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January 28, 2016

CONFIDENTIAL

Mr. Doug Anderson
Executive Director
Public Employee Retirement Association of Minnesota
60 Empire Drive, Suite 200
St. Paul, MN 55103

Re: Projection of Contributions and Funding Status – General Employees Retirement Plan

Dear Doug:

Attached are 30-year projections of estimated funded status, required contributions, and statutory contributions under three asset return scenarios for the General Employees Retirement Plan (GERP). Unless noted otherwise, the estimates are based on participant data, methods and plan provisions as detailed in the General Employees Retirement Plan Actuarial Valuation Report for funding purposes as of July 1, 2015.

An experience study was completed in 2015. In the report, GRS recommended many changes to the valuation assumptions. Since the release of this report, the Society of Actuaries (SOA) published an updated mortality improvement scale, called MP-2015. PERA has expressed intent to adopt this mortality projection scale in lieu of the MP-2014 projection scale that was recommended in the experience study report. The recommended assumptions, including the MP-2015 projection scale, were used to determine the enclosed results. The recommended demographic assumptions are summarized in the *Minnesota General Employees Retirement Plan 6-Year Experience Study*, dated June 30, 2015.

As required by the State of Minnesota Standards for Actuarial Work, the projections reflect three asset return scenarios. The statutory investment return assumption is 8.0%. 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. Note that we believe the 9.5% rate of return assumption is outside of the range of reasonable expected returns for this plan. In fact, according to our most recent experience study, the probability of achieving the 8% assumption is only 37%. The study further indicates that in order to have a 50% change of achieving the assumed earnings rate, the rate would have to be lowered to 6.97%.

Note that as funding ratios decline, as they are expected to in some of the investment return scenarios shown in this letter, it will be increasingly difficult for the plan to attain the assumed investment return. Each year, a larger proportion of assets is paid out in benefits, and less capital is available to invest.

The estimates are based on the market value of assets with no smoothing of investment gains or losses. In all scenarios, the valuation interest rate used to discount liabilities was 8%. Payroll is assumed to increase approximately 3.5% a year over the long-term, consistent with the valuation assumption for total payroll growth.

The projection is an open group projection; meaning, active members projected to retire or otherwise terminate in the future are replaced with new active members so that the total active membership of the plan remains at 145,650 members. The profile of these new members is the same as new members hired between July 1, 2010 and July 1, 2014:

- Average age at hire is 37.7
- Average salary at hire is $26,200
- Approximately 69% female, 31% male

Minnesota Statute 356.215 Subdivision 11 provides for a possible extension of the amortization period when a change in assumptions increases the unfunded accrued liability. Our calculations indicate the increase in liability due to the assumptions changes is estimated to extend the amortization period one year; when the actuarial accrued liability exceeds assets, the unfunded actuarial accrued liability is amortized through June 30, 2034. As directed by PERA, the statutory amortization date is assumed to be changed to June 30, 2064 once the current period expires in 2034. 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.

The contribution stabilizer statutes defined in Minnesota Statute 353.27 were revised in 2015 to make changes to contribution rates less prescriptive and more flexible. Based on PERA's direction, the projection results assume level future contributions.

The Minneapolis Employees Retirement Fund merged with the GERP on January 1, 2015; this merger is reflected in the enclosed projections.

Post-retirement 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. Benefit recipients currently receive an annual 1.0% post-retirement benefit increase. If the plan reaches a funding ratio of 90% (based on a 2.5% post-retirement benefit increase assumption) on a market value of assets basis for two consecutive years in the future, post-retirement increases will revert to the 2.5% level.

An actuarial projection was performed to estimate when this plan is expected to attain the threshold required to pay a 2.5% post-retirement benefit increase. The projection indicated that if all assumptions are met, for the 8.0% investment return scenario, the plan would begin paying a 2.5% benefit increase on January 1, 2041. This assumption is reflected in the enclosed projection for the 8% rate of return scenario. We performed a similar projection for the July 1, 2015 valuation and determined the plan would begin paying a 2.5% benefit increase on January 1, 2035. The six-year delay in the 2.5% post-retirement benefit increase in the enclosed projection is due to the change in assumptions, primarily increased longevity under the updated mortality assumptions.

Under the 6.5% investment return scenario, the funded status of the plan is expected to deteriorate and plan assets are projected to be exhausted in approximately 60 years. We performed a projection to estimate when the plan is expected to attain the threshold required to pay a 2.5% post-retirement benefit increase if future investment returns are 6.5%. As the plan experiences lower than expected investment returns each year, the assumed 2.5% benefit increase date of 2041 is pushed back further and eventually is never expected to be attained. To approximate the gradual change in the post-retirement benefit increase assumption, from paying the 2.5% increase in 2041 to paying the 1.0% increase forever, we assumed the accrued liability and normal cost would decrease a proportionate amount between 2015 and 2033.

Similarly, under the 9.5% investment return scenario, the funded status of the plan is expected to improve. We performed a projection to estimate when the plan is expected to attain the threshold required to pay a 2.5% post-retirement benefit increase if future investment returns are 9.5%. As the plan experiences greater than expected investment return each year, the assumed 2.5% benefit increase date is achieved earlier. This projection indicated the plan would begin paying a 2.5% benefit increase on January 1, 2028 under this investment return scenario. To approximate the acceleration of the assumed 2.5% benefit increase date from 2041 to 2028, we assumed the accrued liability and normal cost would increase a proportionate amount between 2015 and 2028.

As stated earlier, we concluded in our recent experience study that the probability of exceeding the current 8% assumption over 20 years is 37% and the probability of exceeding a 7% assumption over 20 years is 50%. While not required by the State of Minnesota Standards of Actuarial Work, we performed a projection assuming a 7.0% investment return. The results were similar to the 6.5% investment return scenario; the funded status of the plan deteriorates and plan assets are projected to be exhausted in approximately 90 years.

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 Public Employees Retirement Association (PERA), 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 Trustees. These parties are responsible for selecting the plan's funding policy, actuarial valuation methods, asset valuation methods, and assumptions. Except where noted, 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 or the *Minnesota General Employees Retirement Plan 6-Year Experience Study*, dated June 30, 2015. PERA 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.

Bonita J. Wurst and Brian B. Murphy are Members of the American Academy of Actuaries (MAAA) 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 General Employees Retirement Plan 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

Bonita J. Wurst, ASA, EA, MAAA

Brian B Murphy

Brian B. Murphy, FSA, EA, MAAA, FCA
BJW/BBM:bd/Enclosures

Other Observations

General Implications of Contribution Allocation Procedure or Funding Policy on Future Expected Plan Contributions and Funded Status

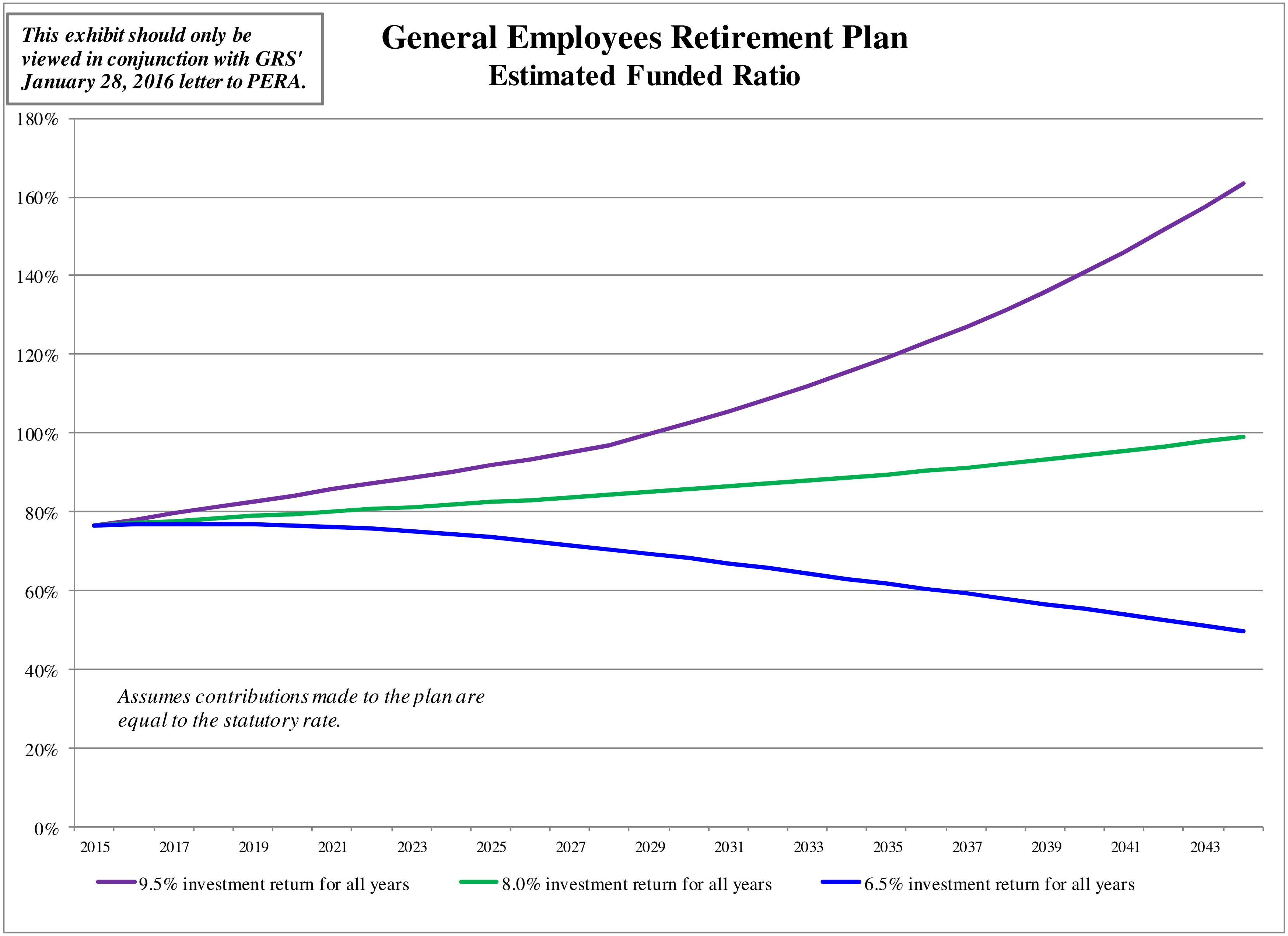
Given the plan's contribution allocation procedure, if there are no changes in benefits or contributions and all actuarial assumptions are met (including the assumption of the plan earning 8.0% on the market value of assets), it is expected that:

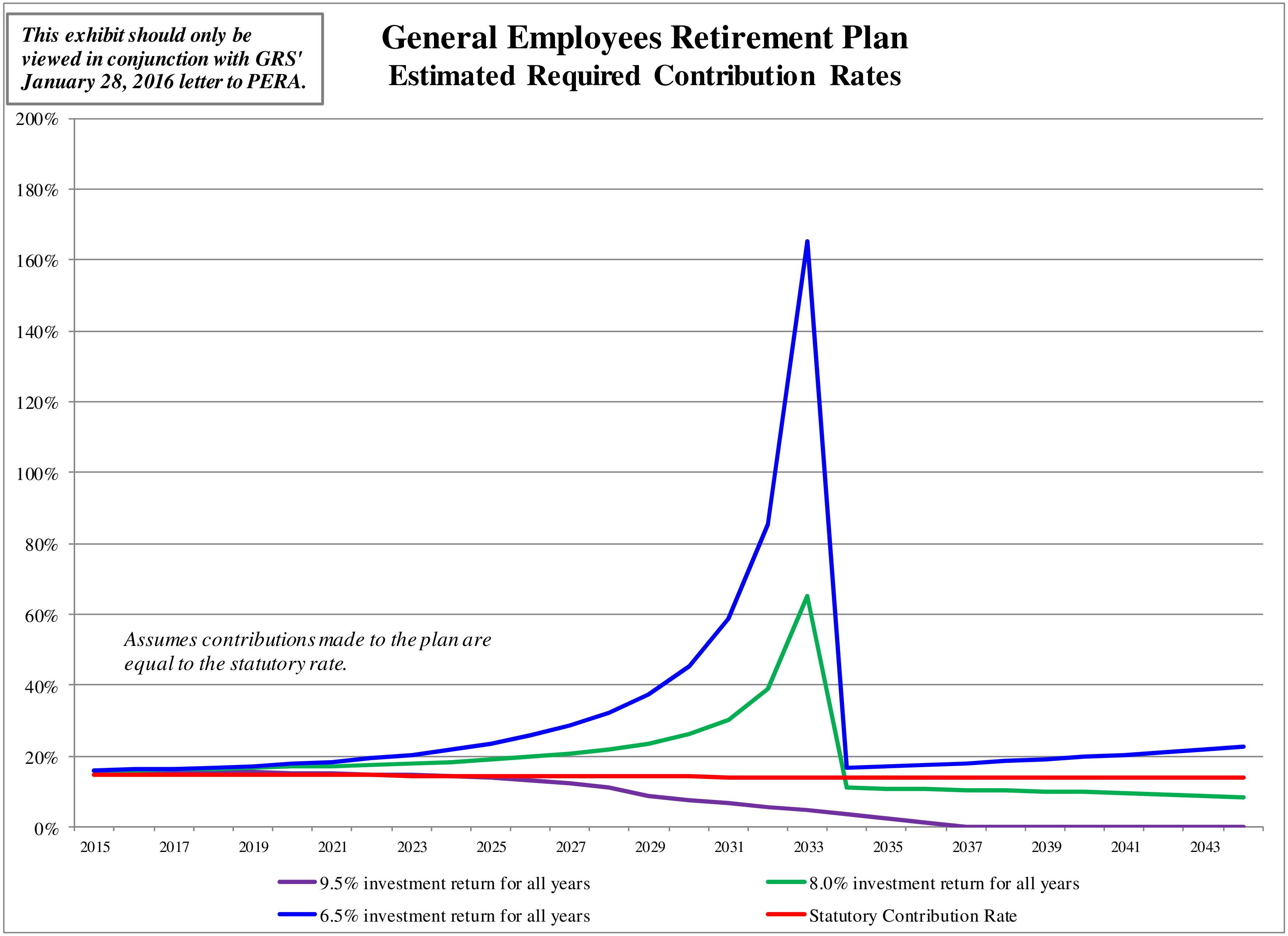
(1) The unfunded actuarial accrued liabilities will be fully amortized after 32 years,
(2) The funded status of the plan will increase gradually towards a 100% funded ratio, and
(3) The unfunded liability will grow initially as a dollar amount before beginning to decline.

Limitations of Funded Status Measurements

Unless otherwise indicated, a funded status measurement presented in this report is based upon the actuarial accrued liability and the market value of assets. Unless otherwise indicated, with regard to any funded status measurements presented in this report:

(1) The measurement is inappropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations; in other words, of transferring the obligations to a unrelated third party in an arm's length market value type transaction.
(2) The measurement is dependent upon the actuarial cost method which, in combination with the plan's amortization policy, affects the timing and amounts of future contributions. The amounts of future contributions will most certainly differ from those assumed in this report due to future actual experience differing from assumed experience based upon the actuarial assumptions. A funded status measurement in this report of 100% is not synonymous with no required future contributions. If the funded status were 100%, the plan would still require future normal cost contributions (i.e., contributions to cover the cost of the active membership accruing an additional year of service credit).
(3) The measurement would produce a different result if the actuarial value of assets were used instead of the market value of assets.


This exhibit should only be viewed in conjunction with GRS' January 28, 2016 letter to PERA.
General Employees Retirement Plan
Estimated Funded Ratio
180%
160%
140%
120%
100%
80%
60%
40%
20%
0%
Assumes contributions made to the plan are equal to the statutory rate.
2015
2017
2019
2021
2023
2025
2027
2029
2031
2033
2035
2037
2039
2041
2043
9.5% investment return for all years
8.0% investment return for all years
6.5% investment return for all years


This exhibit should only be viewed in conjunction with GRS' January 28, 2016 letter to PERA.
General Employees Retirement Plan
Estimated Required Contribution Rates
200%
180%
160%
140%
120%
100%
80%
60%
40%
20%
0%
Assumes contributions made to the plan are equal to the statutory rate.
2015
2017
2019
2021
2023
2025
2027
2029
2031
2033
2035
2037
2039
2041
2043
9.5% investment return for all years
8.0% investment return for all years
6.5% investment return for all years
Statutory Contribution Rate

This exhibit should only be viewed in conjunction with GRS' January 28, 2016 letter to PERA.

General Employees Retirement Plan

Scenario: 6.5% for All Years

Fiscal Year Beginning July 1

$ in Thousands	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**
Contributions (% of Payroll)										
Statutory - Chapter 352	14.7%	14.6%	14.6%	14.6%	14.6%	14.6%	14.6%	14.6%	14.5%	14.5%
Required - Chapter 356 (MVA)	16.0%	16.2%	16.4%	16.7%	17.2%	17.7%	18.4%	19.3%	20.4%	21.8%
Sufficiency / (Deficiency)	(1.3)%	(1.5)%	(1.7)%	(2.1)%	(2.6)%	(3.1)%	(3.9)%	(4.8)%	(5.9)%	(7.3)%
Contributions										
Statutory - Chapter 352	824,606	844,014	867,874	889,370	911,491	934,671	958,422	983,245	1,009,523	1,037,406
Required - Chapter 356 (MVA)	897,509	931,194	970,528	1,016,621	1,071,303	1,136,339	1,213,865	1,307,019	1,419,730	1,557,688
Sufficiency / (Deficiency)	(72,903)	(87,180)	(102,654)	(127,251)	(159,812)	(201,668)	(255,443)	(323,774)	(410,207)	(520,282)
Funding Ratios										
Current Assets (MVA)	18,581,795	19,183,710	19,771,248	20,340,849	20,885,756	21,404,321	21,896,316	22,358,987	22,792,324	23,194,834
Actuarial Accrued Liability (AAL)	24,315,708	24,995,015	25,693,299	26,411,091	27,148,936	27,907,394	28,687,041	29,488,469	30,312,287	31,159,120
Unfunded AAL	5,733,913	5,811,305	5,922,051	6,070,242	6,263,180	6,503,073	6,790,725	7,129,483	7,519,964	7,964,285
Funding Ratio	76%	77%	77%	77%	77%	77%	76%	76%	75%	74%
Benefit Payments	1,400,747	1,471,709	1,549,605	1,630,585	1,712,222	1,793,468	1,876,271	1,958,294	2,041,351	2,122,148

Numbers may not add due to rounding.

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General Employees Retirement Plan

Scenario: 6.5% for All Years

Fiscal Year Beginning July 1

$ in Thousands	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Contributions (% of Payroll)										
Statutory - Chapter 352	14.5%	14.5%	14.5%	14.5%	14.5%	14.4%	14.0%	14.0%	14.0%	14.0%
Required - Chapter 356 (MVA)	23.5%	25.7%	28.5%	32.2%	37.5%	45.4%	58.7%	85.4%	165.4%	16.8%
Sufficiency / (Deficiency)	(9.0)%	(11.2)%	(14.0)%	(17.8)%	(23.1)%	(31.0)%	(44.7)%	(71.4)%	(151.4)%	(2.8)%
Contributions										
Statutory - Chapter 352	1,066,864	1,097,910	1,130,398	1,164,377	1,199,778	1,236,635	1,237,728	1,277,130	1,317,966	1,360,338
Required - Chapter 356 (MVA)	1,728,619	1,944,151	2,222,492	2,594,475	3,114,928	3,893,653	5,187,478	7,787,095	15,567,178	1,631,167
Sufficiency / (Deficiency)	(661,755)	(846,241)	(1,092,094)	(1,430,098)	(1,915,150)	(2,657,018)	(3,949,750)	(6,509,965)	(14,249,212)	(270,829)
Funding Ratios										
Current Assets (MVA)	23,568,484	23,915,158	24,237,310	24,535,089	24,811,636	25,069,833	25,311,102	25,499,033	25,669,681	25,824,171
Actuarial Accrued Liability (AAL)	32,029,610	32,924,419	33,844,227	34,789,731	35,761,650	36,760,721	37,787,703	38,843,376	39,928,541	40,935,139
Unfunded AAL	8,461,127	9,009,261	9,606,917	10,254,642	10,950,014	11,690,888	12,476,601	13,344,343	14,258,860	15,110,968
Funding Ratio	74%	73%	72%	71%	69%	68%	67%	66%	64%	63%
Benefit Payments	2,200,855	2,277,055	2,352,989	2,425,817	2,495,919	2,564,926	2,632,349	2,699,787	2,766,460	2,832,643

Numbers may not add due to rounding.

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General Employees Retirement Plan

Scenario: 6.5% for All Years

Fiscal Year Beginning July 1

$ in Thousands	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Contributions (% of Payroll)										
Statutory - Chapter 352	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%
Required - Chapter 356 (MVA)	17.2%	17.6%	18.1%	18.6%	19.1%	19.7%	20.3%	21.0%	21.8%	22.6%
Sufficiency / (Deficiency)	(3.2)%	(3.6)%	(4.1)%	(4.6)%	(5.1)%	(5.7)%	(6.3)%	(7.0)%	(7.8)%	(8.6)%
Contributions										
Statutory - Chapter 352	1,404,226	1,449,674	1,496,758	1,545,417	1,595,727	1,647,701	1,701,509	1,757,300	1,815,225	1,875,212
Required - Chapter 356 (MVA)	1,724,707	1,825,560	1,934,540	2,052,510	2,180,578	2,319,997	2,472,323	2,639,351	2,823,213	3,026,344
Sufficiency / (Deficiency)	(320,481)	(375,886)	(437,782)	(507,093)	(584,851)	(672,296)	(770,814)	(882,051)	(1,007,988)	(1,151,132)
Funding Ratios										
Current Assets (MVA)	25,963,526	26,087,247	26,195,421	26,290,418	26,375,129	26,449,508	26,513,824	26,566,370	26,606,973	26,634,605
Actuarial Accrued Liability (AAL)	41,975,252	43,051,334	44,166,594	45,326,754	46,538,415	47,805,526	49,132,672	50,522,705	51,980,268	53,509,455
Unfunded AAL	16,011,726	16,964,086	17,971,173	19,036,335	20,163,286	21,356,018	22,618,848	23,956,336	25,373,295	26,874,850
Funding Ratio	62%	61%	59%	58%	57%	55%	54%	53%	51%	50%
Benefit Payments	2,899,850	2,967,527	3,033,545	3,097,486	3,162,452	3,228,151	3,296,677	3,366,585	3,438,842	3,512,977

Numbers may not add due to rounding.

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General Employees Retirement Plan

Scenario: 8.0% for All Years

Fiscal Year Beginning July 1

$ in Thousands	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Contributions (% of Payroll)										
Statutory - Chapter 352	14.7%	14.6%	14.6%	14.6%	14.6%	14.6%	14.6%	14.6%	14.5%	14.5%
Required - Chapter 356 (MVA)	16.0%	16.1%	16.3%	16.5%	16.7%	17.0%	17.3%	17.6%	18.0%	18.5%
Sufficiency / (Deficiency)	(1.3)%	(1.5)%	(1.7)%	(1.9)%	(2.1)%	(2.4)%	(2.7)%	(3.1)%	(3.5)%	(4.0)%
Contributions										
Statutory - Chapter 352	824,606	844,014	867,874	889,370	911,491	934,671	958,422	983,245	1,009,523	1,037,406
Required - Chapter 356 (MVA)	897,509	929,322	965,722	1,003,194	1,043,731	1,088,164	1,136,855	1,191,010	1,252,148	1,322,091
Sufficiency / (Deficiency)	(72,903)	(85,308)	(97,848)	(113,824)	(132,240)	(153,493)	(178,433)	(207,765)	(242,625)	(284,685)
Funding Ratios										
Current Assets (MVA)	18,581,795	19,458,036	20,350,485	21,257,797	22,175,526	23,104,465	24,047,004	25,003,197	25,976,046	26,967,302
Actuarial Accrued Liability (AAL)	24,315,708	25,258,124	26,186,039	27,135,234	28,089,090	29,047,612	30,012,089	30,981,773	31,958,432	32,942,302
Unfunded AAL	5,733,913	5,800,088	5,835,554	5,877,437	5,913,563	5,943,147	5,965,084	5,978,577	5,982,386	5,975,000
Funding Ratio	76%	77%	78%	78%	79%	80%	80%	81%	81%	82%
Benefit Payments	1,400,747	1,471,709	1,549,605	1,630,585	1,712,222	1,793,468	1,876,271	1,958,294	2,041,351	2,122,148

Numbers may not add due to rounding.

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General Employees Retirement Plan

Scenario: 8.0% for All Years

Fiscal Year Beginning July 1

$ in Thousands	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Contributions (% of Payroll)										
Statutory - Chapter 352	14.5%	14.5%	14.5%	14.5%	14.5%	14.4%	14.0%	14.0%	14.0%	14.0%
Required - Chapter 356 (MVA)	19.1%	19.8%	20.7%	21.9%	23.6%	26.2%	30.4%	39.1%	65.3%	11.1%
Sufficiency / (Deficiency)	(4.6)%	(5.3)%	(6.2)%	(7.5)%	(9.2)%	(11.7)%	(16.4)%	(25.1)%	(51.3)%	2.9%
Contributions										
Statutory - Chapter 352	1,066,864	1,097,910	1,130,398	1,164,377	1,199,778	1,236,635	1,237,728	1,277,130	1,317,966	1,360,338
Required - Chapter 356 (MVA)	1,403,327	1,499,630	1,616,791	1,764,673	1,960,931	2,240,990	2,687,279	3,568,077	6,144,084	1,080,992
Sufficiency / (Deficiency)	(336,463)	(401,720)	(486,393)	(600,296)	(761,153)	(1,004,355)	(1,449,551)	(2,290,947)	(4,826,118)	279,346
Funding Ratios										
Current Assets (MVA)	27,982,433	29,027,142	30,108,028	31,229,743	32,400,313	33,627,940	34,919,820	36,245,530	37,647,583	39,134,353
Actuarial Accrued Liability (AAL)	33,937,181	34,946,969	35,976,351	37,027,971	38,107,625	39,221,204	40,373,359	41,569,569	42,814,097	44,112,445
Unfunded AAL	5,954,747	5,919,827	5,868,323	5,798,228	5,707,312	5,593,265	5,453,539	5,324,039	5,166,514	4,978,092
Funding Ratio	82%	83%	84%	84%	85%	86%	86%	87%	88%	89%
Benefit Payments	2,200,855	2,277,055	2,352,989	2,425,817	2,495,919	2,564,926	2,632,349	2,699,787	2,766,460	2,832,643

Numbers may not add due to rounding.

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General Employees Retirement Plan

Scenario: 8.0% for All Years

Fiscal Year Beginning July 1

$ in Thousands	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Contributions (% of Payroll)										
Statutory - Chapter 352	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%
Required - Chapter 356 (MVA)	10.9%	10.8%	10.5%	10.3%	10.0%	9.8%	9.5%	9.1%	8.7%	8.3%
Sufficiency / (Deficiency)	3.1%	3.3%	3.5%	3.7%	4.0%	4.2%	4.6%	4.9%	5.3%	5.7%
Contributions										
Statutory - Chapter 352	1,404,226	1,449,674	1,496,758	1,545,417	1,595,727	1,647,701	1,701,509	1,757,300	1,815,225	1,875,212
Required - Chapter 356 (MVA)	1,097,678	1,112,807	1,126,042	1,136,903	1,144,933	1,149,547	1,148,411	1,143,523	1,132,659	1,114,478
Sufficiency / (Deficiency)	306,548	336,867	370,716	408,514	450,794	498,154	553,098	613,777	682,566	760,734
Funding Ratios										
Current Assets (MVA)	40,714,704	42,396,612	44,189,313	46,105,074	48,157,515	50,358,200	52,719,932	55,193,092	57,806,678	60,571,812
Actuarial Accrued Liability (AAL)	45,470,290	46,892,309	48,384,132	49,954,124	51,611,769	53,364,176	55,194,580	57,088,928	59,052,013	61,088,234
Unfunded AAL	4,755,587	4,495,697	4,194,819	3,849,049	3,454,253	3,005,976	2,474,648	1,895,836	1,245,335	516,422
Funding Ratio	90%	90%	91%	92%	93%	94%	96%	97%	98%	99%
Benefit Payments	2,899,850	2,967,527	3,033,545	3,097,486	3,162,452	3,228,151	3,355,759	3,466,010	3,578,474	3,692,592

Numbers may not add due to rounding.

This exhibit should only be viewed in conjunction with GRS' January 28, 2016 letter to PERA.

General Employees Retirement Plan

Scenario: 9.5% for All Years

Fiscal Year Beginning July 1

$ in Thousands	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Contributions (% of Payroll)										
Statutory - Chapter 352	14.7%	14.6%	14.6%	14.6%	14.6%	14.6%	14.6%	14.6%	14.5%	14.5%
Required - Chapter 356 (MVA)	16.0%	15.8%	15.7%	15.5%	15.4%	15.2%	15.0%	14.8%	14.6%	14.2%
Sufficiency / (Deficiency)	(1.3)%	(1.2)%	(1.0)%	(0.9)%	(0.8)%	(0.6)%	(0.5)%	(0.3)%	(0.0)%	0.3%
Contributions										
Statutory - Chapter 352	824,606	844,014	867,874	889,370	911,491	934,671	958,422	983,245	1,009,523	1,037,406
Required - Chapter 356 (MVA)	897,509	913,286	929,057	944,631	960,186	975,350	989,441	1,001,811	1,011,205	1,016,007
Sufficiency / (Deficiency)	(72,903)	(69,272)	(61,183)	(55,261)	(48,695)	(40,679)	(31,019)	(18,566)	(1,682)	21,399
Funding Ratios										
Current Assets (MVA)	18,581,795	19,732,361	20,937,953	22,201,133	23,521,701	24,905,065	26,358,695	27,888,226	29,502,792	31,210,891
Actuarial Accrued Liability (AAL)	24,315,708	25,286,687	26,296,438	27,346,512	28,438,517	29,574,128	30,755,086	31,983,203	33,260,361	34,588,519
Unfunded AAL	5,733,913	5,554,325	5,358,486	5,145,378	4,916,816	4,669,063	4,396,391	4,094,977	3,757,569	3,377,627
Funding Ratio	76%	78%	80%	81%	83%	84%	86%	87%	89%	90%
Benefit Payments	1,400,747	1,471,709	1,549,605	1,630,585	1,712,222	1,793,468	1,876,271	1,958,294	2,041,351	2,122,148

Numbers may not add due to rounding.

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General Employees Retirement Plan

Scenario: 9.5% for All Years

Fiscal Year Beginning July 1

$ in Thousands	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**
Contributions (% of Payroll)										
Statutory - Chapter 352	14.5%	14.5%	14.5%	14.5%	14.5%	14.4%	14.0%	14.0%	14.0%	14.0%
Required - Chapter 356 (MVA)	13.8%	13.2%	12.4%	11.2%	8.6%	7.5%	6.6%	5.7%	4.7%	3.7%
Sufficiency / (Deficiency)	0.7%	1.3%	2.1%	3.3%	5.8%	6.9%	7.4%	8.3%	9.3%	10.4%
Contributions										
Statutory - Chapter 352	1,066,864	1,097,910	1,130,398	1,164,377	1,199,778	1,236,635	1,237,728	1,277,130	1,317,966	1,360,338
Required - Chapter 356 (MVA)	1,013,343	998,881	965,663	902,486	716,387	645,455	584,866	517,780	441,222	354,174
Sufficiency / (Deficiency)	53,521	99,029	164,735	261,891	483,391	591,180	652,862	759,350	876,744	1,006,164
Funding Ratios										
Current Assets (MVA)	33,025,436	34,960,356	37,031,353	39,253,125	41,627,784	44,156,857	46,857,381	49,710,024	52,769,583	56,057,719
Actuarial Accrued Liability (AAL)	35,969,712	37,406,060	38,899,765	40,453,116	41,738,165	43,044,346	44,376,251	45,739,357	47,137,709	48,575,218
Unfunded AAL	2,944,276	2,445,704	1,868,411	1,199,991	110,380	(1,112,511)	(2,481,130)	(3,970,667)	(5,631,875)	(7,482,501)
Funding Ratio	92%	93%	95%	97%	100%	103%	106%	109%	112%	115%
Benefit Payments	2,200,855	2,277,055	2,352,989	2,442,048	2,544,920	2,646,968	2,747,239	2,847,285	2,946,833	3,046,231

Numbers may not add due to rounding.

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General Employees Retirement Plan

Scenario: 9.5% for All Years

Fiscal Year Beginning July 1

$ in Thousands	**2035**	**2036**	**2037**	**2038**	**2039**	**2040**	**2041**	**2042**	**2043**	**2044**
Contributions (% of Payroll)										
Statutory - Chapter 352	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%
Required - Chapter 356 (MVA)	2.6%	1.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Sufficiency / (Deficiency)	11.5%	12.6%	13.8%	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%
Contributions										
Statutory - Chapter 352	1,404,226	1,449,674	1,496,758	1,545,417	1,595,727	1,647,701	1,701,509	1,757,300	1,815,225	1,875,212
Required - Chapter 356 (MVA)	255,458	143,817	17,876	-	-	-	-	-	-	-
Sufficiency / (Deficiency)	1,148,768	1,305,857	1,478,882	1,545,417	1,595,727	1,647,701	1,701,509	1,757,300	1,815,225	1,875,212
Funding Ratios										
Current Assets (MVA)	59,597,891	63,414,286	67,533,610	71,987,854	76,812,307	82,041,709	87,714,437	93,870,603	100,555,628	107,818,222
Actuarial Accrued Liability (AAL)	50,055,899	51,582,886	53,159,359	54,791,893	56,487,779	58,250,355	60,083,532	61,989,688	63,972,585	66,035,196
Unfunded AAL	(9,541,992)	(11,831,400)	(14,374,251)	(17,195,961)	(20,324,528)	(23,791,354)	(27,630,905)	(31,880,915)	(36,583,043)	(41,783,026)
Funding Ratio	119%	123%	127%	131%	136%	141%	146%	151%	157%	163%
Benefit Payments	3,146,892	3,248,647	3,348,950	3,447,491	3,548,073	3,650,384	3,756,418	3,864,889	3,976,929	4,091,730

Numbers may not add due to rounding.