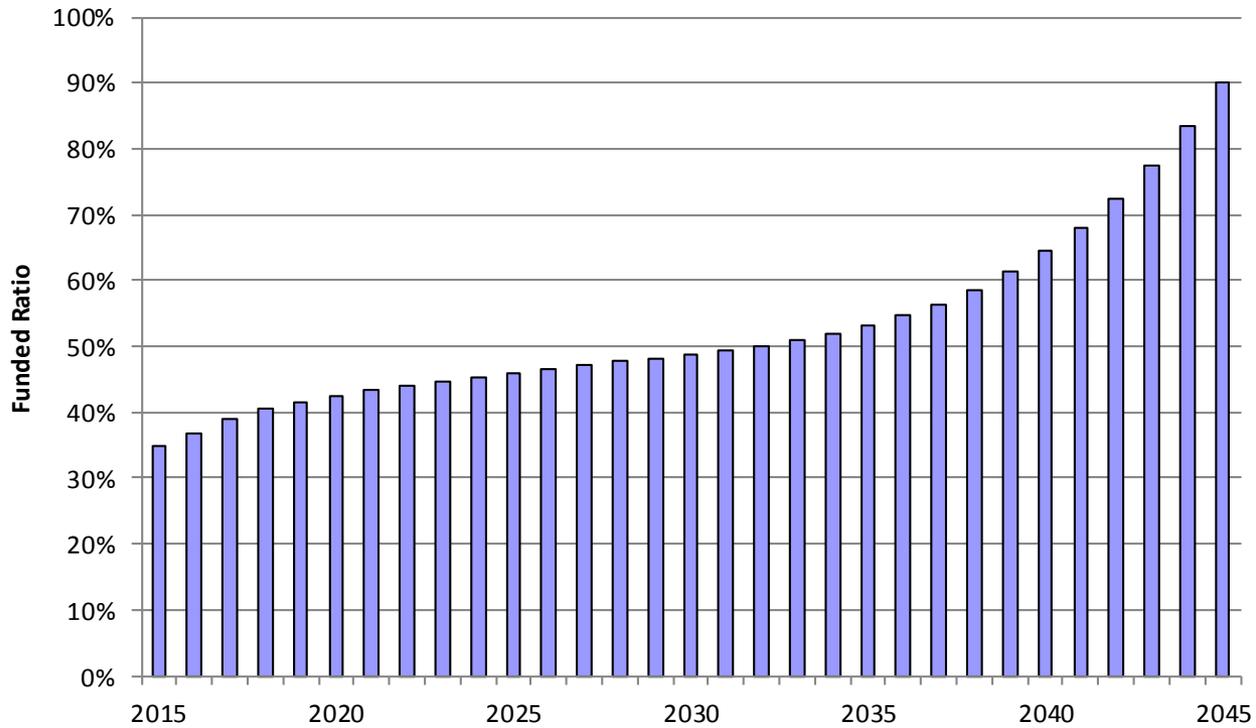


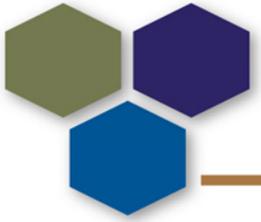
Projection Results: Phase-in of investment losses in the AVA: Cash Flow Comparison



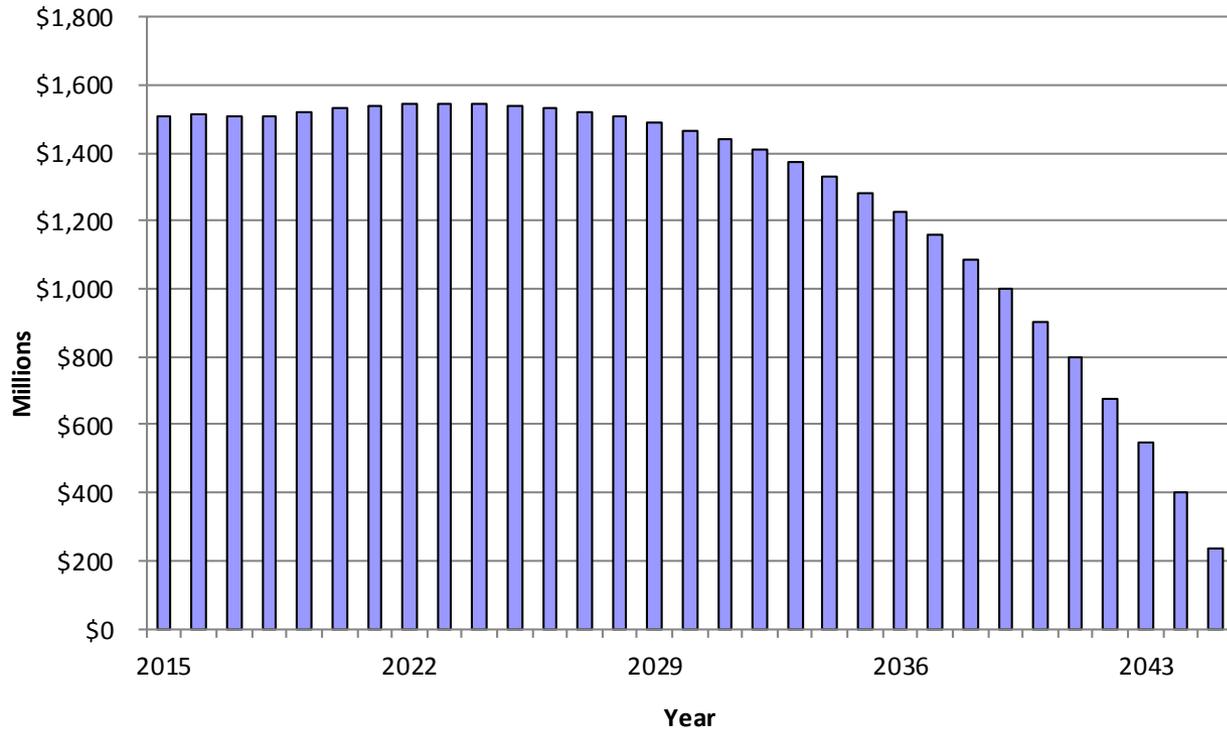


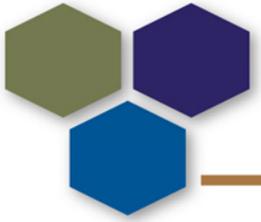
Projection Results: Phase-in of investment losses in the AVA: Funded Ratio



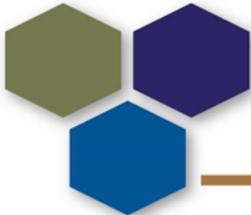


Projection Results: Phase-in of investment losses in the AVA: Unfunded Actuarial Accrued Liability



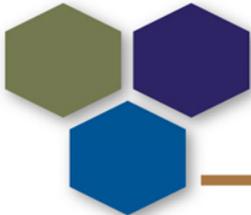


Appendix B: Membership Data



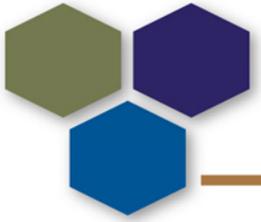
Active Members

	<u>June 30, 2014</u>	<u>June 30, 2015</u>
Number as of Valuation Date	951	961
Covered Payroll for Fiscal Year	\$172.85 Million	\$177.16 Million
Average Annual Earnings	\$181,752	\$184,354

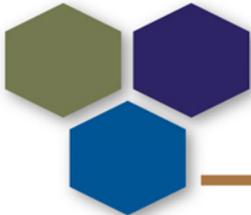


Current Benefit Recipients

	<u>June 30, 2014</u>	<u>June 30, 2015</u>
Retirees	767	787
Survivors	<u>333</u>	<u>334</u>
Total	1,100	1,121
Total Benefits	\$120.685M	\$127.867M
Average Benefits	\$109,713	\$114,066

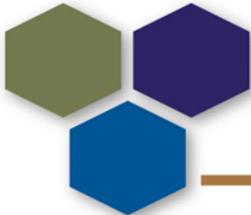


Questions



Disclosures

- ◆ Circular 230 Notice: Pursuant to regulations issued by the IRS, to the extent this presentation concerns tax matters, it is not intended or written to be used, and cannot be used, for the purpose of (i) avoiding tax-related penalties under the Internal Revenue Code or (ii) marketing or recommending to another party any tax-related matter addressed within. Each taxpayer should seek advice based on the individual's circumstances from an independent tax advisor.
- ◆ This presentation shall not be construed to provide tax advice, legal advice or investment advice.
- ◆ The actuary submitting this presentation (Alex Rivera, FSA, EA, MAAA) is a member of the American Academy of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.
- ◆ The primary purpose of the actuarial valuation is to measure the financial position of JRS.



Disclosures

- ◆ The valuation results summarized in this report involve actuarial calculations that require assumptions about future events. The major actuarial assumptions used in this analysis were provided by and are the responsibility of JRS. We are unable to judge the reasonableness of some of these assumptions without performing a substantial amount of additional work beyond the scope of the assignment.
- ◆ Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; and changes in plan provisions or applicable law.
- ◆ This is one of multiple documents comprising the actuarial report for the JRS actuarial valuation. Additional information regarding actuarial assumptions and methods, and important additional disclosures are provided in the full actuarial valuation report as of June 30, 2015.
- ◆ If you need additional information to make an informed decision about the contents of this presentation, or if anything appears to be missing or incomplete, please contact us before relying on this presentation.