

January 31, 2013

CONFIDENTIAL

Mr. Dave Bergstrom  
Executive Director  
Minnesota State Retirement System  
60 Empire Drive, Suite 300  
St. Paul, MN 55103

**Re: Projection of Contributions and Funding Status – Judges Plan**

Dear Dave:

Attached are 30-year projections of estimated funded status, required contributions, and statutory contributions under three asset return scenarios for the Judges Retirement Fund. The estimates are based on participant data, assumptions, methods, and plan provisions as of July 1, 2012 as detailed in the Judges Retirement Fund Actuarial Valuation Report as of July 1, 2012.

As required by the State of Minnesota Standards for Actuarial Work, the projections reflect three asset return scenarios. The statutory investment return assumption is a 5-year select and ultimate approach with rates of 8.0% for the period July 1, 2012 to June 30, 2017 and 8.5% thereafter. The scenarios assume future investment returns of 1.5% more than the assumed rate, the assumed rate, and 1.5% less than the assumed rate.

In each scenario, the funding ratios are expected to decline. Note that as the funding ratios decline, it will be increasingly difficult for the plan to attain the assumed investment returns.

The estimates are based on the market value of assets with no smoothing of investment gains or losses. Payroll is assumed to increase 3.00% a year, consistent with the valuation assumption for total payroll growth. In all scenarios, the valuation interest rate used to discount liabilities was the single effective interest rate used in the July 1, 2012 valuation of 8.32%, which produces a similar liability stream as trending to a liability that reflects the expiration of the 5 year select period on June 30, 2017.

Normal cost is assumed to trend downward as a percent of payroll to a level ultimate rate that reflects the expiration of the 5 year select period on June 30, 2017.

Future contributions to the plan are assumed to be equal to the contribution level of the 2012 valuation; that is, statutory contributions are assumed to equal 28.02% until plan assets are depleted. This reflects the fact that member contributions for Judges at the maximum benefit level are directed to the Unclassified Employees Retirement Plan. If plan assets are depleted during the projection period, statutory contributions are assumed to be equal to estimated benefit payments.

Benefit payments are based on the assumptions and methods described in this letter, with adjustments applied to estimate the impact of future members hired after June 30, 2012 retiring during the 30-year projection period. To estimate this impact, we assumed total benefit payments would increase a minimum of 2% per year.

If actuarial accrued liability exceeds assets, the unfunded actuarial accrued liability is amortized through June 30, 2039 per Minnesota Statute 356.215, Subdivision 11. As directed by MSRS, the statutory amortization date is assumed to be changed to June 30, 2069 once the current period expires in 2039. Per Minnesota Statute 356.215, Subdivision 11 (l), a negative unfunded actuarial accrued liability (i.e. when assets exceed liability) is amortized over a rolling 30-year period.

It is our understanding that changes in benefits and contributions are being considered to address the current funding deficiency in this plan; these potential changes have not been reflected herein.

### **Postretirement Benefit Increases**

A very significant assumption affecting the projected estimates is the expectation of annual increases in the benefits being paid to retirees and beneficiaries. If the plan reaches a funding ratio of 90% (on a market value of assets basis) in the future, postretirement increases will revert to the 2.5% level.

Under all rate of return scenarios, the funded status of the plan is expected to deteriorate. We assumed a 2.0% postretirement benefit increase for all years for the presented scenarios. If the postretirement benefit increase was assumed to be 2.5% instead of 2.0%, the liabilities would be significantly greater than the liabilities shown in this report.

### **Comments**

To the best of our knowledge and belief, the calculations were completed in accordance with the requirements of Minnesota Statutes, Section 356.215, and the requirements of the Standards for Actuarial Work established by the Legislative Commission on Pensions and Retirement.

This report should not be relied upon for any purpose other than the purpose described herein. Determinations of the financial results associated with the benefits described in this report in a manner other than the intended purpose may produce significantly different results. GRS is not responsible for the consequences of any unauthorized use.

The valuation was based upon information furnished by the Minnesota State Retirement System (MSRS), concerning benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries.

Actuarial assumptions, including discount rates, mortality tables and others identified in this report, are prescribed by Minnesota Statutes Section 356.215, the Legislative Commission on Pensions and Retirement (LCPR), and the Board of Directors. These parties are responsible for selecting the plan's funding policy, actuarial valuation methods, asset valuation methods, and assumptions. The policies, methods and assumptions used in this valuation are those that have been so prescribed and are described in the Actuarial Basis of the valuation report. MSRS is solely responsible for communicating to GRS any changes required thereto.

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; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law.

### **Professional Qualifications**

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

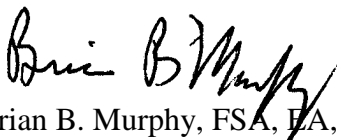
The undersigned actuaries are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. In addition, Mr. Murphy meets the requirements of "approved actuary" under Minnesota Statutes Section 356.215, Subdivision 1, Paragraph (c).

This report has been prepared by actuaries who have substantial experience valuing public employee retirement systems. To the best of our knowledge and belief the information contained in this report is accurate and fairly presents the actuarial position of the Judges Retirement Fund as of the valuation date and was performed in accordance with the requirements of Minnesota Statutes Section 356.215, and the requirements of the Standards for Actuarial Work established by the LCPR. All calculations have been made in conformity with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board and with applicable statutes.

Sincerely,



Bonita J. Wurst, ASA, EA, MAAA



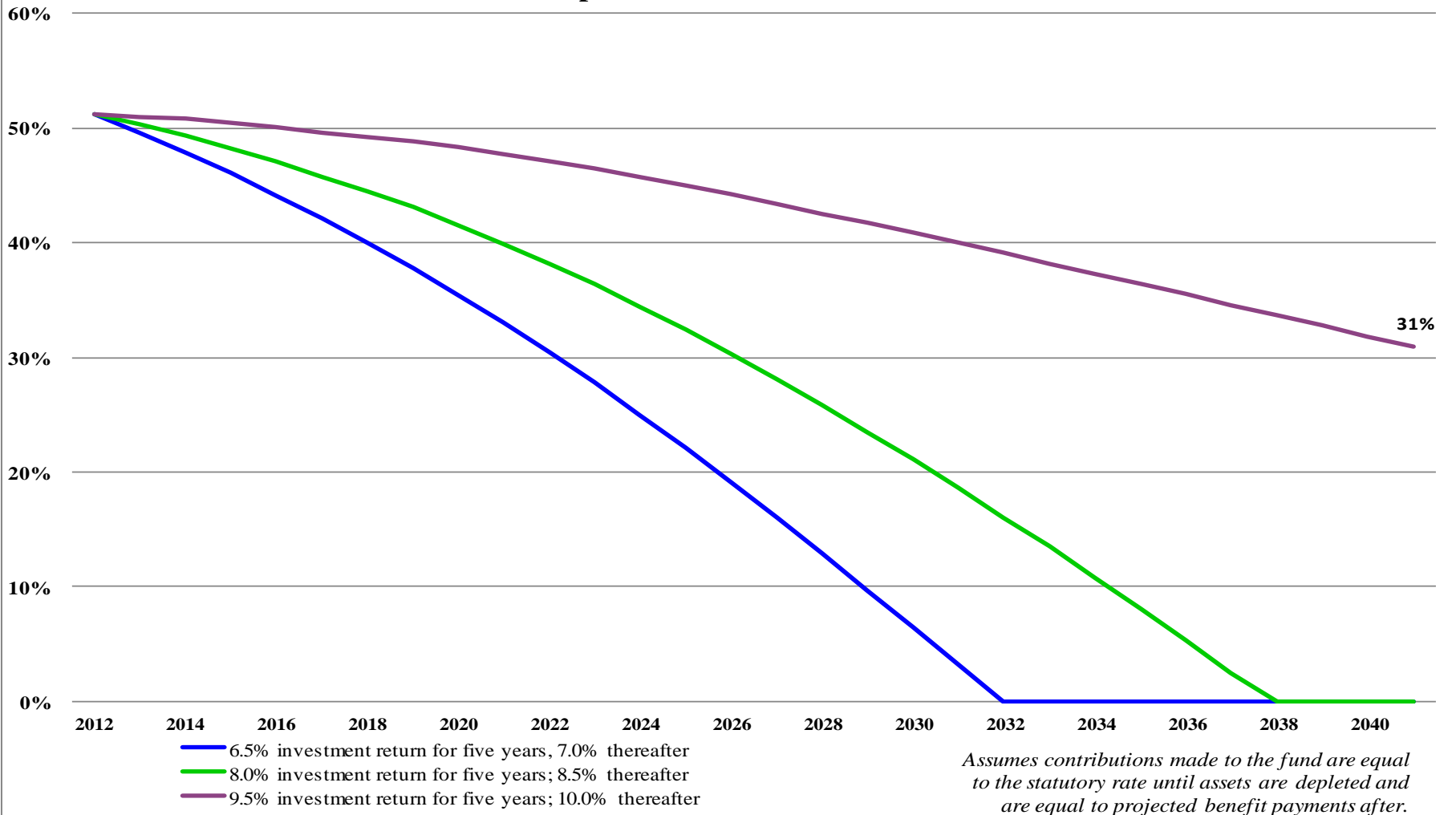
Brian B. Murphy, FSA, EA, MAAA, FCA

BJW/BBM:sc  
Enclosures

This exhibit should only be viewed in conjunction with GRS' letter to MSRS dated January 31, 2013.

## Judges Retirement Fund Projection of Funded Status

Assumes postretirement increases of 2.0%

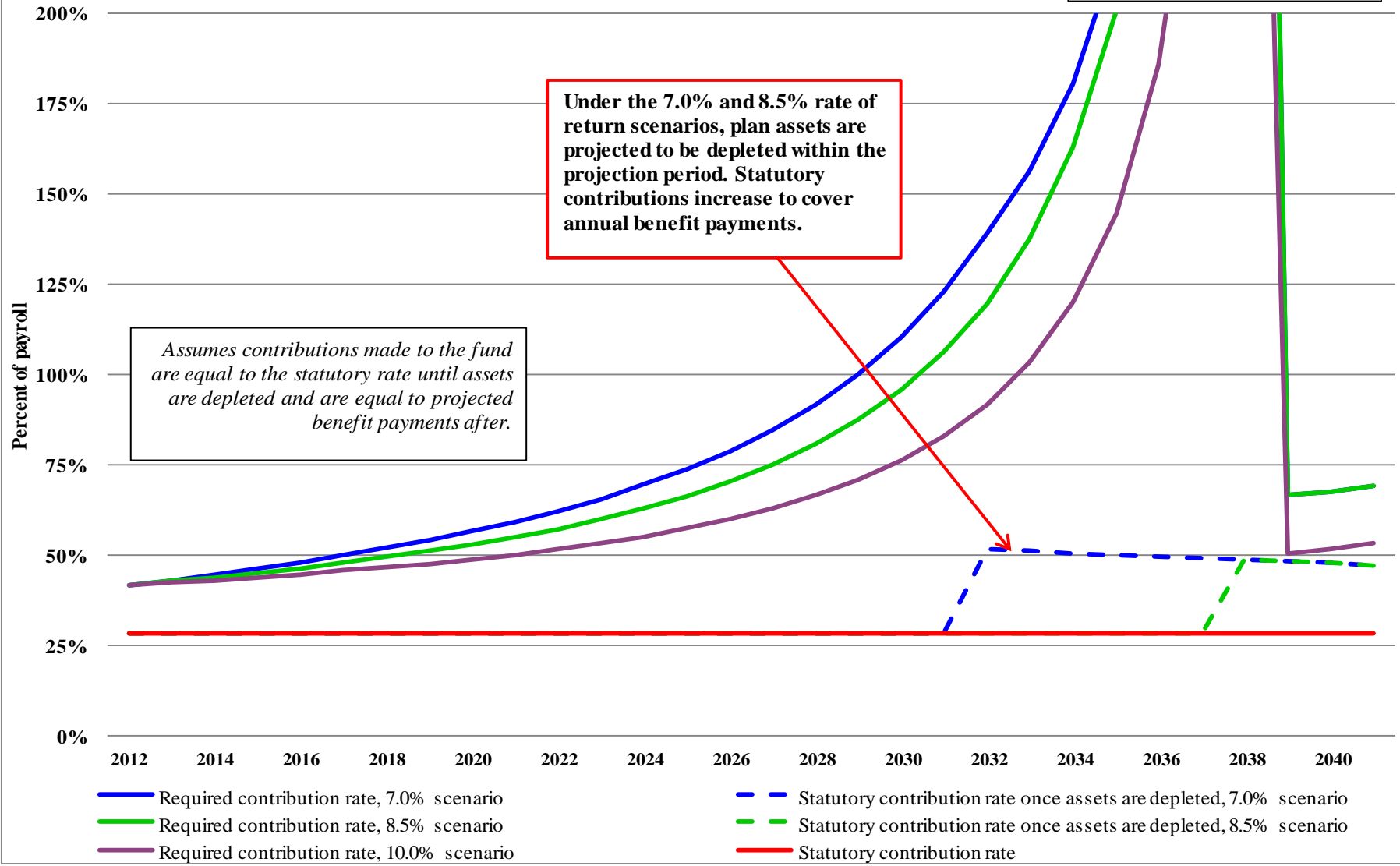


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## Judges Retirement Fund Estimated Contribution Rates

Assumes postretirement increases of 2.0%

Rates briefly exceed 200% of payroll at the end of the projection period. For details, refer to attached exhibits.



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**Judges Retirement Fund**  
**Scenario: 6.5% for Five Years, 7.0% thereafter**  
**Fiscal year beginning July 1**

<b>\$ in Thousands</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
<b>Contributions (% of Payroll)</b>										
Statutory - Chapter 490	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%
Required - Chapter 356	41.7%	43.0%	44.5%	46.1%	47.8%	49.8%	51.8%	54.0%	56.4%	59.1%
Sufficiency / (Deficiency)	(13.6%)	(15.0%)	(16.5%)	(18.1%)	(19.8%)	(21.8%)	(23.8%)	(26.0%)	(28.4%)	(31.1%)
<b>Contributions</b>										
Statutory - Chapter 490	11,364	11,705	12,056	12,418	12,790	13,174	13,569	13,976	14,396	14,828
Required - Chapter 356	16,895	17,964	19,134	20,419	21,834	23,429	25,094	26,937	28,988	31,280
Sufficiency / (Deficiency)	(5,531)	(6,259)	(7,078)	(8,001)	(9,044)	(10,255)	(11,525)	(12,961)	(14,592)	(16,452)
<b>Funding Ratios</b>										
Current Assets (MVA)	144,086	145,063	145,334	144,803	143,441	141,020	138,129	134,249	129,460	123,882
Actuarial Accrued Liability (AAL)	281,576	292,455	303,291	314,022	324,654	334,999	345,008	354,906	364,833	374,968
Unfunded AAL	137,490	147,392	157,957	169,219	181,213	193,979	206,879	220,657	235,373	251,086
Funding Ratio	51%	50%	48%	46%	44%	42%	40%	38%	35%	33%
<b>Benefit Payments</b>										
	19,420	20,503	21,647	22,778	24,087	25,425	26,578	27,597	28,454	29,317

*Assumes 2.0% postretirement benefit increases for all years.*

*Assumes statutory contributions increase to cover annual benefit payments once assets are depleted.*

*Numbers may not add due to rounding.*

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**Judges Retirement Fund**  
**Scenario: 6.5% for Five Years, 7.0% thereafter**  
**Fiscal year beginning July 1**

\$ in Thousands	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
<b>Contributions (% of Payroll)</b>										
Statutory - Chapter 490	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%
Required - Chapter 356	62.1%	65.5%	69.3%	73.7%	78.8%	84.7%	91.6%	100.0%	110.2%	123.0%
Sufficiency / (Deficiency)	(34.1%)	(37.5%)	(41.3%)	(45.7%)	(50.7%)	(56.6%)	(63.6%)	(72.0%)	(82.2%)	(95.0%)
<b>Contributions</b>										
Statutory - Chapter 490	15,272	15,731	16,202	16,689	17,189	17,705	18,236	18,783	19,347	19,927
Required - Chapter 356	33,856	36,770	40,089	43,900	48,317	53,491	59,630	67,022	76,088	87,455
Sufficiency / (Deficiency)	(18,584)	(21,039)	(23,887)	(27,212)	(31,128)	(35,786)	(41,394)	(48,239)	(56,742)	(67,528)
<b>Funding Ratios</b>										
Current Assets (MVA)	117,464	110,146	101,834	92,421	82,079	70,835	58,640	45,431	31,139	15,689
Actuarial Accrued Liability (AAL)	385,329	395,930	406,754	417,774	429,256	441,323	454,032	467,435	481,585	496,540
Unfunded AAL	267,866	285,784	304,919	325,354	347,177	370,488	395,392	422,004	450,446	480,850
Funding Ratio	30%	28%	25%	22%	19%	16%	13%	10%	6%	3%
<b>Benefit Payments</b>	30,195	31,115	32,087	32,830	33,500	34,170	34,854	35,551	36,262	36,987

*Assumes 2.0% postretirement benefit increases for all years.*

*Assumes statutory contributions increase to cover annual benefit payments once assets are depleted.*

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**Judges Retirement Fund**  
**Scenario: 6.5% for Five Years, 7.0% thereafter**  
**Fiscal year beginning July 1**

<b>\$ in Thousands</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>2035</b>	<b>2036</b>	<b>2037</b>	<b>2038</b>	<b>2039</b>	<b>2040</b>	<b>2041</b>
<b>Contributions (% of Payroll)</b>										
Statutory - Chapter 490	51.5%	51.0%	50.5%	50.0%	49.5%	49.1%	48.6%	48.1%	47.6%	47.2%
Required - Chapter 356	139.2%	156.3%	180.5%	217.1%	278.2%	401.0%	770.2%	66.4%	67.6%	68.9%
Sufficiency / (Deficiency)	(87.7%)	(105.3%)	(130.0%)	(167.0%)	(228.7%)	(352.0%)	(721.6%)	(18.3%)	(20.0%)	(21.7%)
<b>Contributions</b>										
Statutory - Chapter 490	37,727	38,481	39,251	40,036	40,837	41,654	42,487	43,336	44,203	45,087
Required - Chapter 356	101,936	117,942	140,293	173,744	229,394	340,538	673,655	59,859	62,724	65,832
Sufficiency / (Deficiency)	(64,209)	(79,461)	(101,042)	(133,707)	(188,557)	(298,885)	(631,168)	(16,522)	(18,521)	(20,745)
<b>Funding Ratios</b>										
Current Assets (MVA)	0	0	0	0	0	0	0	0	0	0
Actuarial Accrued Liability (AAL)	512,363	529,124	546,896	565,760	585,803	607,120	629,814	653,994	679,783	707,310
Unfunded AAL	512,363	529,124	546,896	565,760	585,803	607,120	629,814	653,994	679,783	707,310
Funding Ratio	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
<b>Benefit Payments</b>	<b>37,727</b>	<b>38,481</b>	<b>39,251</b>	<b>40,036</b>	<b>40,837</b>	<b>41,654</b>	<b>42,487</b>	<b>43,336</b>	<b>44,203</b>	<b>45,087</b>

*Assumes 2.0% postretirement benefit increases for all years.*

*Assumes statutory contributions increase to cover annual benefit payments once assets are depleted.*

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**Judges Retirement Fund**  
**Scenario: 8.0% for Five Years, 8.5% thereafter**  
**Fiscal year beginning July 1**

<b>\$ in Thousands</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
<b>Contributions (% of Payroll)</b>										
Statutory - Chapter 490	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%
Required - Chapter 356	41.7%	42.7%	43.7%	44.9%	46.3%	47.8%	49.3%	50.9%	52.8%	54.9%
Sufficiency / (Deficiency)	(13.6%)	(14.6%)	(15.7%)	(16.9%)	(18.3%)	(19.8%)	(21.3%)	(22.9%)	(24.8%)	(26.8%)
<b>Contributions</b>										
Statutory - Chapter 490	11,364	11,705	12,056	12,418	12,790	13,174	13,569	13,976	14,396	14,828
Required - Chapter 356	16,895	17,816	18,820	19,916	21,119	22,473	23,869	25,410	27,119	29,026
Sufficiency / (Deficiency)	(5,531)	(6,111)	(6,764)	(7,498)	(8,329)	(9,299)	(10,300)	(11,434)	(12,723)	(14,198)
<b>Funding Ratios</b>										
Current Assets (MVA)	144,086	147,163	149,712	151,639	152,917	153,321	153,498	152,898	151,606	149,745
Actuarial Accrued Liability (AAL)	281,576	292,455	303,291	314,022	324,654	334,999	345,008	354,906	364,833	374,968
Unfunded AAL	137,490	145,292	153,579	162,383	171,737	181,678	191,510	202,008	213,227	225,223
Funding Ratio	51%	50%	49%	48%	47%	46%	44%	43%	42%	40%
<b>Benefit Payments</b>	19,420	20,503	21,647	22,778	24,087	25,425	26,578	27,597	28,454	29,317

*Assumes 2.0% postretirement benefit increases for all years.*

*Assumes statutory contributions increase to cover annual benefit payments once assets are depleted.*

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**Scenario: 8.0% for Five Years, 8.5% thereafter**  
**Fiscal year beginning July 1**

<b>\$ in Thousands</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>
<b>Contributions (% of Payroll)</b>										
Statutory - Chapter 490	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%
Required - Chapter 356	57.2%	59.8%	62.8%	66.3%	70.3%	75.0%	80.7%	87.4%	95.7%	106.2%
Sufficiency / (Deficiency)	(29.2%)	(31.8%)	(34.8%)	(38.3%)	(42.3%)	(47.0%)	(52.6%)	(59.4%)	(67.7%)	(78.2%)
<b>Contributions</b>										
Statutory - Chapter 490	15,272	15,731	16,202	16,689	17,189	17,705	18,236	18,783	19,347	19,927
Required - Chapter 356	31,166	33,583	36,333	39,488	43,142	47,421	52,498	58,611	66,108	75,510
Sufficiency / (Deficiency)	(15,894)	(17,852)	(20,130)	(22,799)	(25,953)	(29,716)	(34,262)	(39,828)	(46,761)	(55,583)
<b>Funding Ratios</b>										
Current Assets (MVA)	147,274	144,139	140,254	135,513	130,099	124,045	117,311	109,843	101,581	92,458
Actuarial Accrued Liability (AAL)	385,329	395,930	406,754	417,774	429,256	441,323	454,032	467,435	481,585	496,540
Unfunded AAL	238,055	251,790	266,500	282,261	299,157	317,278	336,721	357,592	380,004	404,081
Funding Ratio	38%	36%	34%	32%	30%	28%	26%	23%	21%	19%
<b>Benefit Payments</b>										
	30,195	31,115	32,087	32,830	33,500	34,170	34,854	35,551	36,262	36,987

*Assumes 2.0% postretirement benefit increases for all years.*

*Assumes statutory contributions increase to cover annual benefit payments once assets are depleted.*

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**Judges Retirement Fund**  
**Scenario: 8.0% for Five Years, 8.5% thereafter**  
**Fiscal year beginning July 1**

<b>\$ in Thousands</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>2035</b>	<b>2036</b>	<b>2037</b>	<b>2038</b>	<b>2039</b>	<b>2040</b>	<b>2041</b>
<b>Contributions (% of Payroll)</b>										
Statutory - Chapter 490	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	48.6%	48.1%	47.6%	47.2%
Required - Chapter 356	119.6%	137.6%	162.9%	200.9%	264.3%	391.4%	770.2%	66.4%	67.6%	68.9%
Sufficiency / (Deficiency)	(91.6%)	(109.6%)	(134.9%)	(172.9%)	(236.3%)	(363.3%)	(721.6%)	(18.3%)	(20.0%)	(21.7%)
<b>Contributions</b>										
Statutory - Chapter 490	20,525	21,141	21,775	22,428	23,101	23,794	42,487	43,336	44,203	45,087
Required - Chapter 356	87,635	103,847	126,601	160,809	217,928	332,337	673,655	59,859	62,724	65,832
Sufficiency / (Deficiency)	(67,110)	(82,706)	(104,826)	(138,381)	(194,827)	(308,543)	(631,168)	(16,522)	(18,521)	(20,745)
<b>Funding Ratios</b>										
Current Assets (MVA)	82,406	71,348	59,200	45,876	31,277	15,300	0	0	0	0
Actuarial Accrued Liability (AAL)	512,363	529,124	546,896	565,760	585,803	607,120	629,814	653,994	679,783	707,310
Unfunded AAL	429,957	457,776	487,696	519,884	554,526	591,821	629,814	653,994	679,783	707,310
Funding Ratio	16%	13%	11%	8%	5%	3%	0%	0%	0%	0%
<b>Benefit Payments</b>										
	37,727	38,481	39,251	40,036	40,837	41,654	42,487	43,336	44,203	45,087

*Assumes 2.0% postretirement benefit increases for all years.*

*Assumes statutory contributions increase to cover annual benefit payments once assets are depleted.*

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**Judges Retirement Fund**  
**Scenario: 9.5% for Five Years, 10.0% thereafter**  
**Fiscal year beginning July 1**

<b>\$ in Thousands</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
<b>Contributions (% of Payroll)</b>										
Statutory - Chapter 490	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%
Required - Chapter 356	41.7%	42.3%	43.0%	43.8%	44.6%	45.6%	46.6%	47.6%	48.7%	50.0%
Sufficiency / (Deficiency)	(13.6%)	(14.3%)	(15.0%)	(15.8%)	(16.6%)	(17.6%)	(18.5%)	(19.6%)	(20.7%)	(22.0%)
<b>Contributions</b>										
Statutory - Chapter 490	11,364	11,705	12,056	12,418	12,790	13,174	13,569	13,976	14,396	14,828
Required - Chapter 356	16,895	17,669	18,501	19,399	20,372	21,459	22,549	23,737	25,039	26,474
Sufficiency / (Deficiency)	(5,531)	(5,964)	(6,445)	(6,981)	(7,582)	(8,285)	(8,980)	(9,761)	(10,643)	(11,646)
<b>Funding Ratios</b>										
Current Assets (MVA)	144,086	149,263	154,153	158,675	162,817	166,370	170,060	173,320	176,261	179,034
Actuarial Accrued Liability (AAL)	281,576	292,455	303,291	314,022	324,654	334,999	345,008	354,906	364,833	374,968
Unfunded AAL	137,490	143,192	149,138	155,347	161,837	168,629	174,948	181,586	188,572	195,934
Funding Ratio	51%	51%	51%	51%	50%	50%	49%	49%	48%	48%
<b>Benefit Payments</b>										
	19,420	20,503	21,647	22,778	24,087	25,425	26,578	27,597	28,454	29,317

*Assumes 2.0% postretirement benefit increases for all years.*

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<b>\$ in Thousands</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>
<b>Contributions (% of Payroll)</b>										
Statutory - Chapter 490	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%
Required - Chapter 356	51.5%	53.2%	55.1%	57.3%	59.8%	62.9%	66.5%	70.8%	76.2%	83.0%
Sufficiency / (Deficiency)	(23.5%)	(25.1%)	(27.0%)	(29.3%)	(31.8%)	(34.9%)	(38.5%)	(42.8%)	(48.2%)	(54.9%)
<b>Contributions</b>										
Statutory - Chapter 490	15,272	15,731	16,202	16,689	17,189	17,705	18,236	18,783	19,347	19,927
Required - Chapter 356	28,066	29,843	31,843	34,112	36,712	39,727	43,267	47,489	52,620	58,999
Sufficiency / (Deficiency)	(12,794)	(14,113)	(15,640)	(17,423)	(19,523)	(22,022)	(25,031)	(28,706)	(33,274)	(39,072)
<b>Funding Ratios</b>										
Current Assets (MVA)	181,629	184,026	186,175	188,010	189,757	191,496	193,245	195,004	196,779	198,572
Actuarial Accrued Liability (AAL)	385,329	395,930	406,754	417,774	429,256	441,323	454,032	467,435	481,585	496,540
Unfunded AAL	203,700	211,904	220,579	229,764	239,499	249,826	260,788	272,431	284,806	297,967
Funding Ratio	47%	46%	46%	45%	44%	43%	43%	42%	41%	40%
<b>Benefit Payments</b>	30,195	31,115	32,087	32,830	33,500	34,170	34,854	35,551	36,262	36,987

*Assumes 2.0% postretirement benefit increases for all years.*

*Numbers may not add due to rounding.*

**This exhibit should only be  
viewed in conjunction with GRS'  
January 31, 2013 letter to MSRS**

**Judges Retirement Fund**  
**Scenario: 9.5% for Five Years, 10.0% thereafter**  
**Fiscal year beginning July 1**

<b>\$ in Thousands</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>2035</b>	<b>2036</b>	<b>2037</b>	<b>2038</b>	<b>2039</b>	<b>2040</b>	<b>2041</b>
<b>Contributions (% of Payroll)</b>										
Statutory - Chapter 490	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%
Required - Chapter 356	91.7%	103.4%	119.8%	144.5%	185.8%	268.4%	516.8%	50.5%	51.7%	53.1%
Sufficiency / (Deficiency)	(63.7%)	(75.3%)	(91.8%)	(116.5%)	(157.7%)	(240.4%)	(488.7%)	(22.5%)	(23.7%)	(25.0%)
<b>Contributions</b>										
Statutory - Chapter 490	20,525	21,141	21,775	22,428	23,101	23,794	24,508	25,243	26,000	26,780
Required - Chapter 356	67,159	77,988	93,086	115,649	153,141	227,944	451,980	45,489	47,993	50,709
Sufficiency / (Deficiency)	(46,634)	(56,848)	(71,311)	(93,221)	(130,040)	(204,150)	(427,472)	(20,246)	(21,992)	(23,929)
<b>Funding Ratios</b>										
Current Assets (MVA)	200,389	202,235	204,116	206,039	208,012	210,043	212,143	214,323	216,597	218,978
Actuarial Accrued Liability (AAL)	512,363	529,124	546,896	565,760	585,803	607,120	629,814	653,994	679,783	707,310
Unfunded AAL	311,974	326,889	342,780	359,721	377,792	397,078	417,671	439,671	463,186	488,332
Funding Ratio	39%	38%	37%	36%	36%	35%	34%	33%	32%	31%
<b>Benefit Payments</b>										
	37,727	38,481	39,251	40,036	40,837	41,654	42,487	43,336	44,203	45,087

*Assumes 2.0% postretirement benefit increases for all years.*

*Numbers may not add due to rounding.*