



GOVERNMENT OF THE VIRGIN ISLANDS RETIREMENT SYSTEM

Prepared for the Legislature

September 2015

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Vice President & Actuary

 **Segal Consulting**



Agenda

1. Actuarial Valuation and Review as of October 1, 2014
2. Projections of Market Value of Assets and Impact of Proposed Pension Reform Legislation
3. Questions



This presentation was prepared under the supervision of Rocky Joyner, ASA, FCA, MAAA, EA, and Aldwin Frias, FSA, FCA, MAAA, EA

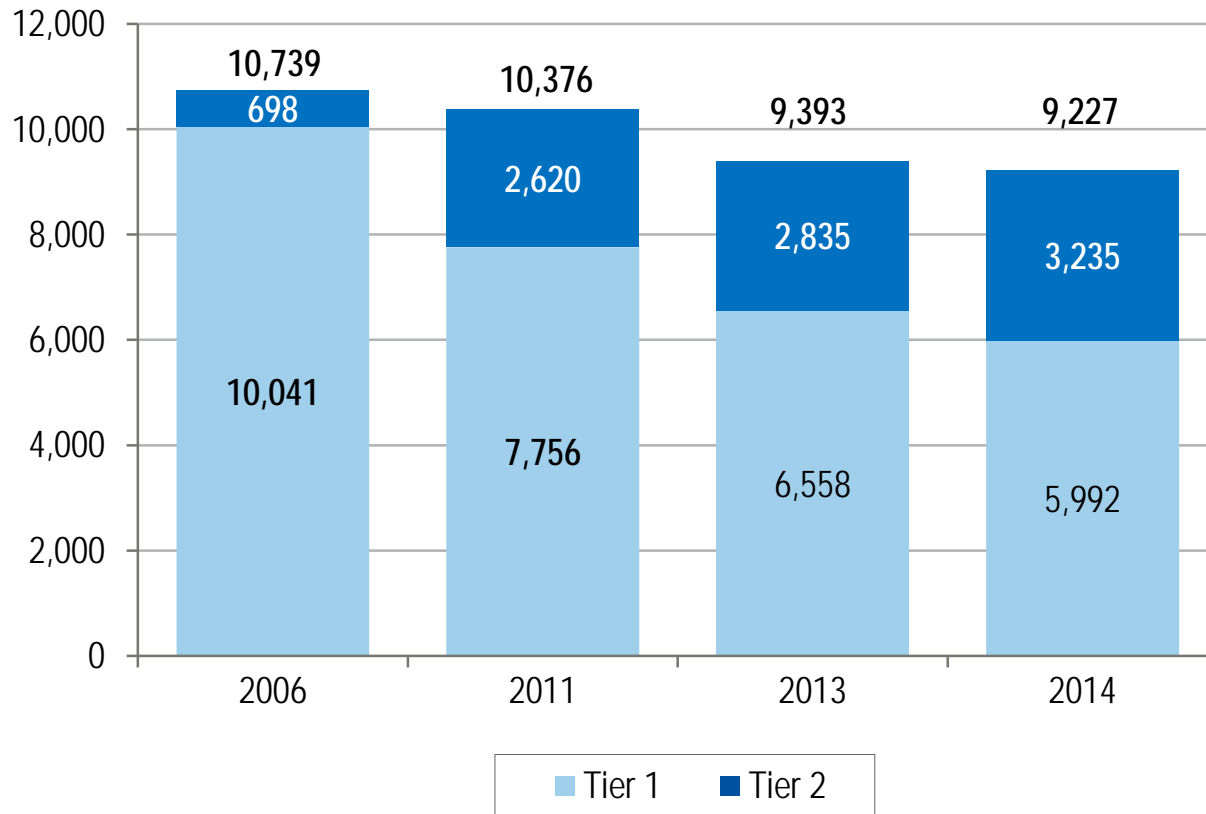
Actuarial Cost Analysis (in \$Millions)

	October 1, 2013	October 1, 2014
1. Total Salary	\$370.1	\$355.6
2. Normal Cost		
• Dollar	\$36.7	\$36.6
• Percent of Salary	9.9%	10.3%
3. Actuarial Accrued Liability	\$3,080.5	\$3,128.3
4. Unfunded Accrued Liability	\$1,843.3	\$1,973.6
5. 20-year Amortization of the Unfunded Liability		
• Dollar	\$168.2	\$180.1
• Percent of Salary	45.4%	50.6%
6. Annual Cost: (2) + (5) including Provision for Expenses*		
• Dollar	\$220.9	\$232.7
• Percent of Salary	59.7%	65.4%
7. Annual Cost Net of Projected Employee Contributions		
• Dollar	\$189.7	\$200.1
• Percent of Salary	51.3%	56.3%

The annual cost continues to increase, with a 5% increase over the prior year.

* Administrative expenses are assumed to be \$16 Million for the October 1, 2013 and 2014 plan years.

Active Membership: 2006 - 2014



The Tier 2 provisions are applicable for those employees hired on or after October 1, 2005. The Tier 2 benefit formula is 30% lower than the Tier 1 formula.

Membership Summary

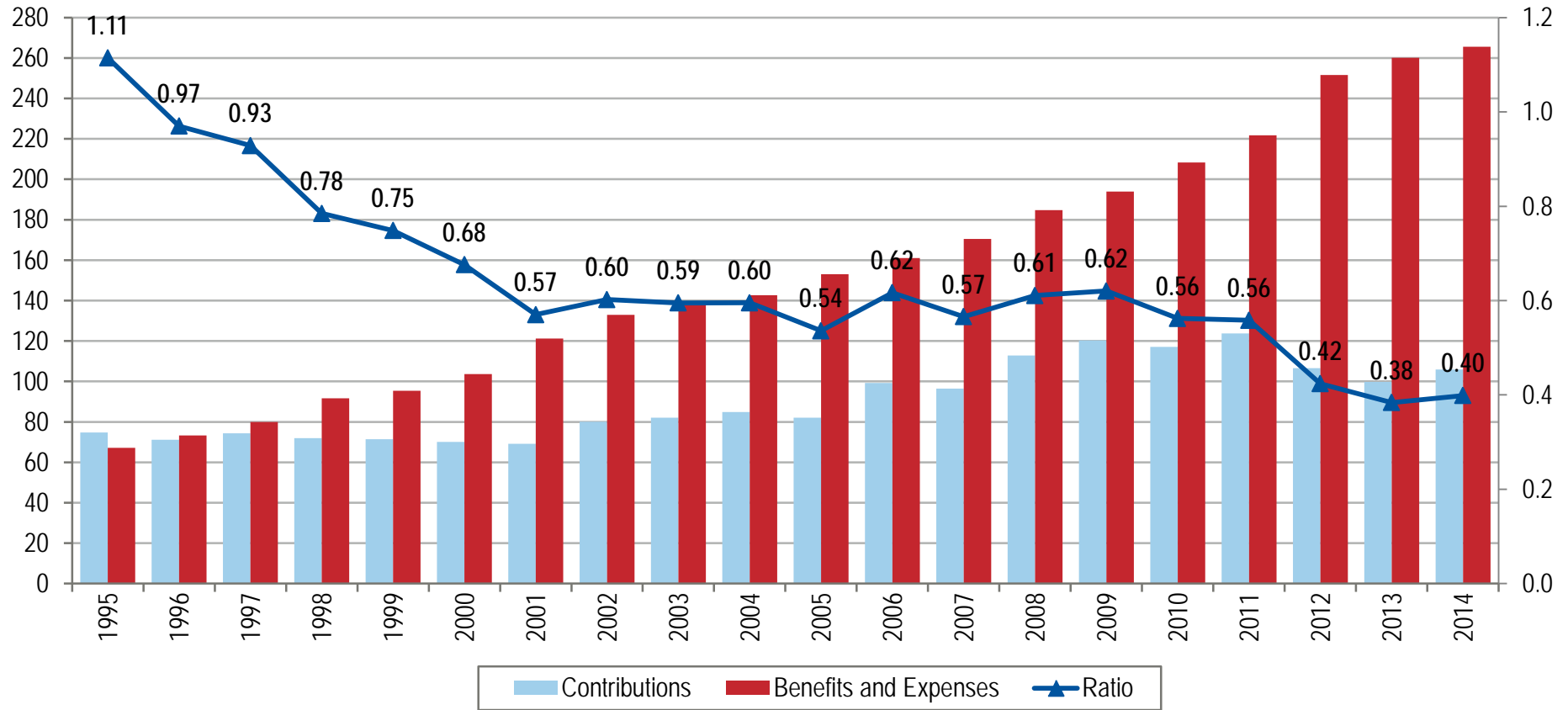
Participant data as of September 30, 2014 was provided by GERS:

Category	Year Ended September 30		
	2011	2013	2014
Active participants in valuation:			
Number	10,376	9,393	9,227
Average age	45.7	46.3	46.2
Average years of service	13.9	14.6	14.4
Average salary*	\$38,885	\$39,405	\$38,539
Retired members and beneficiaries:			
Number in pay status	7,592	8,024	8,465
Average age	69.4	69.5	69.7
Average semi-monthly benefit	\$1,104	\$1,157	\$1,168

* For regular and public safety employees limited at \$65,000

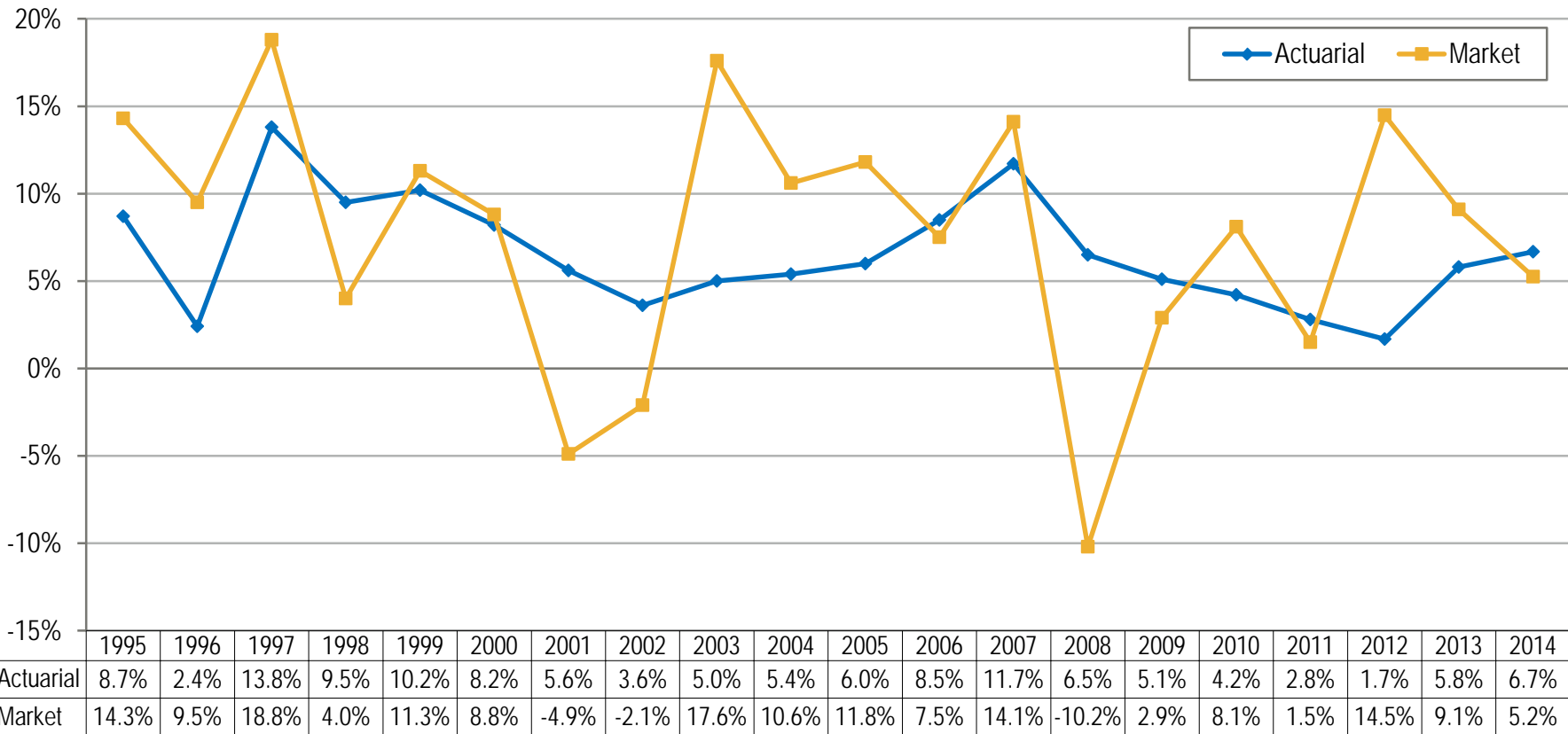
**Annual distributions will exceed \$250 million in 2015.
This is an estimated economic impact of over \$600 million which is about 16% of the USVI GDP.**

Contributions and Benefit Payments (in \$Millions)



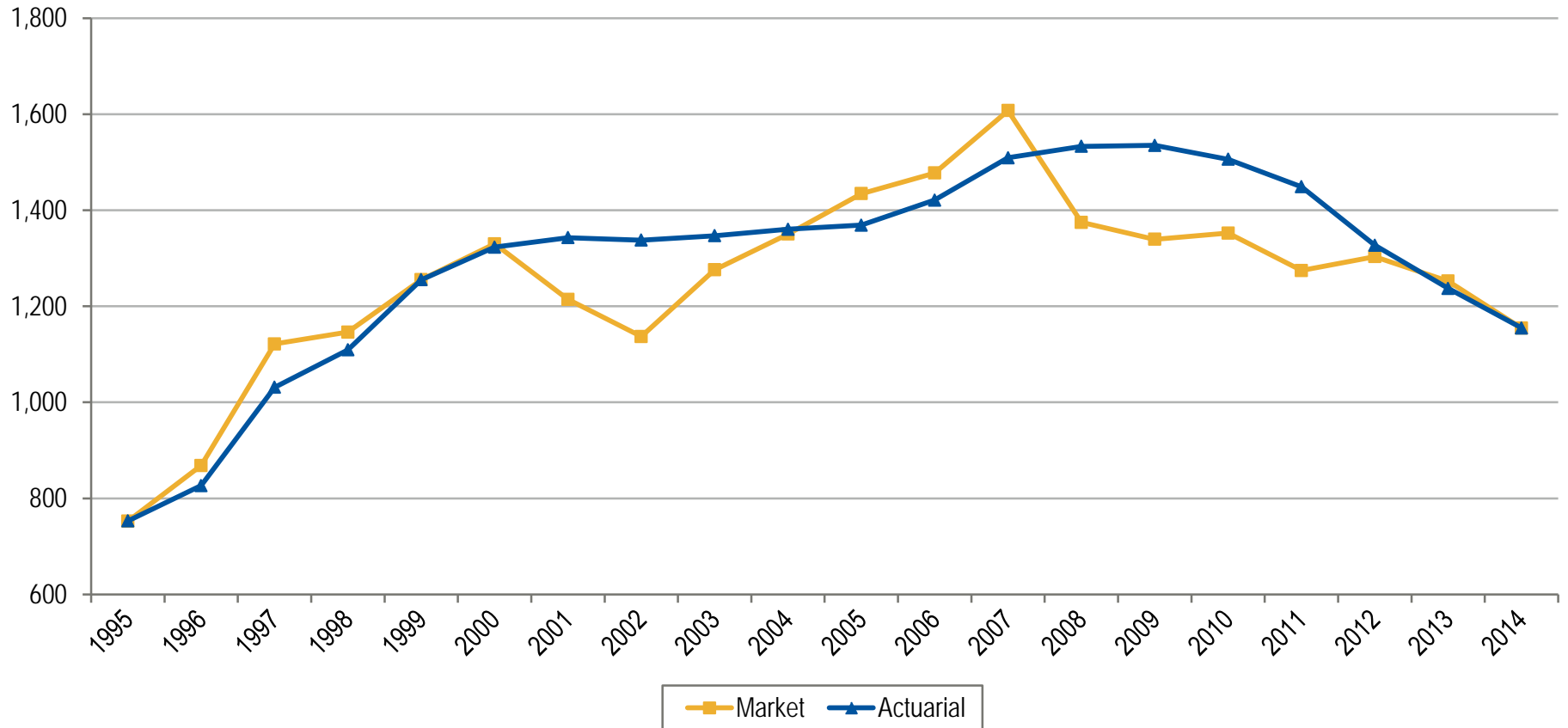
For the past 19 years, the System has negative cash flow.

Actuarial and Market Rates of Return



Actuarial return reflects an averaging/smoothing process of market returns. Actuarial and market return for the year ended 9/30/2014 are based on draft financial statements.

Actuarial and Market Value of Assets (in \$Millions)



The Market Value of Assets has declined by almost 30% since 2007.

Summary of Current Key Benefit Provisions

Service Pension	Eligibility	Tier 1—Amount	Tier 2—Amount
Regular Employees	Age 60 with 10 years of service or any age with 30 years of service	2.5% of Final Average Salary* per year of service up to 100%	1.75% of Final Average Salary* per year of service up to 100%
Public Safety Employees	Age 55 with 10 years of service or any age with 20 years of service	3% of Final Average Salary* per year of service up to 90%	2.1% of Final Average Salary* per year of service up to 90%
Legislature	Age 50 with 6 years of service or any age with 20 years of service	2.5% of highest compensation for years 1-6 3% of highest compensation for years 7-12 4% of highest compensation for years above 12 up to a maximum of 75%	3.5% of highest compensation for years 1-6 4% of highest compensation for years 7-12 4.5% of highest compensation for years 13-20 5% of highest compensation for years above 20 up to a maximum of 100%
Judges**	Age 50 and have completed at least one term. One term is equivalent to 6 years of service	5% highest compensation per year of service up to 100%	5% highest compensation per year of service up to 100%
<p>* Final Average Salary for Regular and Public Safety employees is based on the average of the highest annual salary up to a maximum of \$65,000 for any five years in the last 10 years.</p> <p>** Board established Tier 2 for Judges on January 23, 2015</p>			

Early Pension	Eligibility	Amount
Regular Employees	Age 50 with 10 years of service	Service pension reduced 3.9% per year less than age 60
Public Safety Employees	Age 50 with 10 years of service	Service pension reduced 3.9% per year less than age 55

Deferred Retirement (Vesting)	Eligibility	Amount
	10 years of service and leave contributions in System	Service pension accrued at termination

Summary of Current Key Benefit Provisions *continued*

	Eligibility	Tier 1—Amount	Tier 2—Amount
Duty Connected Disability	Total and permanent disability as a result of performance of duty	75% of salary less workers compensation	52.5% of salary less workers compensation

	Eligibility	Tier 1—Amount	Tier 2—Amount
Non-Duty Connected Disability	9 years of service and total and permanent disability	2% of Final Average Salary* per year of service Minimum of 20% Maximum of 60%	1.4% of Final Average Salary* per year of service Minimum of 14% Maximum of 42%

* *Final Average Salary for Regular and Public Safety employees is based on the average of the highest annual salary up to a maximum of \$65,000 for any five years in the last 10 years.*

Post-Retirement COLAs	Effective January 1, 2013, no annual increases apply to non-disabled pensioners
	1% of the original retirement benefit each year up to age 60 for Disability Pensioners
	No annual increases apply to survivor annuitants

Severance Benefit	Refund of contributions with 4% annual interest, if no other benefit is payable
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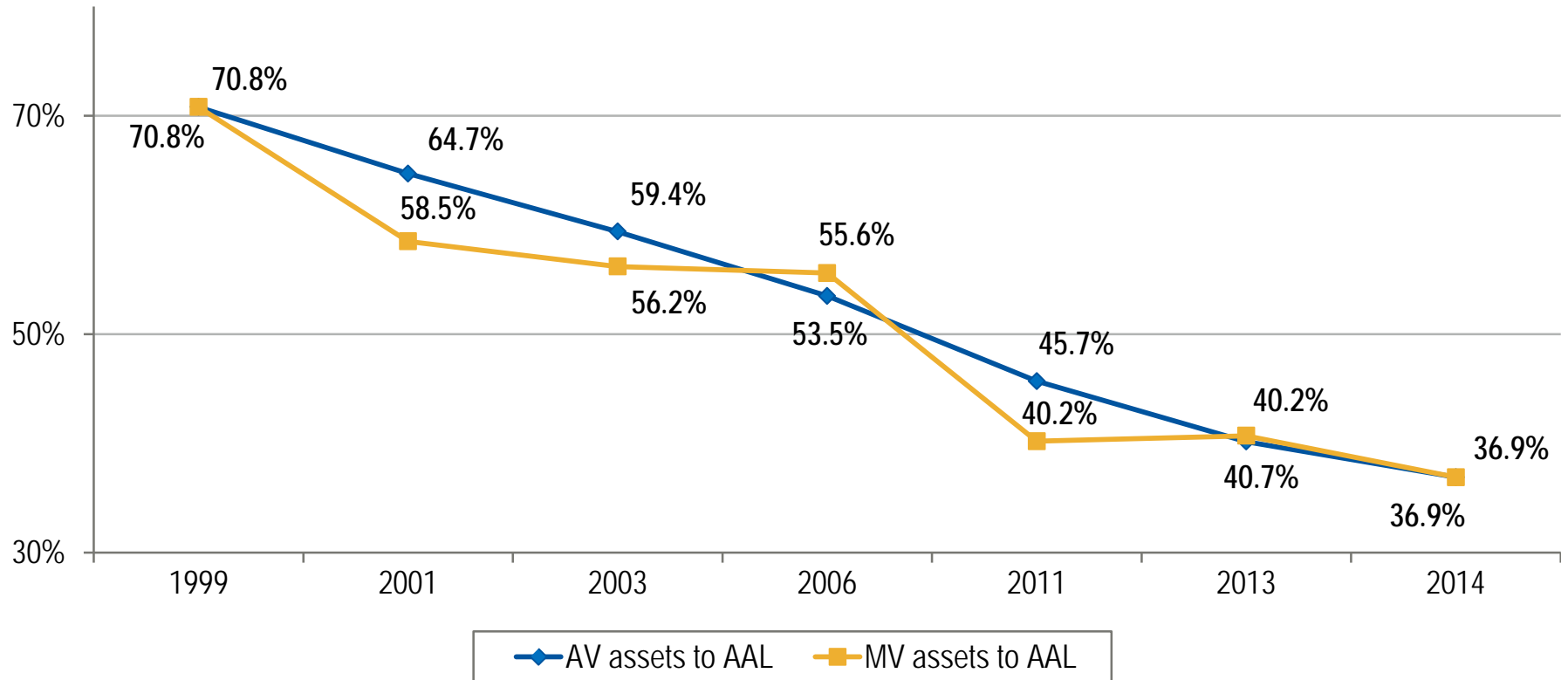
Contribution Rates	Tier 1	Tier 2
Regular Employees	8%	8.5%
Public Safety Employees	10%	10.625%
Legislature	9%	11%
Judges	11%	14%
Employer	17.5%	

Starting January 1, 2015, the contribution rate for Tier 1 and Tier 2 employees increases 1% per year for 3 years and the employer contribution rate increases to 20.5%. Board established Tier 2 for Judges on January 23, 2015.

Key Assumptions and Methods

Mortality Rates	RP-2000 Combined Healthy Mortality Table set forward 2 years																			
Sample Turnover Rates	<table border="1"> <thead> <tr> <th>Age</th> <th>Regular Members</th> <th>Public Safety Members</th> </tr> </thead> <tbody> <tr> <td>22</td> <td>7.9%</td> <td>5.3%</td> </tr> <tr> <td>32</td> <td>6.9%</td> <td>3.2%</td> </tr> <tr> <td>42</td> <td>4.7%</td> <td>0.8%</td> </tr> </tbody> </table>	Age	Regular Members	Public Safety Members	22	7.9%	5.3%	32	6.9%	3.2%	42	4.7%	0.8%							
Age	Regular Members	Public Safety Members																		
22	7.9%	5.3%																		
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Retirement Rates for Actives	<table border="1"> <thead> <tr> <th rowspan="2">Age / Service</th> <th colspan="2">Retirement Rates for Regular Members</th> </tr> <tr> <th>Males</th> <th>Females</th> </tr> </thead> <tbody> <tr> <td>54 and 30 years of service</td> <td>20%</td> <td>0%</td> </tr> <tr> <td>57 and 30 years of service</td> <td>30%</td> <td>25%</td> </tr> <tr> <td>60 and 30 years of service</td> <td>30%</td> <td>50%</td> </tr> <tr> <td>63 and 10 years of service</td> <td>100%</td> <td>100%</td> </tr> </tbody> </table> <p>Public Safety: Upon the attainment of the earlier of 25 years of service or 55 with 10 years of service Judges: Upon the attainment of age 50 with 20 years of service Legislature: Upon the attainment of age 53 with 6 years of service</p>	Age / Service	Retirement Rates for Regular Members		Males	Females	54 and 30 years of service	20%	0%	57 and 30 years of service	30%	25%	60 and 30 years of service	30%	50%	63 and 10 years of service	100%	100%		
Age / Service	Retirement Rates for Regular Members																			
	Males	Females																		
54 and 30 years of service	20%	0%																		
57 and 30 years of service	30%	25%																		
60 and 30 years of service	30%	50%																		
63 and 10 years of service	100%	100%																		
Net Investment Return	7.5% (assumes GERS cash flow issues are solved)																			
Salary Scale	4.0%																			

Funded Percentages: 1999-2014

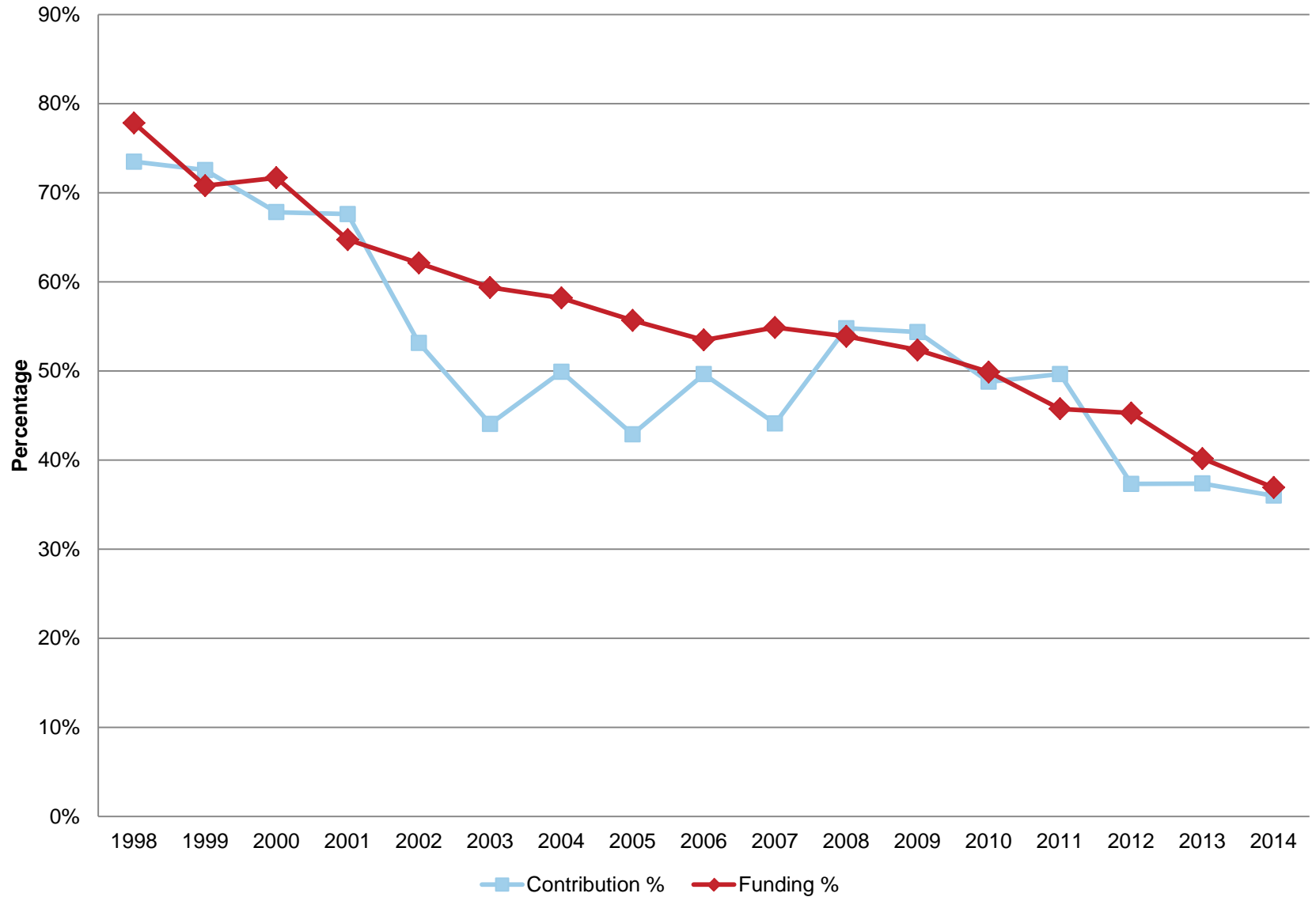


Contribution History: 1999-2014

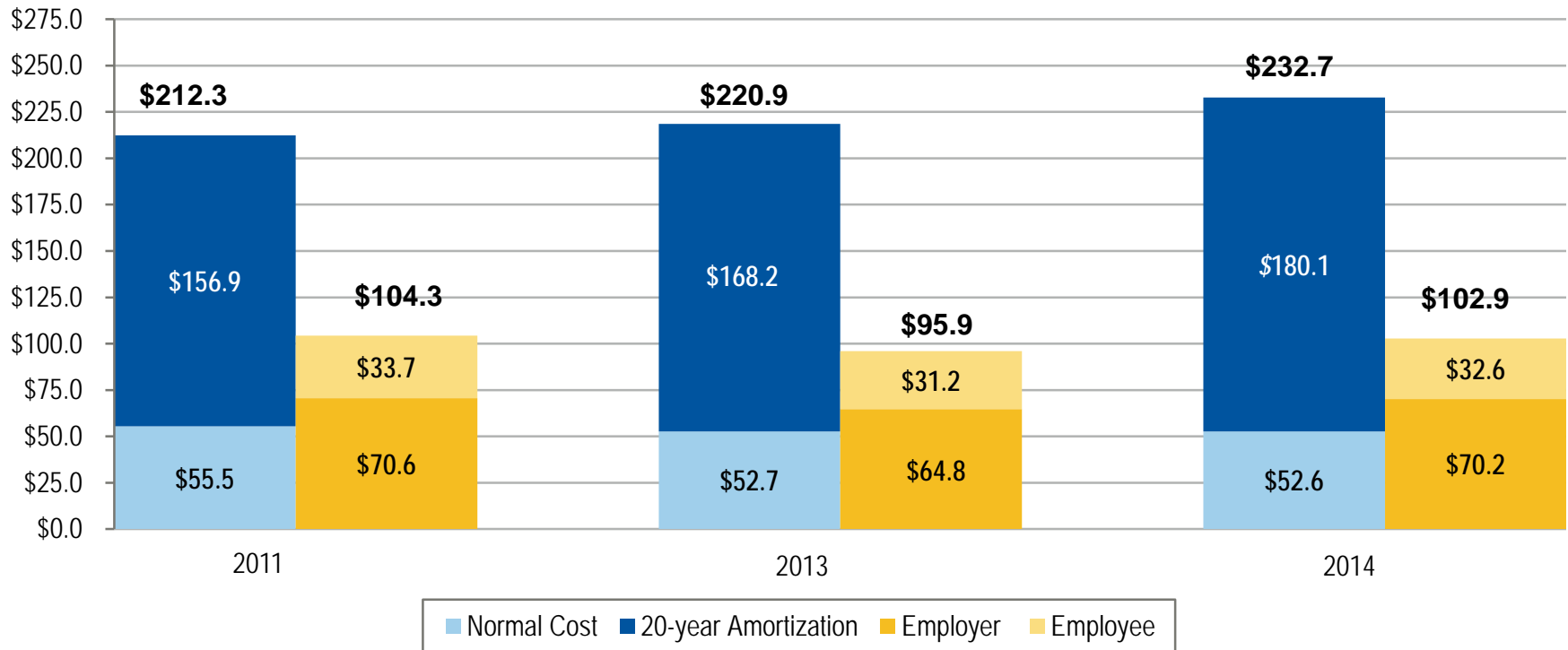
History of Employer Contributions			
Plan Year Ended September 30,	Actuarially Determined Contributions	Actual Contributions	Percentage Contributed
1999	\$62,237,129	\$45,148,387	72.54%
2000	64,992,493	44,078,554	67.82%
2001	64,179,332	43,387,158	67.60%
2002	95,186,021	50,594,531	53.15%
2003	117,124,599	51,588,235	44.05%
2004	108,358,399	54,084,454	49.91%
2005	120,184,848	51,542,030	42.89%
2006	131,059,471	65,061,430	49.64%
2007	137,797,268	60,778,382	44.11%
2008	138,488,871	75,871,146	54.79%
2009	147,490,851	80,177,004	54.36%
2010	157,817,709	77,004,630	48.79%
2011	162,841,336	80,849,762	49.65%
2012	178,644,349	66,677,155	37.32%
2013	172,439,842	64,431,322	37.36%
2014	189,715,251	68,298,617	36.00%

The decline in funding % since 1999 is due in a large measure to statutory contributions being significantly less than needed for proper actuarial funding of the System.

Comparison of Funding % and Contribution %

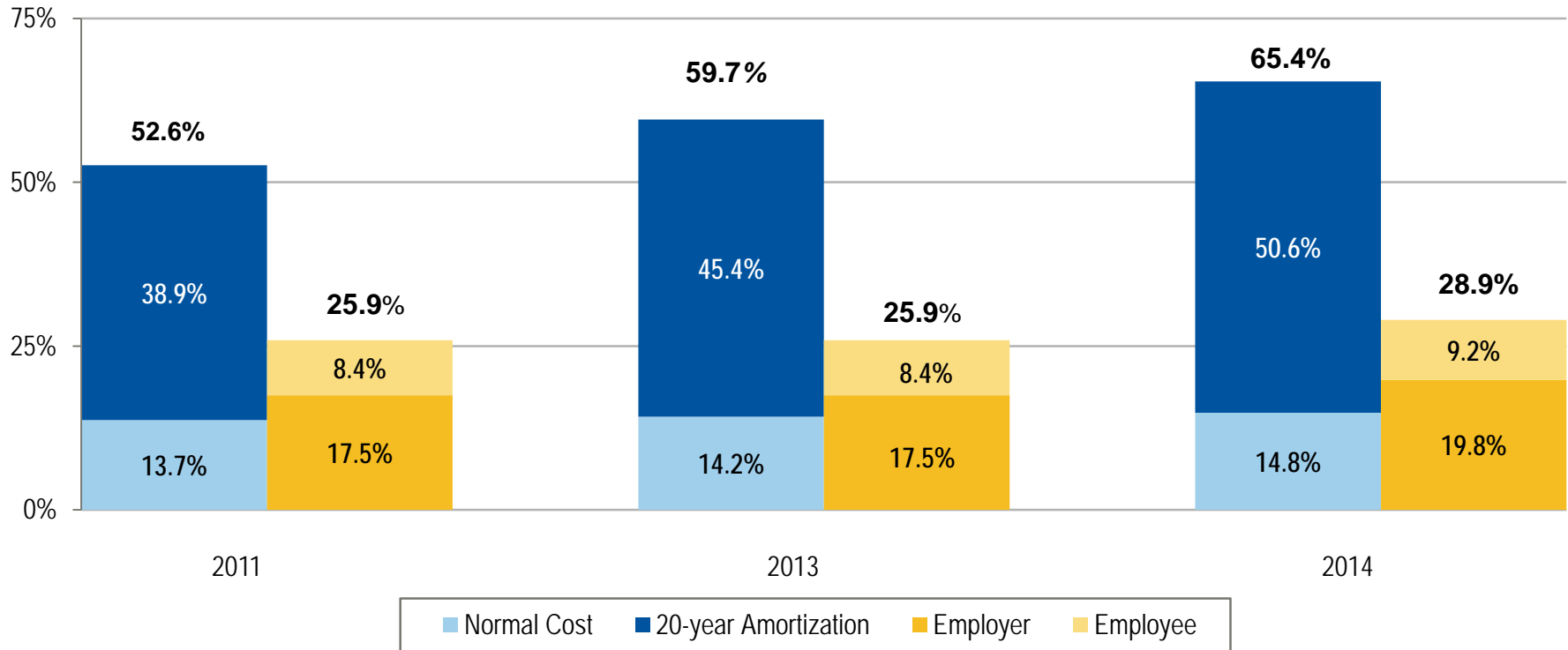


Actuarial, Employer and Employee Contribution Amounts (in \$Millions)



The annual contribution deficit on a dollar basis for 2014 is \$129.9 million. The projected contributions for 2014 include the increase to employee and employer contribution rates effective January 1, 2015.

Actuarial, Employer and Employee Contribution Rates



At the current level of employer and employee contribution rates, there is a projected deficit of 36.5% of pay between the actuarially determined contributions and actual contributions after reflecting the increase to the employer and employee contribution rates effective January 1, 2015.

Comparison of Normal Cost and Contribution Rates by Tier for the year beginning October 1, 2014

	Tier 1	Tier 2	Total
1. Total Salary (\$Millions)	\$246.7	\$108.9	\$355.6
2. Normal Cost			
• Dollar (\$ Millions)	\$27.1	\$9.5	\$36.6
• Percent of Salary	11.0%	8.7%	10.3%
3. Employee Contribution Rate	9.1%	9.4%	9.2%

Tier 2 employees have a lower normal cost percentage than Tier 1, but a higher average contribution rate.



Agenda

1. Preliminary Actuarial Valuation and Review as of October 1, 2014
2. Projections of Market Value of Assets and Impact of Proposed Pension Reform Legislation
3. GASB 67/68 Implementation

This presentation was prepared under the supervision of Rocky Joyner, ASA, FCA, MAAA, EA, and Aldwin Frias, FSA, FCA, MAAA, EA

Projection Parameters

Projection Assumptions:

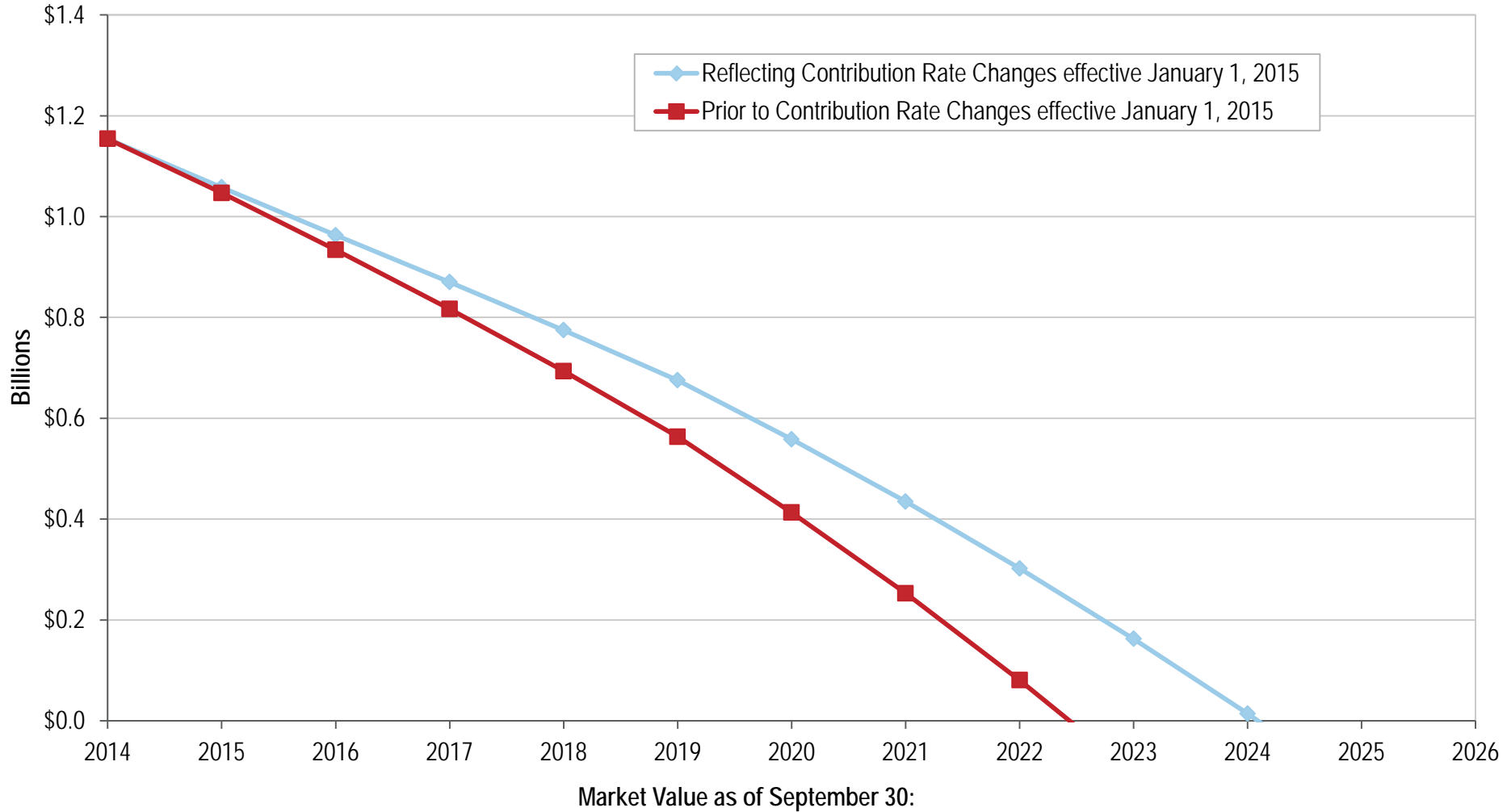
- The active population is assumed to remain level at 9,227 employees
- Total payroll of \$355.6 million is assumed to increase 2.5% per year, but not greater than \$615 million to reflect the \$65,000 salary cap for Regular and Public Safety employees.
 - Under the scenarios showing increases in employer contribution rates, payroll is assumed to remain level during the period of contribution rate increases and then increase 2.5% per year thereafter in addition to any increases due to changes in salary limits.
- Administrative expenses are assumed to be \$16 million during the fiscal year ending September 30, 2015 then increase with inflation
- Future actuarial accrued liability and expected benefit payments were determined based on an open group forecast with the number of active participants assumed to remain level and the new entrants to have similar characteristics to those hired in the past five years.
 - Projected benefit payments and actuarial accrued liability were updated based on the proposed pension reform legislation
- Unless otherwise stated, assets are assumed to earn a 7.5% market return each year

Projection Parameters *continued*

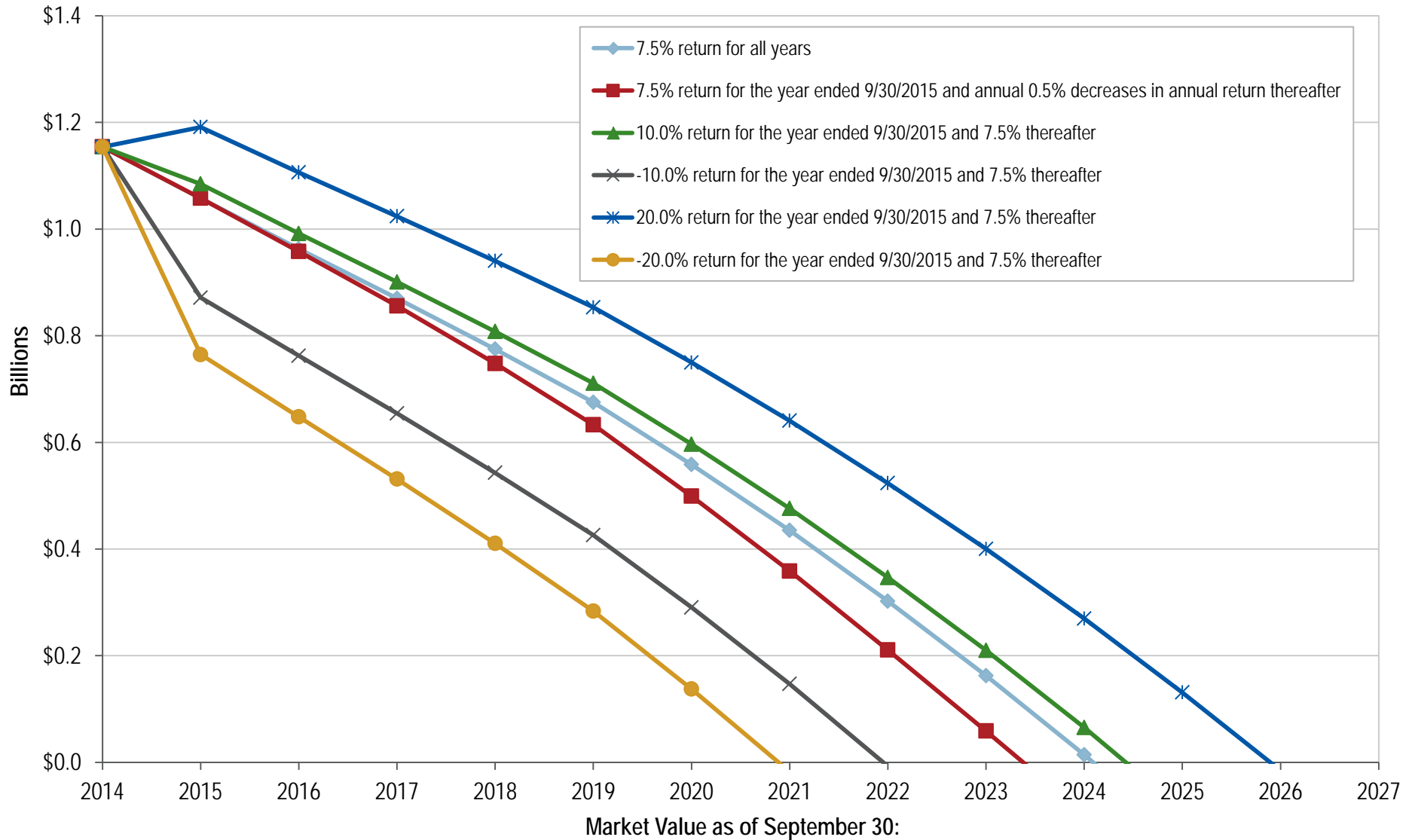
Caveats:

- The closer the plan gets to insolvency, asset illiquidity may become an issue and earning the assumed return may become more difficult.
- Projections, by their nature, are not a guarantee of future results. The modeled projections are intended to serve as estimates of future financial outcomes that are based on the information available to us at the time the modeling is undertaken and completed, and the agreed-upon assumptions and methodologies described herein. Emerging results may differ significantly if the actual experience proves to be different from these assumptions or if alternative methodologies are used. Actual experience may differ due to such variables as demographic experience, the economy, stock market performance and the regulatory environment.
- Periodic review and updates of projections should be performed to measure how well the proposed plan modifications are working out in actual practice.

Comparison of Projected Market Value of Assets Assumes 7.5% Market Rate of Return for all years



Comparison of Projected Market Value of Assets



Projection of Market Value of Assets (in \$Millions)

Annual Net Investment Return: 7.5%

Employer Contribution Rate: 17.5% of payroll increased to 20.5% effective January 1, 2015

Employee Contribution Rate: 3.0% increase over three years beginning in 2015 (for all employees)

Year ending Sept. 30:	Contributions			Disbursements		Return on Assets	Market Value of Assets	Funded Percentage (AVA/AAL)
	Employee	Employer	Benefit Shortfall	Benefit Payments	Expenses			
2014							\$1,154.3	37%
2015	\$32.6	\$70.2	-	\$263.2	\$16.0	\$80.0	1,057.9	34%
2016	36.3	74.7	-	262.5	16.5	73.0	963.0	31%
2017	41.0	76.6	-	259.7	17.0	66.3	870.1	28%
2018	43.0	78.5	-	258.8	17.5	59.5	774.8	25%
2019	44.2	80.5	-	258.5	18.0	52.4	675.3	22%
2020	45.3	82.5	-	270.8	18.5	44.6	558.4	18%
2021	46.5	84.5	-	271.4	19.1	35.9	434.9	14%
2022	47.8	86.7	-	273.9	19.7	26.6	302.4	10%
2023	49.1	88.8	-	274.2	20.3	16.8	162.6	5%
2024	50.4	91.0	-	275.2	20.9	6.4	14.3	0%
2025	51.7	93.3	\$138.9	276.7	21.5	-	-	0%
2026	53.1	95.6	150.8	277.4	22.1	-	-	0%
2027	54.5	98.0	148.3	278.0	22.8	-	-	0%
2028	55.9	100.5	146.9	279.8	23.5	-	-	0%
2029	57.4	103.0	144.0	280.2	24.2	-	-	0%
2030	58.9	105.6	139.7	279.3	24.9	-	-	0%
2031	60.4	108.2	135.6	278.5	25.7	-	-	0%
2032	62.0	110.9	130.4	276.9	26.4	-	-	0%
2033	63.6	113.7	125.2	275.2	27.2	-	-	0%
2034	65.2	116.5	119.1	272.8	28.1	-	-	0%

After reflecting the contribution rate increases, projected insolvency is during the year ending September 30, 2025, a two year delay from the prior scenario.

Summary of Proposed Pension Reform Legislation

Plan of Benefits

- For all regular and public safety employee provide benefits for salaries above \$65,000
 - 1% of the difference between each year's salary and \$65,000 if the salary is over \$65,000
 - Benefits above \$65,000 are limited to the Social Security cap (\$118,500) in 2015
 - Applies for plans years on or after October 1, 2015
- Tier 2 benefit accruals based on compensation each year and no longer based on average compensation at retirement (i.e. career average benefit design)
 - We have assumed this change would be made for all years of service not prospectively
- Prior proposed changes including modifications to retirement ages for Tier 2 employees and a reduction in Tier 1 benefits were not included in this study

Contribution Rates

- No additional contribution rate increases are included in the proposed pension reform legislation other than the following increases effective January 1, 2015:
 - Employer: Effective January 1, 2015 the contribution rate increased from 17.5% to 20.5%.
 - Employee: Effective January 1, 2015 the contribution rate increased 1%, followed by two additional annual increases of 1%.
- As a result of the change in the plan of benefits to allow for benefit accruals above salaries of \$65,000, contributions will also be made for salaries in excess of \$65,000.

Actuarial Cost Analysis (in \$Millions)

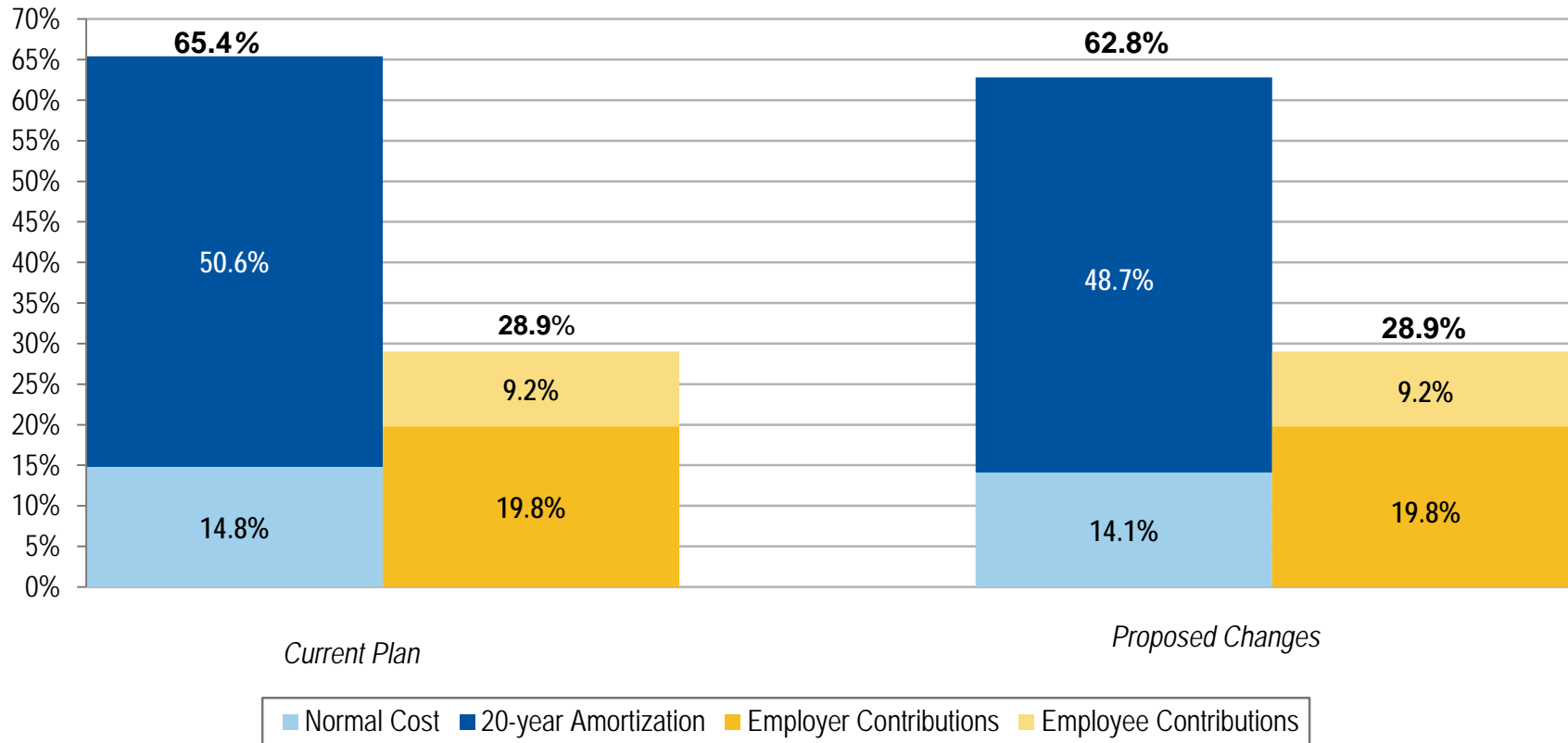
Impact of Proposed Pension Reform Legislation

Proposed Changes to Benefit Provisions – Effect on Total Costs Amounts Based on October 1, 2014 Actuarial Valuation (\$Millions)

	October 1, 2014	Proposed Pension Reform
1. Total Salary	\$355.6	\$369.7
2. Normal Cost		
• Dollar	\$36.6	\$36.3
• Percent of Salary	10.3%	9.8%
3. Actuarial Accrued Liability	\$3,128.3	\$3,126.5
4. Unfunded Accrued Liability	\$1,973.6	\$1,971.8
5. 20-year Amortization of the Unfunded Liability		
• Dollar	\$180.1	\$179.9
• Percent of Salary	50.6%	48.7%
6. Annual Cost: (2) + (5) including Provision for Expenses		
• Dollar	\$232.7	\$232.2
• Percent of Salary	65.4%	62.8%

Comparison of Alternative Annual Plan Costs

Impact of Proposed Pension Reform Legislation



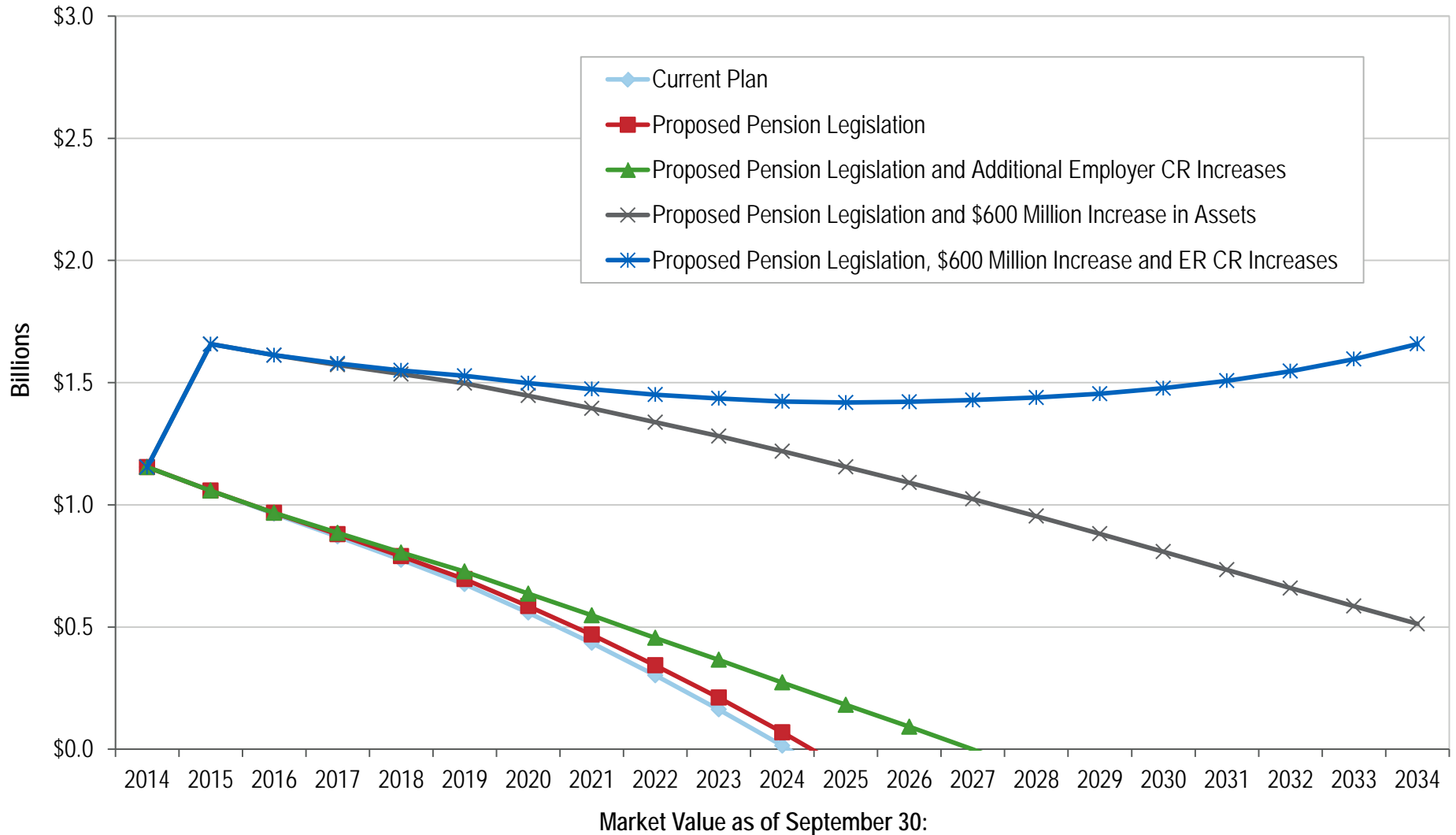
These results are based on the October 1, 2014 valuation and reflects the impact of the Proposed Pension Reform Legislation summarized on slide 30

Comparison of Normal Cost and Contribution Rates by Tier as of October 1, 2014

	Tier 1 Current Plan	Tier 1 Proposed Changes	Tier 2 Current Plan	Tier 2 Proposed Changes
1. Total Salary (\$Millions)	\$246.7	\$257.4	\$108.9	\$112.3
2. Normal Cost				
• Dollar (\$ Millions)*	\$27.1	\$27.0	\$9.5	\$8.7
• Percent of Salary	11.0%	10.3%	8.7%	7.7%
3. Employee Contribution Rate	9.1%	9.1%	9.4%	9.4%
4. Net Employer Normal Cost	1.9%	1.2%	-0.7%	-1.7%

The decrease in the normal cost of Tier 2 employees is primarily due to the change from a final average salary design to a career average salary design.

Comparison of Projected Market Value of Assets



All scenarios assume a 7.5% investment return for all years

Projection of Market Value of Assets (in \$Millions)

Impact of Proposed Pension Reform Legislation

Annual Net Investment Return: 7.5%

Employer Contribution Rate: 17.5% of payroll increased to 20.5% effective January 1, 2015

Employee Contribution Rate: 3.0% increase over three years beginning in 2015 (for all employees)

Proposed Pension Reform

Year ending Sept. 30:	Contributions			Disbursements		Return on Assets	Market Value of Assets	Funded Percentage (AVA/AAL)
	Employee	Employer	Benefit Shortfall	Benefit Payments	Expenses			
2014							\$1,154.3	37%
2015	\$32.6	\$70.2	-	\$263.2	\$16.0	\$80.0	1,057.9	34%
2016	37.7	77.7	-	262.6	16.5	73.2	967.4	31%
2017	42.6	79.6	-	260.0	17.0	66.8	879.4	29%
2018	44.7	81.6	-	259.0	17.5	60.3	789.5	25%
2019	45.9	83.7	-	258.9	18.0	53.7	695.9	23%
2020	47.1	85.8	-	271.1	18.5	46.3	585.3	19%
2021	48.3	87.9	-	271.8	19.1	38.1	468.7	15%
2022	49.6	90.1	-	275.2	19.7	29.3	342.8	11%
2023	50.9	92.3	-	274.8	20.3	20.0	211.0	7%
2024	52.3	94.7	-	278.1	20.9	10.1	69.1	2%
2025	53.7	97.0	\$80.5	278.8	21.5	-	-	0%
2026	55.1	99.4	145.9	278.3	22.1	-	-	0%
2027	56.5	101.9	143.4	279.0	22.8	-	-	0%
2028	58.0	104.5	141.7	280.7	23.5	-	-	0%
2029	59.6	107.1	138.7	281.2	24.2	-	-	0%
2030	61.1	109.8	134.5	280.4	24.9	-	-	0%
2031	62.7	112.5	130.2	279.7	25.7	-	-	0%
2032	64.4	115.3	124.6	277.9	26.4	-	-	0%
2033	66.0	118.2	119.0	276.0	27.2	-	-	0%
2034	67.7	121.2	112.6	273.4	28.1	-	-	0%

The proposed benefit changes do not impact the short term funding shortfall. Assets are still projected to be depleted during the plan year ending September 30, 2025

Projection of Market Value of Assets (in \$Millions)

Increase in employer contribution rate to 35.5% ultimate rate

Annual Net Investment Return: 7.5%

Employer Contribution Rate: 3.0% increases every two years starting 1/1/2017 to an ultimate rate of 35.5% by 1/1/2025

Employee Contribution Rate: 3.0% increase over three years beginning in 2015 (for all employees)

Proposed Pension Reform

Year ending Sept. 30:				Disbursements		Return on Assets	Market Value of Assets	Funded Percentage (AVA/AAL)
	Employee	Employer	Benefit Shortfall	Benefit Payments	Expenses			
2014							\$1,154.3	37%
2015	\$32.6	\$70.2	-	\$263.2	\$16.0	\$80.0	1,057.9	34%
2016	37.7	77.7	-	262.6	16.5	73.2	967.4	31%
2017	41.5	86.2	-	260.0	17.0	67.0	885.1	29%
2018	43.6	91.3	-	259.0	17.5	61.1	804.5	26%
2019	43.6	100.0	-	258.9	18.0	55.3	726.6	23%
2020	44.8	105.5	-	271.1	18.5	49.3	636.5	21%
2021	44.8	114.5	-	271.8	19.1	42.8	547.6	18%
2022	46.0	120.4	-	275.2	19.7	36.3	455.3	15%
2023	46.1	129.6	-	274.8	20.3	29.7	365.6	12%
2024	47.3	136.0	-	278.1	20.9	23.1	272.9	9%
2025	47.3	145.4	-	278.8	21.5	16.4	181.7	6%
2026	48.6	152.2	-	278.3	22.1	9.9	92.0	3%
2027	49.9	156.0	\$3.9	279.0	22.8	-	-	0%
2028	51.2	159.9	93.1	280.7	23.5	-	-	0%
2029	52.6	163.9	88.9	281.2	24.2	-	-	0%
2030	54.0	168.0	83.3	280.4	24.9	-	-	0%
2031	55.4	172.2	77.8	279.7	25.7	-	-	0%
2032	56.8	176.5	71.0	277.9	26.4	-	-	0%
2033	58.3	180.9	64.0	276.0	27.2	-	-	0%
2034	59.8	185.5	56.2	273.4	28.1	-	-	0%

Projection of Market Value of Assets (in \$Millions)

Includes \$600 million increase in assets during the year ended 9/30/2015

Annual Net Investment Return: 7.5%

Employer Contribution Rate: 17.5% of payroll increased to 20.5% effective January 1, 2015

Employee Contribution Rate: 3.0% increase over three years beginning in 2015 (for all employees)

Proposed Pension Reform

Year ending Sept. 30:				Disbursements		Return on Assets	Market Value of Assets	Funded Percentage (AVA/AAL)
	Employee	Employer	Benefit Shortfall	Benefit Payments	Expenses			
2014							\$1,154.3	37%
2015	\$32.6	\$70.2	-	\$263.2	\$16.0	\$80.0	1,657.9	53%
2016	37.7	77.7	-	262.6	16.5	118.2	1,612.4	52%
2017	42.6	79.6	-	260.0	17.0	115.1	1,572.8	51%
2018	44.7	81.6	-	259.0	17.5	112.3	1,534.9	50%
2019	45.9	83.7	-	258.9	18.0	109.6	1,497.1	48%
2020	47.1	85.8	-	271.1	18.5	106.4	1,446.7	47%
2021	48.3	87.9	-	271.8	19.1	102.7	1,394.7	46%
2022	49.6	90.1	-	275.2	19.7	98.8	1,338.2	44%
2023	50.9	92.3	-	274.8	20.3	94.7	1,281.1	43%
2024	52.3	94.7	-	278.1	20.9	90.4	1,219.5	41%
2025	53.7	97.0	-	278.8	21.5	85.8	1,155.7	39%
2026	55.1	99.4	-	278.3	22.1	81.2	1,091.0	37%
2027	56.5	101.9	-	279.0	22.8	76.4	1,024.1	35%
2028	58.0	104.5	-	280.7	23.5	71.5	954.0	34%
2029	59.6	107.1	-	281.2	24.2	66.3	881.5	31%
2030	61.1	109.8	-	280.4	24.9	61.1	808.2	29%
2031	62.7	112.5	-	279.7	25.7	55.7	733.8	27%
2032	64.4	115.3	-	277.9	26.4	50.4	659.4	25%
2033	66.0	118.2	-	276.0	27.2	45.0	585.4	22%
2034	67.7	121.2	-	273.4	28.1	39.7	512.5	20%

Assets are projected to be depleted during the year ending September 30, 2043.

Projection of Market Value of Assets (in \$Millions)

Includes \$600 million increase in assets during the year ended 9/30/2015

Annual Net Investment Return: 7.5%

Employer Contribution Rate: 3.0% increases every two years starting 1/1/2017 to an ultimate rate of 35.5% by 1/1/2025

Employee Contribution Rate: 3.0% increase over three years beginning in 2015 (for all employees)

Proposed Pension Reform

Year ending Sept. 30:				Disbursements		Return on Assets	Market Value of Assets	Funded Percentage (AVA/AAL)
	Employee	Employer	Benefit Shortfall	Benefit Payments	Expenses			
2014							\$1,154.3	37%
2015	\$32.6	\$70.2	-	\$263.2	\$16.0	\$80.0	1,657.9	53%
2016	37.7	77.7	-	262.6	16.5	118.2	1,612.4	52%
2017	41.5	86.2	-	260.0	17.0	115.3	1,578.5	51%
2018	43.6	91.3	-	259.0	17.5	113.1	1,549.9	50%
2019	43.6	100.0	-	258.9	18.0	111.2	1,527.9	49%
2020	44.8	105.5	-	271.1	18.5	109.4	1,497.9	49%
2021	44.8	114.5	-	271.8	19.1	107.4	1,473.6	48%
2022	46.0	120.4	-	275.2	19.7	105.7	1,450.8	48%
2023	46.1	129.6	-	274.8	20.3	104.3	1,435.7	48%
2024	47.3	136.0	-	278.1	20.9	103.3	1,423.3	48%
2025	47.3	145.4	-	278.8	21.5	102.7	1,418.3	48%
2026	48.6	152.2	-	278.3	22.1	102.6	1,421.4	49%
2027	49.9	156.0	-	279.0	22.8	103.0	1,428.5	50%
2028	51.2	159.9	-	280.7	23.5	103.7	1,439.1	51%
2029	52.6	163.9	-	281.2	24.2	104.6	1,454.8	52%
2030	54.0	168.0	-	280.4	24.9	106.0	1,477.5	54%
2031	55.4	172.2	-	279.7	25.7	107.9	1,507.6	56%
2032	56.8	176.5	-	277.9	26.4	110.4	1,547.0	58%
2033	58.3	180.9	-	276.0	27.2	113.6	1,596.6	61%
2034	59.8	185.5	-	273.4	28.1	117.6	1,658.0	64%



Agenda

1. Preliminary Actuarial Valuation and Review as of October 1, 2014
2. Projections of Market Value of Assets and Impact of Proposed Pension Reform Legislation
3. Questions

This presentation was prepared under the supervision of Rocky Joyner, ASA, FCA, MAAA, EA, and Aldwin Frias, FSA, FCA, MAAA, EA

Questions

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Appendix



Projection of Market Value of Assets (in \$Millions)

Annual Net Investment Return: 7.5% for the year ended September 30, 2015 followed by annual 0.5% decreases

Employer Contribution Rate: 17.5% of payroll increased to 20.5% effective January 1, 2015

Employee Contribution Rate: 3.0% increase over three years beginning in 2015 (for all employees)

Year ending Sept. 30:	Contributions			Disbursements		Return on Assets	Market Value of Assets	Funded Percentage (AVA/AAL)
	Employee	Employer	Benefit Shortfall	Benefit Payments	Expenses			
2014							\$1,154.3	37%
2015	\$32.6	\$70.2	-	\$263.2	\$16.0	\$80.0	1,057.9	34%
2016	36.3	74.7	-	262.5	16.5	68.2	958.1	31%
2017	41.0	76.6	-	259.7	17.0	57.1	856.1	27%
2018	43.0	78.5	-	258.8	17.5	46.7	748.1	24%
2019	44.2	80.5	-	258.5	18.0	37.0	633.1	20%
2020	45.3	82.5	-	270.8	18.5	27.6	499.2	15%
2021	46.5	84.5	-	271.4	19.1	18.9	358.7	11%
2022	47.8	86.7	-	273.9	19.7	11.2	210.7	6%
2023	49.1	88.8	-	274.2	20.3	4.6	58.7	1%
2024	50.4	91.0	\$96.0	275.2	20.9	-	-	0%
2025	51.7	93.3	153.1	276.7	21.5	-	-	0%
2026	53.1	95.6	150.8	277.4	22.1	-	-	0%
2027	54.5	98.0	148.3	278.0	22.8	-	-	0%
2028	55.9	100.5	146.9	279.8	23.5	-	-	0%
2029	57.4	103.0	144.0	280.2	24.2	-	-	0%
2030	58.9	105.6	139.7	279.3	24.9	-	-	0%
2031	60.4	108.2	135.6	278.5	25.7	-	-	0%
2032	62.0	110.9	130.4	276.9	26.4	-	-	0%
2033	63.6	113.7	125.2	275.2	27.2	-	-	0%
2034	65.2	116.5	119.1	272.8	28.1	-	-	0%

If the market rate of return declines by ½% each year, assets are projected to be depleted during the plan year ending September 30, 2024

Projection of Market Value of Assets (in \$Millions)

Annual Net Investment Return: 10.0% for the year ended September 30, 2015 followed by 7.5% each year thereafter
Employer Contribution Rate: 17.5% of payroll increased to 20.5% effective January 1, 2015
Employee Contribution Rate: 3.0% increase over three years beginning in 2015 (for all employees)

Year ending Sept. 30:	Contributions			Disbursements		Return on Assets	Market Value of Assets	Funded Percentage (AVA/AAL)
	Employee	Employer	Benefit Shortfall	Benefit Payments	Expenses			
2014							\$1,154.3	37%
2015	\$32.6	\$70.2	-	\$263.2	\$16.0	\$106.6	1,084.6	35%
2016	36.3	74.7	-	262.5	16.5	75.0	991.6	33%
2017	41.0	76.6	-	259.7	17.0	68.4	900.9	29%
2018	43.0	78.5	-	258.8	17.5	61.8	807.9	26%
2019	44.2	80.5	-	258.5	18.0	54.9	710.9	23%
2020	45.3	82.5	-	270.8	18.5	47.3	596.7	19%
2021	46.5	84.5	-	271.4	19.1	38.8	476.0	15%
2022	47.8	86.7	-	273.9	19.7	29.7	346.6	11%
2023	49.1	88.8	-	274.2	20.3	20.1	210.1	7%
2024	50.4	91.0	-	275.2	20.9	10.0	65.4	2%
2025	51.7	93.3	\$87.8	276.7	21.5	-	-	0%
2026	53.1	95.6	150.8	277.4	22.1	-	-	0%
2027	54.5	98.0	148.3	278.0	22.8	-	-	0%
2028	55.9	100.5	146.9	279.8	23.5	-	-	0%
2029	57.4	103.0	144.0	280.2	24.2	-	-	0%
2030	58.9	105.6	139.7	279.3	24.9	-	-	0%
2031	60.4	108.2	135.6	278.5	25.7	-	-	0%
2032	62.0	110.9	130.4	276.9	26.4	-	-	0%
2033	63.6	113.7	125.2	275.2	27.2	-	-	0%
2034	65.2	116.5	119.1	272.8	28.1	-	-	0%

Projection of Market Value of Assets (in \$Millions)

Annual Net Investment Return: 20.0% for the year ended September 30, 2015 followed by 7.5% each year thereafter
Employer Contribution Rate: 17.5% of payroll increased to 20.5% effective January 1, 2015
Employee Contribution Rate: 3.0% increase over three years beginning in 2015 (for all employees)

Year ending Sept. 30:	Contributions			Disbursements		Return on Assets	Market Value of Assets	Funded Percentage (AVA/AAL)
	Employee	Employer	Benefit Shortfall	Benefit Payments	Expenses			
2014							\$1,154.3	37%
2015	\$32.6	\$70.2	-	\$263.2	\$16.0	\$213.2	1,191.2	41%
2016	36.3	74.7	-	262.5	16.5	83.0	1,106.2	38%
2017	41.0	76.6	-	259.7	17.0	77.0	1,024.1	35%
2018	43.0	78.5	-	258.8	17.5	71.0	940.4	31%
2019	44.2	80.5	-	258.5	18.0	64.8	853.3	27%
2020	45.3	82.5	-	270.8	18.5	57.9	749.7	24%
2021	46.5	84.5	-	271.4	19.1	50.3	640.6	21%
2022	47.8	86.7	-	273.9	19.7	42.1	523.5	17%
2023	49.1	88.8	-	274.2	20.3	33.4	400.3	13%
2024	50.4	91.0	-	275.2	20.9	24.2	269.8	9%
2025	51.7	93.3	-	276.7	21.5	14.5	131.1	4%
2026	53.1	95.6	\$19.7	277.4	22.1	-	-	0%
2027	54.5	98.0	148.3	278.0	22.8	-	-	0%
2028	55.9	100.5	146.9	279.8	23.5	-	-	0%
2029	57.4	103.0	144.0	280.2	24.2	-	-	0%
2030	58.9	105.6	139.7	279.3	24.9	-	-	0%
2031	60.4	108.2	135.6	278.5	25.7	-	-	0%
2032	62.0	110.9	130.4	276.9	26.4	-	-	0%
2033	63.6	113.7	125.2	275.2	27.2	-	-	0%
2034	65.2	116.5	119.1	272.8	28.1	-	-	0%

Projection of Market Value of Assets (in \$Millions)

Annual Net Investment Return: -10.0% for the year ended September 30, 2015 followed by 7.5% each year thereafter

Employer Contribution Rate: 17.5% of payroll increased to 20.5% effective January 1, 2015

Employee Contribution Rate: 3.0% increase over three years beginning in 2015 (for all employees)

Year ending Sept. 30:	Contributions			Disbursements		Return on Assets	Market Value of Assets	Funded Percentage (AVA/AAL)
	Employee	Employer	Benefit Shortfall	Benefit Payments	Expenses			
2014							\$1,154.3	37%
2015	\$32.6	\$70.2	-	\$263.2	\$16.0	-\$106.6	871.3	23%
2016	36.3	74.7	-	262.5	16.5	59.1	762.4	21%
2017	41.0	76.6	-	259.7	17.0	51.2	654.5	19%
2018	43.0	78.5	-	258.8	17.5	43.3	543.1	17%
2019	44.2	80.5	-	258.5	18.0	35.0	426.2	14%
2020	45.3	82.5	-	270.8	18.5	25.9	290.6	9%
2021	46.5	84.5	-	271.4	19.1	15.8	146.9	5%
2022	47.8	86.7	\$12.2	273.9	19.7	-	-	0%
2023	49.1	88.8	156.5	274.2	20.3	-	-	0%
2024	50.4	91.0	154.6	275.2	20.9	-	-	0%
2025	51.7	93.3	153.1	276.7	21.5	-	-	0%
2026	53.1	95.6	150.8	277.4	22.1	-	-	0%
2027	54.5	98.0	148.3	278.0	22.8	-	-	0%
2028	55.9	100.5	146.9	279.8	23.5	-	-	0%
2029	57.4	103.0	144.0	280.2	24.2	-	-	0%
2030	58.9	105.6	139.7	279.3	24.9	-	-	0%
2031	60.4	108.2	135.6	278.5	25.7	-	-	0%
2032	62.0	110.9	130.4	276.9	26.4	-	-	0%
2033	63.6	113.7	125.2	275.2	27.2	-	-	0%
2034	65.2	116.5	119.1	272.8	28.1	-	-	0%

Projection of Market Value of Assets (in \$Millions)

Annual Net Investment Return: -20.0% for the year ended September 30, 2015 followed by 7.5% each year thereafter

Employer Contribution Rate: 17.5% of payroll increased to 20.5% effective January 1, 2015

Employee Contribution Rate: 3.0% increase over three years beginning in 2015 (for all employees)

Year ending Sept. 30:	Contributions			Disbursements		Return on Assets	Market Value of Assets	Funded Percentage (AVA/AAL)
	Employee	Employer	Benefit Shortfall	Benefit Payments	Expenses			
2014							\$1,154.3	37%
2015	\$32.6	\$70.2	-	\$263.2	\$16.0	-\$213.2	764.7	17%
2016	36.3	74.7	-	262.5	16.5	51.1	647.8	16%
2017	41.0	76.6	-	259.7	17.0	42.6	531.3	14%
2018	43.0	78.5	-	258.8	17.5	34.0	410.6	12%
2019	44.2	80.5	-	258.5	18.0	25.1	283.8	10%
2020	45.3	82.5	-	270.8	18.5	15.2	137.5	5%
2021	46.5	84.5	\$22.0	271.4	19.1	-	-	0%
2022	47.8	86.7	159.2	273.9	19.7	-	-	0%
2023	49.1	88.8	156.5	274.2	20.3	-	-	0%
2024	50.4	91.0	154.6	275.2	20.9	-	-	0%
2025	51.7	93.3	153.1	276.7	21.5	-	-	0%
2026	53.1	95.6	150.8	277.4	22.1	-	-	0%
2027	54.5	98.0	148.3	278.0	22.8	-	-	0%
2028	55.9	100.5	146.9	279.8	23.5	-	-	0%
2029	57.4	103.0	144.0	280.2	24.2	-	-	0%
2030	58.9	105.6	139.7	279.3	24.9	-	-	0%
2031	60.4	108.2	135.6	278.5	25.7	-	-	0%
2032	62.0	110.9	130.4	276.9	26.4	-	-	0%
2033	63.6	113.7	125.2	275.2	27.2	-	-	0%
2034	65.2	116.5	119.1	272.8	28.1	-	-	0%