

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

January 31, 2012

Subject: State Employees Retirement Fund – Projection of Contributions and Funding Status

Dear Dave:

Attached are projection graphs showing estimated funded status, required contributions, and statutory contributions under three asset return scenarios over a 30 year period for the State Employees Retirement Fund As required by the State of Minnesota Standards for Actuarial Work, the scenarios assume future investment return of 7.0%, 8.5%, and 10.0%. Also attached are tables showing the values graphed under each scenario. The estimates are based on valuation results as of July 1, 2011.

The estimates are based on the market value of assets with no smoothing of investment gains or losses. Normal cost is assumed to increase 3.75% a year – the same assumption as used in the valuation for total payroll growth. In all scenarios, the valuation interest rate used to discount liabilities is 8.5% compounded annually.

Benefit payments are based on the assumptions and methods described herein with adjustments applied to estimate the impact of retiring members hired after the valuation date. To estimate this impact, beginning in 2031, we assumed benefit payments would increase a minimum of 3% (3.5% if the plan's funded ratio was at least 90%); benefit payments from 2026 to 2030 were assumed to increase on a linear basis.

If actuarial accrued liability exceeds assets, the unfunded actuarial accrued liability is amortized through July 1, 2040 per Minnesota Statute 356.215, Subdivision 11(k). The statutory amortization date is assumed to be changed to July 1, 2070 once the current period expires in 2040. Per Minnesota Statute 356.215, Subdivision 11(l), a negative unfunded actuarial accrued liability (i.e. assets exceed liability) is amortized over a rolling 30-year period.

Based on MSRS' direction, we have shown projection results with and without the contribution stabilizer defined in Minnesota Statute 352.045, summarized in the attached Exhibit A.

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Based on the operations of the stabilizer, the projected highest annual statutory contribution rate is:

Assumed investment return	Maximum Statutory Contribution
7.0%	17.0%
8.5%	12.5%
10.0%	10.5%

Some of these rates are significantly higher than current rates and may not be sustainable. Please be aware that lower contributions would result in markedly different projections.

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, post-retirement increases will revert to the 2.5% level.

We performed projections of liabilities and assets for each investment return scenario using the 2011 valuation results as a baseline and assuming future experience follows the valuation assumptions.

In order to determine the date the plan reaches a 90% funded ratio, we utilized the following methods and assumptions:

- Liabilities and normal cost assuming future COLAs at 2.5% level payable for all years
- Cash flow assuming future COLAs at current 2% level
- Level normal cost as a percent of pay (assuming total payroll increases of 3.75%)
- Investment return of 7.0%, 8.5%, and 10.0% per year, with and without contribution stabilizer

Based on these assumptions and methods, the projection indicates that the funded status of this plan is expected to reach 90% according to the following timeline:

Assumed investment return	Estimated date expected to reach 90% funding ratio:
7.0%, without stabilizer	*
7.0%, with stabilizer	*
8.5%, without stabilizer	*
8.5%, with stabilizer	2033
10.0%, without stabilizer	2016
10.0%, with stabilizer	2016

* Fund is not projected to reach 90% funding ratio within the 30-year projection period.

The liabilities, normal cost, and benefit payments in the attached estimates are based on the assumption that the post-retirement benefit increase will be 2% until 90% funded (indicated in the above table) and 2.5% thereafter. We relied on direction from MSRS, including MSRS' interpretation of applicable Minnesota Statutes, on this issue. Different results would be obtained if our projected liabilities for years before the 90% threshold were calculated using a permanent 2.0% COLA and calculated using a permanent 2.5% COLA once the threshold was reached. Different results would also be obtained if the projected 90% threshold were determined assuming 8.5% investment return in the 10% investment return scenario.

Important Notices

Mercer has prepared this letter exclusively for the Minnesota State Retirement System to determine the actuarial accrued liability and contribution requirements under the assumptions and plan provisions outlined in this letter. This letter may not be used or relied upon by any other party or for any other purpose; Mercer is not responsible for the consequences of any unauthorized use.

Decisions about benefit changes, granting new benefits, investment policy, funding policy, benefit security and/or benefit-related issues should not be made on the basis of this valuation, but only after careful consideration of alternative economic, financial, demographic and societal factors, including financial scenarios that assume future sustained investment losses.

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The Fund is solely responsible for selecting the plan's investment policies, asset allocations and individual investments. Mercer's actuaries have not provided any investment advice to the Fund.

A valuation report is only a snapshot of a Plan's estimated financial condition at a particular point in time; it does not predict the Plan's future financial condition or its ability to pay benefits in the future and does not provide any guarantee of future financial soundness of the Plan. Over time, a plan's total cost will depend on a number of factors, including the amount of benefits the plan pays, the number of people paid benefits, the period of time over which benefits are paid, plan expenses and the amount earned on any assets invested to pay benefits. These amounts and other variables are uncertain and unknowable at the valuation date.

Because modeling all aspects of a situation is not possible or practical, we may use summary information, estimates, or simplifications of calculations to facilitate the modeling of future events in an efficient and cost-effective manner. We may also exclude factors or data that are immaterial in our judgment. Use of such simplifying techniques does not, in our judgment, affect the reasonableness of valuation results for the plan.

To prepare these results, actuarial assumptions, as described in our actuarial report dated December 2011 (unless noted herein), are used in a forward looking financial and demographic model to present a single scenario from a wide range of possibilities; the results based on that single scenario are included in the valuation. The future is uncertain and the plan's actual experience will differ from those assumptions; these differences may be significant or material because these results are very sensitive to the assumptions made and, in some cases, to the interaction between the assumptions.

Different assumptions or scenarios within the range of possibilities may also be reasonable and results based on those assumptions would be different. As a result of the uncertainty inherent in a forward looking projection over a very long period of time, no one projection is uniquely "correct" and many alternative projections of the future could also be regarded as reasonable. Two different actuaries could, quite reasonably, arrive at different results based on the same data and different views of the future. A "sensitivity analysis" shows the degree to which results would be different if you substitute alternative assumptions within the range of possibilities for those utilized in this report. We have not been engaged to perform such a sensitivity analysis and thus the results of such an analysis are not included in this report. At the Fund's request, Mercer is available to perform such a sensitivity analysis.

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Actuarial assumptions may also be changed from one valuation to the next because of changes in mandated requirements, plan experience, changes in expectations about the future and other factors. A change in assumptions is not an indication that prior assumptions were unreasonable when made.

The calculation of actuarial liabilities for valuation purposes is based on a current estimate of future benefit payments. The calculation includes a computation of the “present value” of those estimated future benefit payments using an assumed discount rate; the higher the discount rate assumption, the lower the estimated liability will be. For purposes of estimating the liabilities (future and accrued) in this letter, you selected an assumption based on the expected long term rate of return on plan investments. Using a lower discount rate assumption, such as a rate based on long-term bond yields, could substantially increase the estimated present value of future and accrued liabilities.

Because valuations are a snapshot in time and are based on estimates and assumptions that are not precise and will differ from actual experience, contribution calculations are inherently imprecise. There is no uniquely “correct” level of contributions for the coming plan year.

Valuations do not affect the ultimate cost of the Plan, only the timing of contributions into the Plan. Plan funding occurs over time. Contributions not made this year, for whatever reason, including errors, remain the responsibility of the Plan sponsor and can be made in later years. If the contribution levels over a period of years are lower or higher than necessary, it is normal and expected practice for adjustments to be made to future contribution levels to take account of this with a view to funding the plan over time.

Data, computer coding and mathematical errors are possible in the preparation of a valuation involving complex computer programming and thousands of calculations and data inputs. Errors in a valuation discovered after its preparation may be corrected by amendment to the valuation or in a subsequent year’s valuation.

Actuarial assumptions, including discount rates, mortality tables and others identified in this letter, are prescribed by Minnesota Statutes Section 356.215, the requirements of the Standards of Actuarial Work established by the LCPR and the Board of Directors. The Fund is 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 our report dated December 2011. The Fund is solely responsible for communicating to Mercer any changes required thereto.

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To prepare these results, Mercer has used and relied on financial data and participant data supplied by the Fund and summarized in the valuation report dated December 2011. The Fund is responsible for ensuring that such participant data provides an accurate description of all persons who are participants under the terms of the plan or otherwise entitled to benefits as of the valuation date that is sufficiently comprehensive and accurate for the purposes of this report. Although Mercer has reviewed the data in accordance with Actuarial Standards of Practice No. 23, Mercer has not verified or audited any of the data or information provided.

Mercer has also used and relied on the plan documents, including amendments, and interpretations of plan provisions, supplied by the Fund as summarized in the valuation report dated December 2011 (unless noted otherwise in this letter). The Fund is solely responsible for the validity, accuracy and comprehensiveness of this information. If any data or plan provisions supplied are not accurate and complete, the results may differ significantly from the results that would be obtained with accurate and complete information; this may require a later revision of this letter. Moreover, plan documents may be susceptible to different interpretations, each of which could be reasonable, and that the different interpretations could lead to different results.


The Fund should notify Mercer promptly after receipt of this letter if the Fund disagrees with anything contained in this letter or is aware of any information that would affect the results that has not been communicated to Mercer or incorporated therein. The results will be deemed final and acceptable to the Fund unless the Fund promptly provides such notice to Mercer.

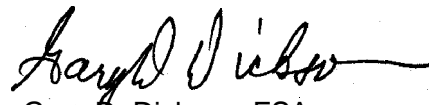
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Professional qualifications

We are available to answer any questions on the material in this letter or to provide explanations or further details as appropriate. The undersigned credentialed actuaries meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report. In addition, Mr. Dickson meets the requirements of "approved actuary" under Minnesota Statutes, Section 356.215, Subdivision 1, Paragraph (c). We are not aware of any direct or material indirect financial interest or relationship, including investments or other services that could create a conflict of interest, that would impair the objectivity of our work.

Sincerely,


Bonita J. Wurst, ASA


Gary D. Dickson, FSA

Enclosure

Copy:
Julie Thompson, Sheri Wroblewski – Mercer

The information contained in this document (including any attachments) is not intended by Mercer to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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State Employees Retirement Fund
Contribution Stabilizer

Exhibit A

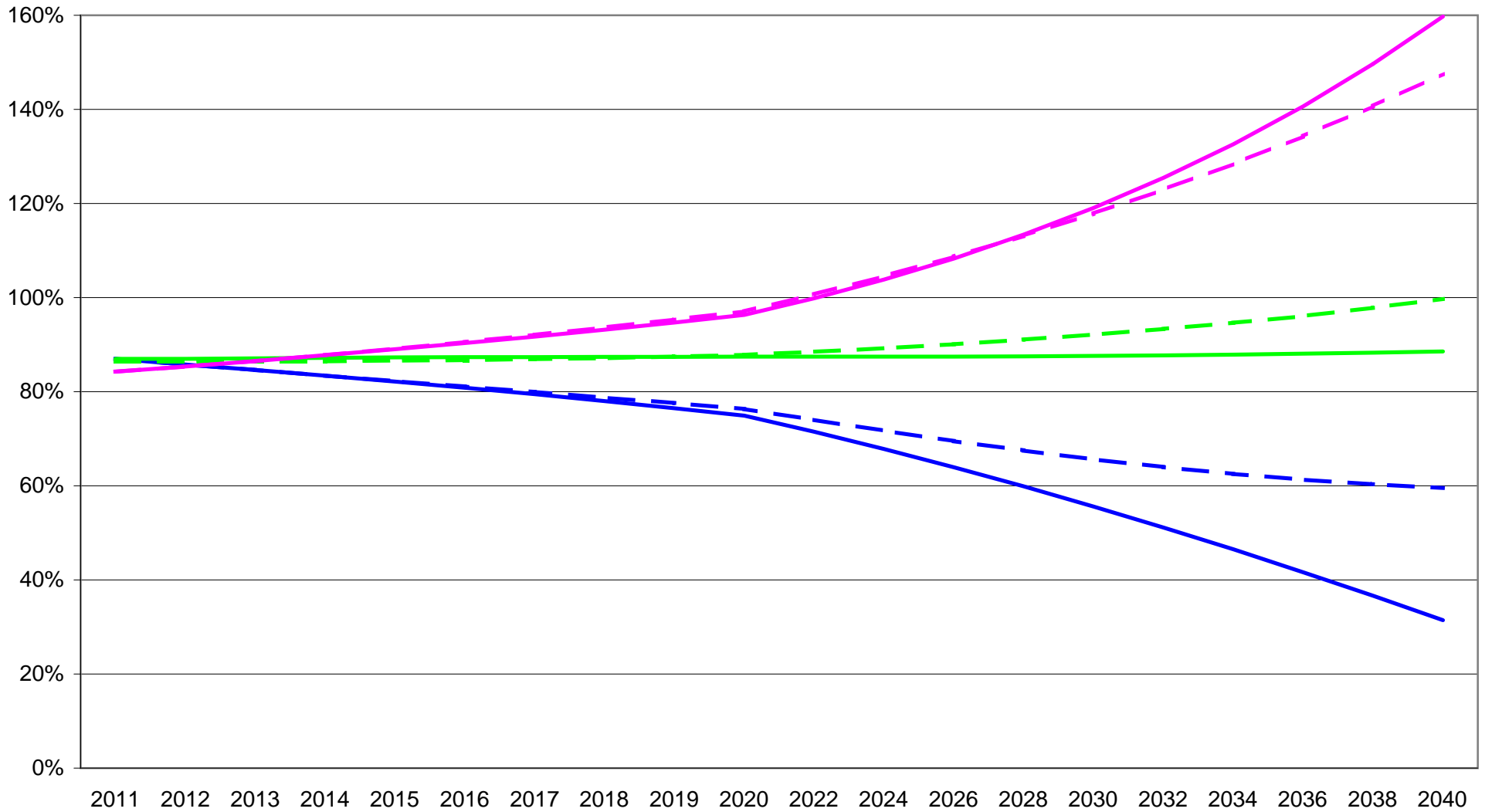
Beginning July 1, 2014, member and employer contribution rates are adjusted as follows:

- if a contribution sufficiency of at least 0.5% has existed for two consecutive years (after July 1, 2011), the member and employer contribution rates are decreased by at most 0.25% each to a level that is necessary to maintain a 0.25% sufficiency
- if a contribution deficiency of at least 0.5% has existed for two consecutive years (after July 1, 2011), the member and employer contribution rates are increased by at most 0.25% each
- a contribution rate adjustment under this section must not be made until at least two years have passed since fully implementing a previous adjustment

This exhibit should only be viewed in conjunction with Mercer's January 31, 2012 letter to MSRS

State Employees Retirement Fund Estimated Funding Ratios

Exhibit B



Each of the first ten years is represented; every other year thereafter

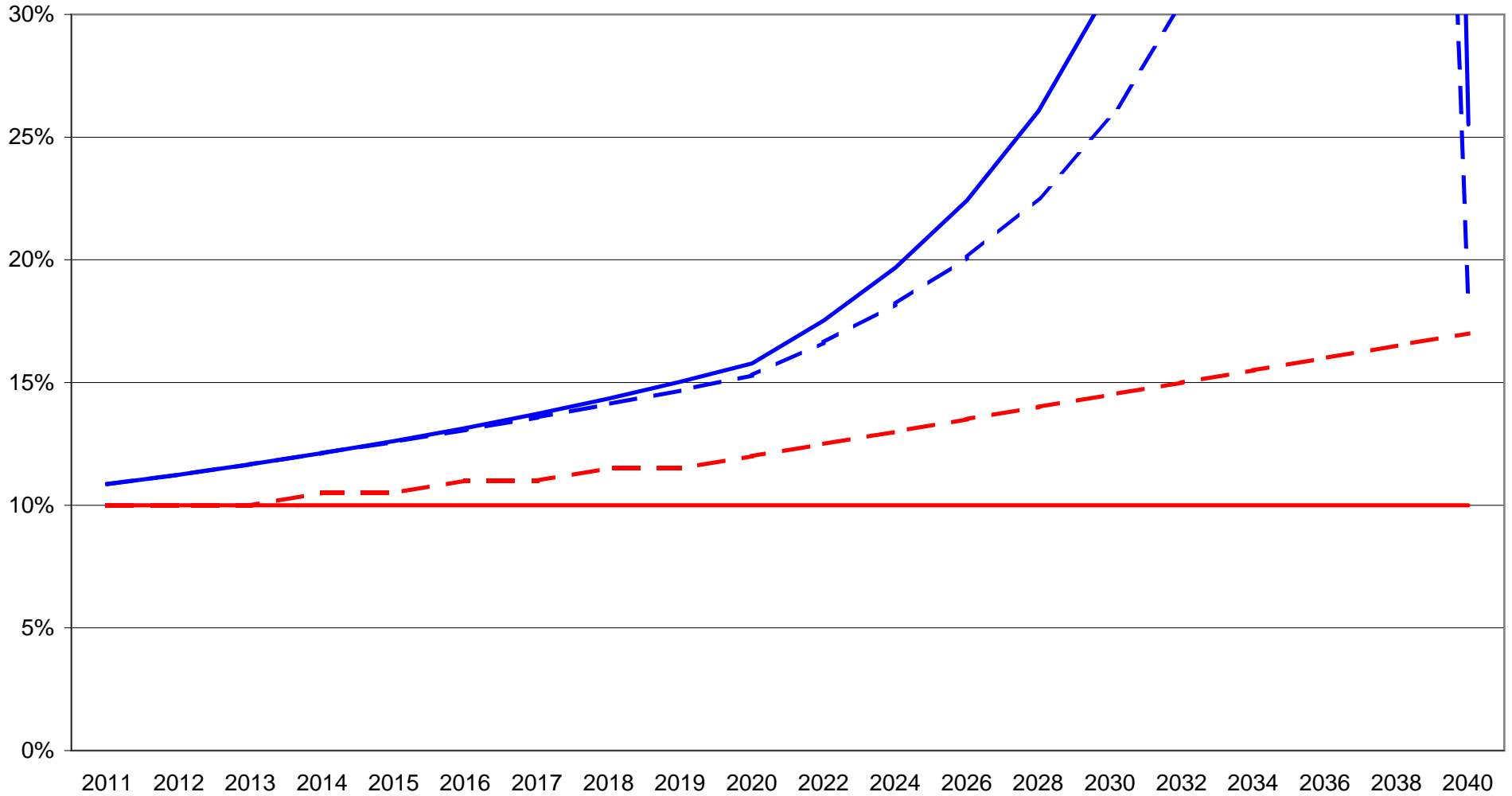


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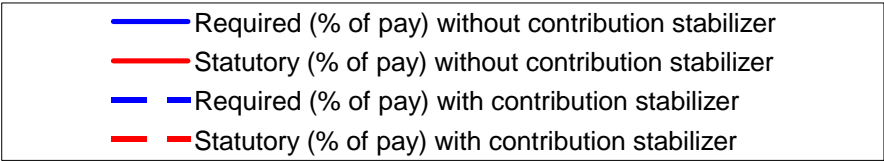
State Employees Retirement Fund

Estimated contribution rates assuming 7.0% return on assets

Exhibit B



Each of the first ten years is represented; every other year thereafter

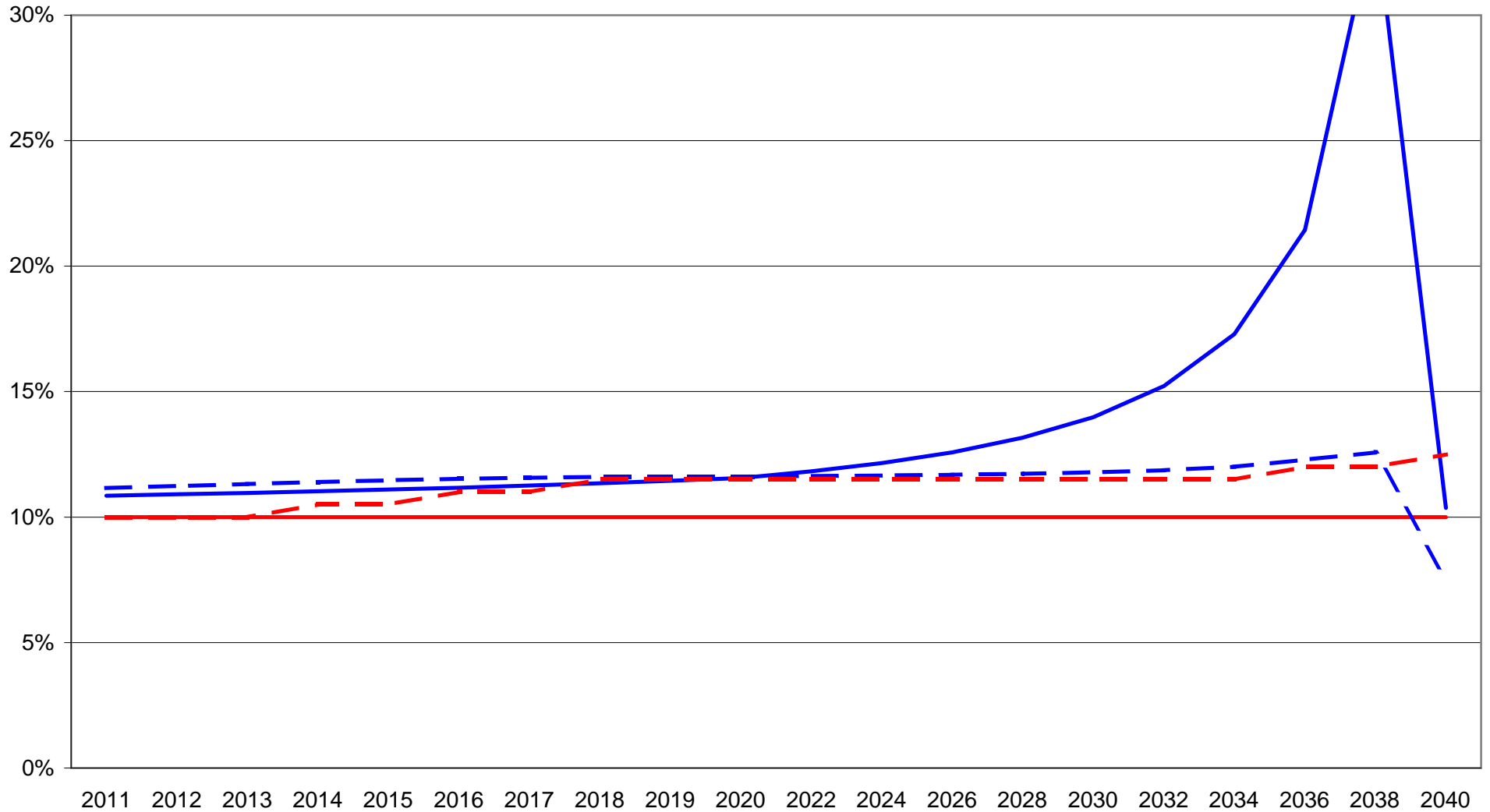


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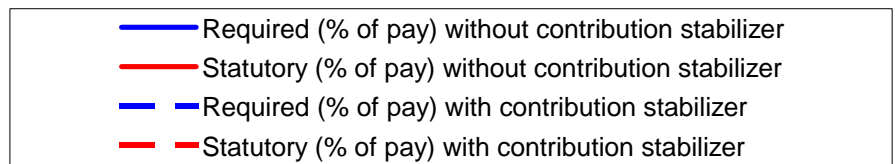
State Employees Retirement Fund

Estimated contribution rates assuming 8.5% return on assets

Exhibit B



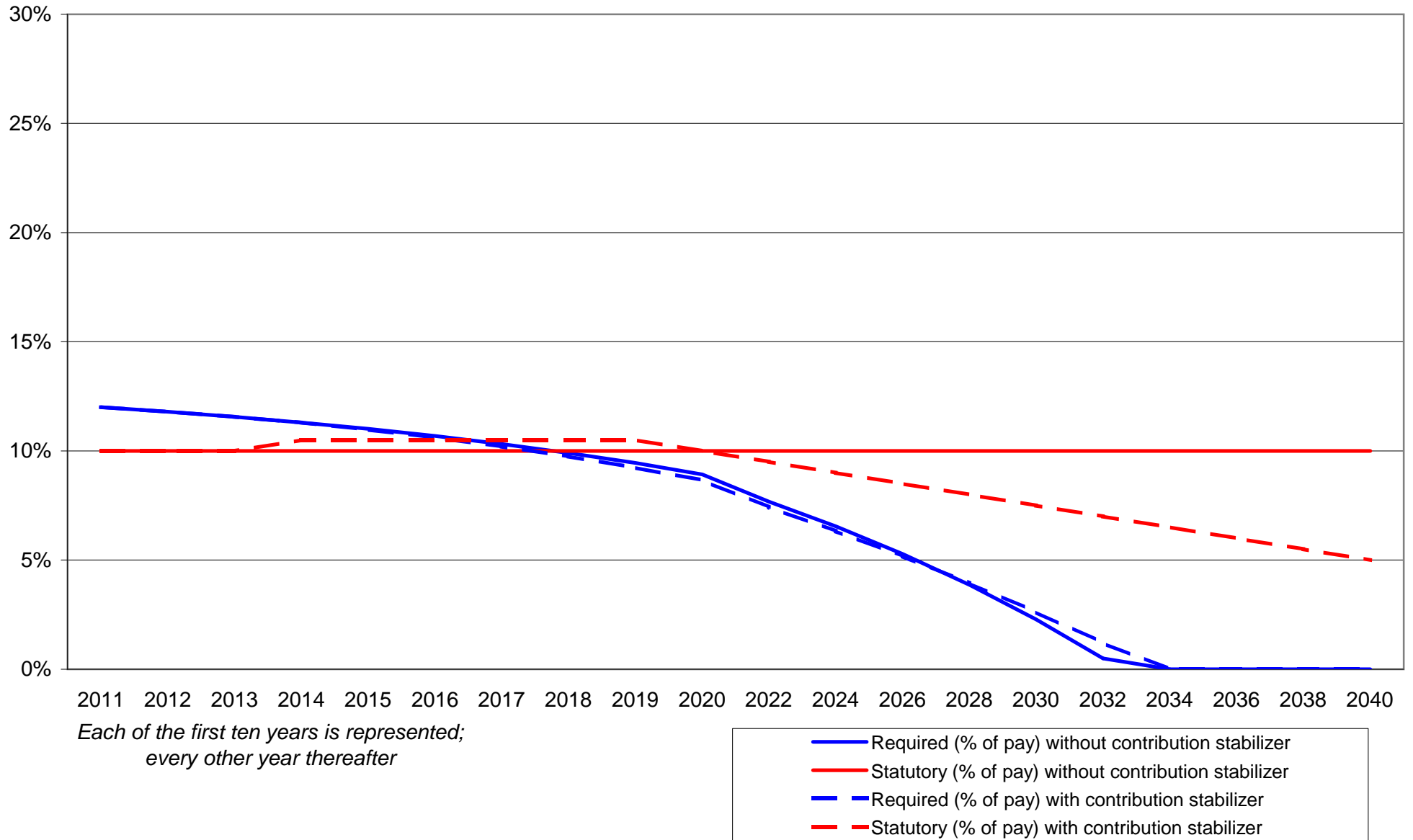
*Each of the first ten years is represented;
every other year thereafter*



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State Employees Retirement Fund Estimated contribution rates assuming 10.0% return on assets

Exhibit B



This exhibit should only be viewed in conjunction with Mercer's January 31, 2012 letter to MSRS

State Employees Retirement Fund
Scenario: 7% return for all years

Exhibit C

<i>\$ in Thousands</i>	July 1, 2011	July 1, 2012	July 1, 2013	July 1, 2014	July 1, 2015	July 1, 2016	July 1, 2017	July 1, 2018
Contributions (% of Payroll), with stabilizer								
Statutory - Chapter 352	10.00%	10.00%	10.00%	10.50%	10.50%	11.00%	11.00%	11.50%
Required - Chapter 356	10.85%	11.24%	11.67%	12.12%	12.58%	13.07%	13.57%	14.12%
Sufficiency / (Deficiency)	-0.85%	-1.24%	-1.67%	-1.62%	-2.08%	-2.07%	-2.57%	-2.62%
Contributions, with stabilizer								
Statutory - Chapter 352	246,000	255,000	265,000	288,000	299,000	325,000	337,000	366,000
Required - Chapter 356	267,000	287,000	309,000	333,000	358,000	386,000	416,000	449,000
Sufficiency / (Deficiency)	(21,000)	(32,000)	(44,000)	(45,000)	(59,000)	(61,000)	(79,000)	(83,000)
Funding Ratios, with stabilizer								
Current Assets (MVA)	9,198,000	9,424,000	9,703,000	9,968,000	10,232,000	10,481,000	10,727,000	10,955,000
Actuarial Accrued Liability	10,576,000	10,986,000	11,464,000	11,948,000	12,435,000	12,927,000	13,421,000	13,917,000
Unfunded Actuarial Accrued Liability	(1,378,000)	(1,562,000)	(1,761,000)	(1,980,000)	(2,203,000)	(2,446,000)	(2,694,000)	(2,962,000)
Funding Ratio	87%	86%	85%	83%	82%	81%	80%	79%
Benefit Payments, with stabilizer								
	643,000	616,000	657,000	700,000	744,000	788,000	834,000	879,000
Contributions (% of Payroll), without stabilizer								
Statutory - Chapter 352	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
Required - Chapter 356	10.85%	11.24%	11.67%	12.12%	12.61%	13.14%	13.72%	14.35%
Sufficiency / (Deficiency)	-0.85%	-1.24%	-1.67%	-2.12%	-2.61%	-3.14%	-3.72%	-4.35%
Contributions, without stabilizer								
Statutory - Chapter 352	246,000	255,000	265,000	275,000	285,000	296,000	307,000	318,000
Required - Chapter 356	267,000	287,000	309,000	333,000	359,000	389,000	421,000	457,000
Sufficiency / (Deficiency)	(21,000)	(32,000)	(44,000)	(58,000)	(74,000)	(93,000)	(114,000)	(139,000)
Funding Ratios, without stabilizer								
Current Assets (MVA)	9,198,000	9,424,000	9,703,000	9,968,000	10,218,000	10,451,000	10,664,000	10,856,000
Actuarial Accrued Liability	10,576,000	10,986,000	11,464,000	11,948,000	12,435,000	12,927,000	13,421,000	13,917,000
Unfunded Actuarial Accrued Liability	(1,378,000)	(1,562,000)	(1,761,000)	(1,980,000)	(2,217,000)	(2,476,000)	(2,757,000)	(3,061,000)
Funding Ratio	87%	86%	85%	83%	82%	81%	79%	78%
Benefit Payments, without stabilizer								
	643,000	616,000	657,000	700,000	744,000	788,000	834,000	879,000

Not all numbers may add due to rounding

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State Employees Retirement Fund
Scenario: 7% return for all years

Exhibit C

<i>\$ in Thousands</i>	July 1, 2019	July 1, 2020	July 1, 2021	July 1, 2022	July 1, 2023	July 1, 2024	July 1, 2025	July 1, 2026
Contributions (% of Payroll), with stabilizer								
Statutory - Chapter 352	11.50%	12.00%	12.00%	12.50%	12.50%	13.00%	13.00%	13.50%
Required - Chapter 356	14.68%	15.29%	15.93%	16.63%	17.37%	18.20%	19.09%	20.10%
Sufficiency / (Deficiency)	-3.18%	-3.29%	-3.93%	-4.13%	-4.87%	-5.20%	-6.09%	-6.60%
Contributions, with stabilizer								
Statutory - Chapter 352	380,000	411,000	426,000	461,000	478,000	516,000	535,000	577,000
Required - Chapter 356	485,000	524,000	566,000	613,000	664,000	722,000	786,000	859,000
Sufficiency / (Deficiency)	(105,000)	(113,000)	(140,000)	(152,000)	(186,000)	(206,000)	(251,000)	(282,000)
Funding Ratios, with stabilizer								
Current Assets (MVA)	11,182,000	11,393,000	11,606,000	11,807,000	12,017,000	12,221,000	12,442,000	12,664,000
Actuarial Accrued Liability	14,417,000	14,922,000	15,434,000	15,957,000	16,493,000	17,046,000	17,620,000	18,219,000
Unfunded Actuarial Accrued Liability	(3,235,000)	(3,529,000)	(3,828,000)	(4,150,000)	(4,476,000)	(4,825,000)	(5,178,000)	(5,555,000)
Funding Ratio	78%	76%	75%	74%	73%	72%	71%	70%
Benefit Payments, with stabilizer								
	924,000	966,000	1,008,000	1,046,000	1,084,000	1,118,000	1,151,000	1,181,000
Contributions (% of Payroll), without stabilizer								
Statutory - Chapter 352	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
Required - Chapter 356	15.03%	15.78%	16.61%	17.52%	18.54%	19.68%	20.96%	22.43%
Sufficiency / (Deficiency)	-5.03%	-5.78%	-6.61%	-7.52%	-8.54%	-9.68%	-10.96%	-12.43%
Contributions, without stabilizer								
Statutory - Chapter 352	330,000	343,000	355,000	369,000	383,000	397,000	412,000	427,000
Required - Chapter 356	496,000	541,000	590,000	646,000	709,000	781,000	863,000	958,000
Sufficiency / (Deficiency)	(166,000)	(198,000)	(235,000)	(277,000)	(326,000)	(384,000)	(451,000)	(531,000)
Funding Ratios, without stabilizer								
Current Assets (MVA)	11,027,000	11,175,000	11,303,000	11,409,000	11,496,000	11,564,000	11,616,000	11,652,000
Actuarial Accrued Liability	14,417,000	14,922,000	15,434,000	15,957,000	16,493,000	17,046,000	17,620,000	18,219,000
Unfunded Actuarial Accrued Liability	(3,390,000)	(3,747,000)	(4,131,000)	(4,548,000)	(4,997,000)	(5,482,000)	(6,004,000)	(6,567,000)
Funding Ratio	76%	75%	73%	71%	70%	68%	66%	64%
Benefit Payments, without stabilizer								
	924,000	966,000	1,008,000	1,046,000	1,084,000	1,118,000	1,151,000	1,181,000

Not all numbers may add due to rounding

This exhibit should only be viewed in conjunction with Mercer's January 31, 2012 letter to MSRS

State Employees Retirement Fund
Scenario: 7% return for all years

Exhibit C

<i>\$ in Thousands</i>	July 1, 2027	July 1, 2028	July 1, 2029	July 1, 2030	July 1, 2031	July 1, 2032	July 1, 2033	July 1, 2034
Contributions (% of Payroll), with stabilizer								
Statutory - Chapter 352	13.50%	14.00%	14.00%	14.50%	14.50%	15.00%	15.00%	15.50%
Required - Chapter 356	21.21%	22.51%	23.98%	25.75%	27.84%	30.45%	33.72%	38.09%
Sufficiency / (Deficiency)	-7.71%	-8.51%	-9.98%	-11.25%	-13.34%	-15.45%	-18.72%	-22.59%
Contributions, with stabilizer								
Statutory - Chapter 352	598,000	644,000	668,000	718,000	745,000	799,000	829,000	889,000
Required - Chapter 356	940,000	1,035,000	1,144,000	1,275,000	1,430,000	1,622,000	1,864,000	2,184,000
Sufficiency / (Deficiency)	(342,000)	(391,000)	(476,000)	(557,000)	(685,000)	(823,000)	(1,035,000)	(1,295,000)
Funding Ratios, with stabilizer								
Current Assets (MVA)	12,913,000	13,168,000	13,454,000	13,747,000	14,073,000	14,408,000	14,780,000	15,165,000
Actuarial Accrued Liability	18,850,000	19,513,000	20,210,000	20,942,000	21,710,000	22,515,000	23,361,000	24,250,000
Unfunded Actuarial Accrued Liability	(5,937,000)	(6,345,000)	(6,756,000)	(7,195,000)	(7,637,000)	(8,107,000)	(8,581,000)	(9,085,000)
Funding Ratio	69%	67%	67%	66%	65%	64%	63%	63%
Benefit Payments, with stabilizer	1,213,000	1,247,000	1,282,000	1,320,000	1,359,000	1,400,000	1,442,000	1,485,000
Contributions (% of Payroll), without stabilizer								
Statutory - Chapter 352	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
Required - Chapter 356	24.11%	26.06%	28.37%	31.13%	34.50%	38.70%	44.09%	51.26%
Sufficiency / (Deficiency)	-14.11%	-16.06%	-18.37%	-21.13%	-24.50%	-28.70%	-34.09%	-41.26%
Contributions, without stabilizer								
Statutory - Chapter 352	443,000	460,000	477,000	495,000	514,000	533,000	553,000	574,000
Required - Chapter 356	1,069,000	1,199,000	1,354,000	1,541,000	1,772,000	2,062,000	2,437,000	2,940,000
Sufficiency / (Deficiency)	(626,000)	(739,000)	(877,000)	(1,046,000)	(1,258,000)	(1,529,000)	(1,884,000)	(2,366,000)
Funding Ratios, without stabilizer								
Current Assets (MVA)	11,676,000	11,684,000	11,675,000	11,646,000	11,594,000	11,516,000	11,410,000	11,274,000
Actuarial Accrued Liability	18,850,000	19,513,000	20,210,000	20,942,000	21,710,000	22,515,000	23,361,000	24,250,000
Unfunded Actuarial Accrued Liability	(7,174,000)	(7,829,000)	(8,535,000)	(9,296,000)	(10,116,000)	(10,999,000)	(11,951,000)	(12,976,000)
Funding Ratio	62%	60%	58%	56%	53%	51%	49%	46%
Benefit Payments, without stabilizer	1,213,000	1,247,000	1,282,000	1,320,000	1,359,000	1,400,000	1,442,000	1,485,000

Not all numbers may add due to rounding

C-7

This exhibit should only be viewed in conjunction with Mercer's January 31, 2012 letter to MSRS

State Employees Retirement Fund
Scenario: 7% return for all years

Exhibit C

<i>\$ in Thousands</i>	July 1, 2035	July 1, 2036	July 1, 2037	July 1, 2038	July 1, 2039	July 1, 2040
Contributions (% of Payroll), with stabilizer						
Statutory - Chapter 352	15.50%	16.00%	16.00%	16.50%	16.50%	17.00%
Required - Chapter 356	44.09%	53.09%	67.93%	97.62%	186.21%	18.06%
Sufficiency / (Deficiency)	-28.59%	-37.09%	-51.93%	-81.12%	-169.71%	-1.06%
Contributions, with stabilizer						
Statutory - Chapter 352	922,000	988,000	1,025,000	1,096,000	1,138,000	1,216,000
Required - Chapter 356	2,623,000	3,278,000	4,351,000	6,487,000	12,838,000	1,292,000
Sufficiency / (Deficiency)	(1,701,000)	(2,290,000)	(3,326,000)	(5,391,000)	(11,700,000)	(76,000)
Funding Ratios, with stabilizer						
Current Assets (MVA)	15,594,000	16,041,000	16,539,000	17,060,000	17,641,000	18,253,000
Actuarial Accrued Liability	25,184,000	26,167,000	27,202,000	28,293,000	29,444,000	30,659,000
Unfunded Actuarial Accrued Liability	(9,590,000)	(10,126,000)	(10,663,000)	(11,233,000)	(11,803,000)	(12,406,000)
Funding Ratio	62%	61%	61%	60%	60%	60%
Benefit Payments, with stabilizer	1,530,000	1,576,000	1,623,000	1,672,000	1,722,000	1,773,000
Contributions (% of Payroll), without stabilizer						
Statutory - Chapter 352	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
Required - Chapter 356	61.30%	76.34%	101.38%	151.45%	301.58%	25.51%
Sufficiency / (Deficiency)	-51.30%	-66.34%	-91.38%	-141.45%	-291.58%	-15.51%
Contributions, without stabilizer						
Statutory - Chapter 352	595,000	617,000	641,000	665,000	689,000	715,000
Required - Chapter 356	3,648,000	4,713,000	6,494,000	10,064,000	20,793,000	1,825,000
Sufficiency / (Deficiency)	(3,053,000)	(4,096,000)	(5,853,000)	(9,399,000)	(20,104,000)	(1,110,000)
Funding Ratios, without stabilizer						
Current Assets (MVA)	11,104,000	10,898,000	10,652,000	10,364,000	10,029,000	9,644,000
Actuarial Accrued Liability	25,184,000	26,167,000	27,202,000	28,293,000	29,444,000	30,659,000
Unfunded Actuarial Accrued Liability	(14,080,000)	(15,269,000)	(16,550,000)	(17,929,000)	(19,415,000)	(21,015,000)
Funding Ratio	44%	42%	39%	37%	34%	31%
Benefit Payments, without stabilizer	1,530,000	1,576,000	1,623,000	1,672,000	1,722,000	1,773,000

Not all numbers may add due to rounding

This exhibit should only be viewed in conjunction with Mercer's January 31, 2012 letter to MSRS

State Employees Retirement Fund
Scenario: 8.5% return for all years

Exhibit C

<i>\$ in Thousands</i>	July 1, 2011	July 1, 2012	July 1, 2013	July 1, 2014	July 1, 2015	July 1, 2016	July 1, 2017	July 1, 2018
Contributions (% of Payroll), with stabilizer								
Statutory - Chapter 352	10.00%	10.00%	10.00%	10.50%	10.50%	11.00%	11.00%	11.50%
Required - Chapter 356	11.16%	11.24%	11.32%	11.40%	11.46%	11.53%	11.57%	11.61%
Sufficiency / (Deficiency)	-1.16%	-1.24%	-1.32%	-0.90%	-0.96%	-0.53%	-0.57%	-0.11%
Contributions, with stabilizer								
Statutory - Chapter 352	246,000	255,000	265,000	288,000	299,000	325,000	337,000	366,000
Required - Chapter 356	275,000	287,000	300,000	313,000	327,000	341,000	355,000	369,000
Sufficiency / (Deficiency)	(29,000)	(32,000)	(35,000)	(25,000)	(28,000)	(16,000)	(18,000)	(3,000)
Funding Ratios, with stabilizer								
Current Assets (MVA)	9,198,000	9,563,000	9,992,000	10,426,000	10,875,000	11,328,000	11,801,000	12,277,000
Actuarial Accrued Liability	10,648,000	11,071,000	11,561,000	12,057,000	12,558,000	13,064,000	13,574,000	14,088,000
Unfunded Actuarial Accrued Liability	(1,450,000)	(1,508,000)	(1,569,000)	(1,631,000)	(1,683,000)	(1,736,000)	(1,773,000)	(1,811,000)
Funding Ratio	86%	86%	86%	86%	87%	87%	87%	87%
Benefit Payments, with stabilizer								
	639,000	616,000	657,000	700,000	743,000	788,000	834,000	879,000
Contributions (% of Payroll), without stabilizer								
Statutory - Chapter 352	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
Required - Chapter 356	10.85%	10.91%	10.97%	11.03%	11.10%	11.17%	11.26%	11.35%
Sufficiency / (Deficiency)	-0.85%	-0.91%	-0.97%	-1.03%	-1.10%	-1.17%	-1.26%	-1.35%
Contributions, without stabilizer								
Statutory - Chapter 352	246,000	255,000	265,000	275,000	285,000	296,000	307,000	318,000
Required - Chapter 356	267,000	278,000	290,000	303,000	316,000	330,000	345,000	361,000
Sufficiency / (Deficiency)	(21,000)	(23,000)	(25,000)	(28,000)	(31,000)	(34,000)	(38,000)	(43,000)
Funding Ratios, without stabilizer								
Current Assets (MVA)	9,198,000	9,558,000	9,987,000	10,419,000	10,853,000	11,289,000	11,726,000	12,164,000
Actuarial Accrued Liability	10,576,000	10,986,000	11,464,000	11,948,000	12,435,000	12,927,000	13,421,000	13,917,000
Unfunded Actuarial Accrued Liability	(1,378,000)	(1,428,000)	(1,477,000)	(1,529,000)	(1,582,000)	(1,638,000)	(1,695,000)	(1,753,000)
Funding Ratio	87%	87%	87%	87%	87%	87%	87%	87%
Benefit Payments, without stabilizer								
	643,000	616,000	657,000	700,000	744,000	788,000	834,000	879,000

Not all numbers may add due to rounding

This exhibit should only be viewed in conjunction with Mercer's January 31, 2012 letter to MSRS

State Employees Retirement Fund
Scenario: 8.5% return for all years

Exhibit C

<i>\$ in Thousands</i>	July 1, 2019	July 1, 2020	July 1, 2021	July 1, 2022	July 1, 2023	July 1, 2024	July 1, 2025	July 1, 2026
Contributions (% of Payroll), with stabilizer								
Statutory - Chapter 352	11.50%	11.50%	11.50%	11.50%	11.50%	11.50%	11.50%	11.50%
Required - Chapter 356	11.61%	11.62%	11.63%	11.64%	11.65%	11.66%	11.67%	11.69%
Sufficiency / (Deficiency)	-0.11%	-0.12%	-0.13%	-0.14%	-0.15%	-0.16%	-0.17%	-0.19%
Contributions, with stabilizer								
Statutory - Chapter 352	380,000	394,000	409,000	424,000	440,000	456,000	474,000	491,000
Required - Chapter 356	383,000	398,000	413,000	429,000	446,000	463,000	481,000	499,000
Sufficiency / (Deficiency)	(3,000)	(4,000)	(4,000)	(5,000)	(6,000)	(7,000)	(7,000)	(8,000)
Funding Ratios, with stabilizer								
Current Assets (MVA)	12,777,000	13,287,000	13,810,000	14,350,000	14,911,000	15,496,000	16,112,000	16,764,000
Actuarial Accrued Liability	14,607,000	15,133,000	15,669,000	16,217,000	16,781,000	17,364,000	17,971,000	18,607,000
Unfunded Actuarial Accrued Liability	(1,830,000)	(1,846,000)	(1,859,000)	(1,867,000)	(1,870,000)	(1,868,000)	(1,859,000)	(1,843,000)
Funding Ratio	87%	88%	88%	88%	89%	89%	90%	90%
Benefit Payments, with stabilizer								
	923,000	966,000	1,007,000	1,046,000	1,083,000	1,118,000	1,151,000	1,181,000
Contributions (% of Payroll), without stabilizer								
Statutory - Chapter 352	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
Required - Chapter 356	11.45%	11.56%	11.68%	11.82%	11.98%	12.15%	12.35%	12.58%
Sufficiency / (Deficiency)	-1.45%	-1.56%	-1.68%	-1.82%	-1.98%	-2.15%	-2.35%	-2.58%
Contributions, without stabilizer								
Statutory - Chapter 352	330,000	343,000	355,000	369,000	383,000	397,000	412,000	427,000
Required - Chapter 356	378,000	396,000	415,000	436,000	458,000	482,000	509,000	538,000
Sufficiency / (Deficiency)	(48,000)	(53,000)	(60,000)	(67,000)	(75,000)	(85,000)	(97,000)	(111,000)
Funding Ratios, without stabilizer								
Current Assets (MVA)	12,603,000	13,046,000	13,495,000	13,951,000	14,420,000	14,903,000	15,406,000	15,932,000
Actuarial Accrued Liability	14,417,000	14,922,000	15,434,000	15,957,000	16,493,000	17,046,000	17,620,000	18,219,000
Unfunded Actuarial Accrued Liability	(1,814,000)	(1,876,000)	(1,939,000)	(2,006,000)	(2,073,000)	(2,143,000)	(2,214,000)	(2,287,000)
Funding Ratio	87%	87%	87%	87%	87%	87%	87%	87%
Benefit Payments, without stabilizer								
	924,000	966,000	1,008,000	1,046,000	1,084,000	1,118,000	1,151,000	1,181,000

Not all numbers may add due to rounding

C-10

This exhibit should only be viewed in conjunction with Mercer's January 31, 2012 letter to MSRS

State Employees Retirement Fund
Scenario: 8.5% return for all years

Exhibit C

<i>\$ in Thousands</i>	July 1, 2027	July 1, 2028	July 1, 2029	July 1, 2030	July 1, 2031	July 1, 2032	July 1, 2033	July 1, 2034
Contributions (% of Payroll), with stabilizer								
Statutory - Chapter 352	11.50%	11.50%	11.50%	11.50%	11.50%	11.50%	11.50%	11.50%
Required - Chapter 356	11.71%	11.73%	11.75%	11.78%	11.82%	11.87%	11.93%	12.01%
Sufficiency / (Deficiency)	-0.21%	-0.23%	-0.25%	-0.28%	-0.32%	-0.37%	-0.43%	-0.51%
Contributions, with stabilizer								
Statutory - Chapter 352	510,000	529,000	549,000	569,000	591,000	613,000	636,000	660,000
Required - Chapter 356	519,000	539,000	561,000	583,000	607,000	632,000	659,000	689,000
Sufficiency / (Deficiency)	(9,000)	(10,000)	(12,000)	(14,000)	(16,000)	(19,000)	(23,000)	(29,000)
Funding Ratios, with stabilizer								
Current Assets (MVA)	17,457,000	18,195,000	18,981,000	19,816,000	20,704,000	21,648,000	22,648,000	23,706,000
Actuarial Accrued Liability	19,277,000	19,982,000	20,725,000	21,507,000	22,330,000	23,195,000	24,103,000	25,051,000
Unfunded Actuarial Accrued Liability	(1,820,000)	(1,787,000)	(1,744,000)	(1,691,000)	(1,626,000)	(1,547,000)	(1,455,000)	(1,345,000)
Funding Ratio	91%	91%	92%	92%	93%	93%	94%	95%
Benefit Payments, with stabilizer	1,213,000	1,246,000	1,282,000	1,319,000	1,359,000	1,403,000	1,452,000	1,503,000
Contributions (% of Payroll), without stabilizer								
Statutory - Chapter 352	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
Required - Chapter 356	12.85%	13.16%	13.54%	13.98%	14.53%	15.22%	16.11%	17.29%
Sufficiency / (Deficiency)	-2.85%	-3.16%	-3.54%	-3.98%	-4.53%	-5.22%	-6.11%	-7.29%
Contributions, without stabilizer								
Statutory - Chapter 352	443,000	460,000	477,000	495,000	514,000	533,000	553,000	574,000
Required - Chapter 356	570,000	605,000	646,000	692,000	746,000	811,000	890,000	992,000
Sufficiency / (Deficiency)	(127,000)	(145,000)	(169,000)	(197,000)	(232,000)	(278,000)	(337,000)	(418,000)
Funding Ratios, without stabilizer								
Current Assets (MVA)	16,488,000	17,074,000	17,691,000	18,342,000	19,027,000	19,748,000	20,507,000	21,307,000
Actuarial Accrued Liability	18,850,000	19,513,000	20,210,000	20,942,000	21,710,000	22,515,000	23,361,000	24,250,000
Unfunded Actuarial Accrued Liability	(2,362,000)	(2,439,000)	(2,519,000)	(2,600,000)	(2,683,000)	(2,767,000)	(2,854,000)	(2,943,000)
Funding Ratio	87%	87%	88%	88%	88%	88%	88%	88%
Benefit Payments, without stabilizer	1,213,000	1,247,000	1,282,000	1,320,000	1,359,000	1,400,000	1,442,000	1,485,000

Not all numbers may add due to rounding

C-11

This exhibit should only be viewed in conjunction with Mercer's January 31, 2012 letter to MSRS

State Employees Retirement Fund
Scenario: 8.5% return for all years

Exhibit C

<i>\$ in Thousands</i>	July 1, 2035	July 1, 2036	July 1, 2037	July 1, 2038	July 1, 2039	July 1, 2040
Contributions (% of Payroll), with stabilizer						
Statutory - Chapter 352	11.50%	12.00%	12.00%	12.00%	12.00%	12.50%
Required - Chapter 356	12.12%	12.28%	12.38%	12.58%	13.16%	7.52%
Sufficiency / (Deficiency)	-0.62%	-0.28%	-0.38%	-0.58%	-1.16%	4.98%
Contributions, with stabilizer						
Statutory - Chapter 352	684,000	741,000	769,000	797,000	827,000	894,000
Required - Chapter 356	721,000	758,000	793,000	836,000	907,000	538,000
Sufficiency / (Deficiency)	(37,000)	(17,000)	(24,000)	(39,000)	(80,000)	356,000
Funding Ratios, with stabilizer						
Current Assets (MVA)	24,826,000	26,010,000	27,297,000	28,663,000	30,113,000	31,654,000
Actuarial Accrued Liability	26,043,000	27,079,000	28,164,000	29,300,000	30,490,000	31,736,000
Unfunded Actuarial Accrued Liability	(1,217,000)	(1,069,000)	(867,000)	(637,000)	(377,000)	(82,000)
Funding Ratio	95%	96%	97%	98%	99%	100%
Benefit Payments, with stabilizer	1,556,000	1,610,000	1,666,000	1,725,000	1,785,000	1,847,000
Contributions (% of Payroll), without stabilizer						
Statutory - Chapter 352	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
Required - Chapter 356	18.95%	21.45%	25.62%	33.96%	59.00%	10.36%
Sufficiency / (Deficiency)	-8.95%	-11.45%	-15.62%	-23.96%	-49.00%	-0.36%
Contributions, without stabilizer						
Statutory - Chapter 352	595,000	617,000	641,000	665,000	689,000	715,000
Required - Chapter 356	1,128,000	1,324,000	1,641,000	2,257,000	4,068,000	741,000
Sufficiency / (Deficiency)	(533,000)	(707,000)	(1,000,000)	(1,592,000)	(3,379,000)	(26,000)
Funding Ratios, without stabilizer						
Current Assets (MVA)	22,151,000	23,042,000	23,984,000	24,980,000	26,035,000	27,152,000
Actuarial Accrued Liability	25,184,000	26,167,000	27,202,000	28,293,000	29,444,000	30,659,000
Unfunded Actuarial Accrued Liability	(3,033,000)	(3,125,000)	(3,218,000)	(3,313,000)	(3,409,000)	(3,507,000)
Funding Ratio	88%	88%	88%	88%	88%	89%
Benefit Payments, without stabilizer	1,530,000	1,576,000	1,623,000	1,672,000	1,722,000	1,773,000

Not all numbers may add due to rounding

This exhibit should only be viewed in conjunction with Mercer's January 31, 2012 letter to MSRS

State Employees Retirement Fund
Scenario: 10% return for all years

Exhibit C

<i>\$ in Thousands</i>	July 1, 2011	July 1, 2012	July 1, 2013	July 1, 2014	July 1, 2015	July 1, 2016	July 1, 2017	July 1, 2018
Contributions (% of Payroll), with stabilizer								
Statutory - Chapter 352	10.00%	10.00%	10.00%	10.50%	10.50%	10.50%	10.50%	10.50%
Required - Chapter 356	12.01%	11.80%	11.57%	11.30%	10.98%	10.61%	10.20%	9.74%
Sufficiency / (Deficiency)	-2.01%	-1.80%	-1.57%	-0.80%	-0.48%	-0.11%	0.30%	0.76%
Contributions, with stabilizer								
Statutory - Chapter 352	246,000	255,000	265,000	288,000	299,000	310,000	322,000	334,000
Required - Chapter 356	295,000	301,000	306,000	310,000	313,000	314,000	313,000	310,000
Sufficiency / (Deficiency)	(49,000)	(46,000)	(41,000)	(22,000)	(14,000)	(4,000)	9,000	24,000
Funding Ratios, with stabilizer								
Current Assets (MVA)	9,198,000	9,700,000	10,283,000	10,892,000	11,541,000	12,221,000	12,932,000	13,675,000
Actuarial Accrued Liability	10,914,000	11,366,000	11,885,000	12,414,000	12,950,000	13,494,000	14,046,000	14,602,000
Unfunded Actuarial Accrued Liability	(1,716,000)	(1,666,000)	(1,602,000)	(1,522,000)	(1,409,000)	(1,273,000)	(1,114,000)	(927,000)
Funding Ratio	84%	85%	87%	88%	89%	91%	92%	94%
Benefit Payments, with stabilizer								
	637,000	616,000	657,000	700,000	743,000	788,000	837,000	886,000
Contributions (% of Payroll), without stabilizer								
Statutory - Chapter 352	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
Required - Chapter 356	12.01%	11.80%	11.57%	11.30%	11.01%	10.68%	10.32%	9.91%
Sufficiency / (Deficiency)	-2.01%	-1.80%	-1.57%	-1.30%	-1.01%	-0.68%	-0.32%	0.09%
Contributions, without stabilizer								
Statutory - Chapter 352	246,000	255,000	265,000	275,000	285,000	296,000	307,000	318,000
Required - Chapter 356	295,000	301,000	306,000	310,000	314,000	316,000	316,000	315,000
Sufficiency / (Deficiency)	(49,000)	(46,000)	(41,000)	(35,000)	(29,000)	(20,000)	(9,000)	3,000
Funding Ratios, without stabilizer								
Current Assets (MVA)	9,198,000	9,700,000	10,283,000	10,892,000	11,527,000	12,190,000	12,883,000	13,605,000
Actuarial Accrued Liability	10,914,000	11,366,000	11,885,000	12,414,000	12,950,000	13,494,000	14,046,000	14,602,000
Unfunded Actuarial Accrued Liability	(1,716,000)	(1,666,000)	(1,602,000)	(1,522,000)	(1,423,000)	(1,304,000)	(1,163,000)	(997,000)
Funding Ratio	84%	85%	87%	88%	89%	90%	92%	93%
Benefit Payments, without stabilizer								
	637,000	616,000	657,000	700,000	743,000	788,000	837,000	886,000

Not all numbers may add due to rounding

This exhibit should only be viewed in conjunction with Mercer's January 31, 2012 letter to MSRS

State Employees Retirement Fund
Scenario: 10% return for all years

Exhibit C

<i>\$ in Thousands</i>	July 1, 2019	July 1, 2020	July 1, 2021	July 1, 2022	July 1, 2023	July 1, 2024	July 1, 2025	July 1, 2026
Contributions (% of Payroll), with stabilizer								
Statutory - Chapter 352	10.50%	10.00%	10.00%	9.50%	9.50%	9.00%	9.00%	8.50%
Required - Chapter 356	9.23%	8.65%	8.04%	7.42%	6.89%	6.33%	5.77%	5.17%
Sufficiency / (Deficiency)	1.27%	1.35%	1.96%	2.08%	2.61%	2.67%	3.23%	3.33%
Contributions, with stabilizer								
Statutory - Chapter 352	347,000	343,000	355,000	350,000	363,000	357,000	371,000	363,000
Required - Chapter 356	305,000	296,000	286,000	274,000	264,000	251,000	238,000	221,000
Sufficiency / (Deficiency)	42,000	47,000	69,000	76,000	99,000	106,000	133,000	142,000
Funding Ratios, with stabilizer								
Current Assets (MVA)	14,453,000	15,270,000	16,114,000	17,008,000	17,940,000	18,934,000	19,978,000	21,100,000
Actuarial Accrued Liability	15,162,000	15,728,000	16,303,000	16,889,000	17,489,000	18,107,000	18,747,000	19,412,000
Unfunded Actuarial Accrued Liability	(709,000)	(458,000)	(189,000)	119,000	451,000	827,000	1,231,000	1,688,000
Funding Ratio	95%	97%	99%	101%	103%	105%	107%	109%
Benefit Payments, with stabilizer								
	935,000	982,000	1,028,000	1,072,000	1,114,000	1,154,000	1,192,000	1,227,000
Contributions (% of Payroll), without stabilizer								
Statutory - Chapter 352	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
Required - Chapter 356	9.45%	8.93%	8.34%	7.68%	7.12%	6.54%	5.93%	5.28%
Sufficiency / (Deficiency)	0.55%	1.07%	1.66%	2.32%	2.88%	3.46%	4.07%	4.72%
Contributions, without stabilizer								
Statutory - Chapter 352	330,000	343,000	355,000	369,000	383,000	397,000	412,000	427,000
Required - Chapter 356	312,000	306,000	297,000	283,000	272,000	260,000	244,000	226,000
Sufficiency / (Deficiency)	18,000	37,000	58,000	86,000	111,000	137,000	168,000	201,000
Funding Ratios, without stabilizer								
Current Assets (MVA)	14,358,000	15,149,000	15,981,000	16,862,000	17,798,000	18,798,000	19,870,000	21,025,000
Actuarial Accrued Liability	15,162,000	15,728,000	16,303,000	16,889,000	17,489,000	18,107,000	18,747,000	19,412,000
Unfunded Actuarial Accrued Liability	(804,000)	(579,000)	(322,000)	(27,000)	309,000	691,000	1,123,000	1,613,000
Funding Ratio	95%	96%	98%	100%	102%	104%	106%	108%
Benefit Payments, without stabilizer								
	935,000	982,000	1,028,000	1,072,000	1,114,000	1,154,000	1,192,000	1,227,000

Not all numbers may add due to rounding

C-14

This exhibit should only be viewed in conjunction with Mercer's January 31, 2012 letter to MSRS

State Employees Retirement Fund
Scenario: 10% return for all years

Exhibit C

<i>\$ in Thousands</i>	July 1, 2027	July 1, 2028	July 1, 2029	July 1, 2030	July 1, 2031	July 1, 2032	July 1, 2033	July 1, 2034
Contributions (% of Payroll), with stabilizer								
Statutory - Chapter 352	8.50%	8.00%	8.00%	7.50%	7.50%	7.00%	7.00%	6.50%
Required - Chapter 356	4.57%	3.94%	3.30%	2.62%	1.93%	1.20%	0.46%	0.00%
Sufficiency / (Deficiency)	3.93%	4.06%	4.70%	4.88%	5.57%	5.80%	6.54%	6.50%
Contributions, with stabilizer								
Statutory - Chapter 352	377,000	368,000	382,000	371,000	385,000	373,000	387,000	373,000
Required - Chapter 356	203,000	181,000	157,000	130,000	99,000	64,000	26,000	-
Sufficiency / (Deficiency)	174,000	187,000	225,000	241,000	286,000	309,000	361,000	373,000
Funding Ratios, with stabilizer								
Current Assets (MVA)	22,289,000	23,571,000	24,929,000	26,391,000	27,940,000	29,607,000	31,374,000	33,277,000
Actuarial Accrued Liability	20,110,000	20,839,000	21,600,000	22,395,000	23,223,000	24,086,000	24,983,000	25,917,000
Unfunded Actuarial Accrued Liability	2,179,000	2,732,000	3,329,000	3,996,000	4,717,000	5,521,000	6,391,000	7,360,000
Funding Ratio	111%	113%	115%	118%	120%	123%	126%	128%
Benefit Payments, with stabilizer	1,265,000	1,306,000	1,349,000	1,394,000	1,443,000	1,494,000	1,546,000	1,600,000
Contributions (% of Payroll), without stabilizer								
Statutory - Chapter 352	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
Required - Chapter 356	4.60%	3.87%	3.10%	2.28%	1.42%	0.50%	0.00%	0.00%
Sufficiency / (Deficiency)	5.40%	6.13%	6.90%	7.72%	8.58%	9.50%	10.00%	10.00%
Contributions, without stabilizer								
Statutory - Chapter 352	443,000	460,000	477,000	495,000	514,000	533,000	553,000	574,000
Required - Chapter 356	204,000	178,000	148,000	113,000	73,000	27,000	-	-
Sufficiency / (Deficiency)	239,000	282,000	329,000	382,000	441,000	506,000	553,000	574,000
Funding Ratios, without stabilizer								
Current Assets (MVA)	22,274,000	23,624,000	25,083,000	26,662,000	28,368,000	30,212,000	32,207,000	34,368,000
Actuarial Accrued Liability	20,110,000	20,839,000	21,600,000	22,395,000	23,223,000	24,086,000	24,983,000	25,917,000
Unfunded Actuarial Accrued Liability	2,164,000	2,785,000	3,483,000	4,267,000	5,145,000	6,126,000	7,224,000	8,451,000
Funding Ratio	111%	113%	116%	119%	122%	125%	129%	133%
Benefit Payments, without stabilizer	1,265,000	1,306,000	1,349,000	1,394,000	1,443,000	1,494,000	1,546,000	1,600,000

Not all numbers may add due to rounding

This exhibit should only be viewed in conjunction with Mercer's January 31, 2012 letter to MSRS

State Employees Retirement Fund
Scenario: 10% return for all years

Exhibit C

<i>\$ in Thousands</i>	July 1, 2035	July 1, 2036	July 1, 2037	July 1, 2038	July 1, 2039	July 1, 2040
Contributions (% of Payroll), with stabilizer						
Statutory - Chapter 352	6.50%	6.00%	6.00%	5.50%	5.50%	5.00%
Required - Chapter 356	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Sufficiency / (Deficiency)	6.50%	6.00%	6.00%	5.50%	5.50%	5.00%
Contributions, with stabilizer						
Statutory - Chapter 352	387,000	370,000	384,000	365,000	379,000	358,000
Required - Chapter 356	-	-	-	-	-	-
Sufficiency / (Deficiency)	387,000	370,000	384,000	365,000	379,000	358,000
Funding Ratios, with stabilizer						
Current Assets (MVA)	35,298,000	37,476,000	39,794,000	42,294,000	44,958,000	47,835,000
Actuarial Accrued Liability	26,891,000	27,905,000	28,962,000	30,064,000	31,213,000	32,413,000
Unfunded Actuarial Accrued Liability	8,407,000	9,571,000	10,832,000	12,230,000	13,745,000	15,422,000
Funding Ratio	131%	134%	137%	141%	144%	148%
Benefit Payments, with stabilizer	1,656,000	1,714,000	1,774,000	1,836,000	1,900,000	1,967,000
Contributions (% of Payroll), without stabilizer						
Statutory - Chapter 352	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
Required - Chapter 356	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Sufficiency / (Deficiency)	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
Contributions, without stabilizer						
Statutory - Chapter 352	595,000	617,000	641,000	665,000	689,000	715,000
Required - Chapter 356	-	-	-	-	-	-
Sufficiency / (Deficiency)	595,000	617,000	641,000	665,000	689,000	715,000
Funding Ratios, without stabilizer						
Current Assets (MVA)	36,709,000	39,247,000	42,000,000	44,990,000	48,238,000	51,768,000
Actuarial Accrued Liability	26,891,000	27,905,000	28,962,000	30,064,000	31,213,000	32,413,000
Unfunded Actuarial Accrued Liability	9,818,000	11,342,000	13,038,000	14,926,000	17,025,000	19,355,000
Funding Ratio	137%	141%	145%	150%	155%	160%
Benefit Payments, without stabilizer	1,656,000	1,714,000	1,774,000	1,836,000	1,900,000	1,967,000

Not all numbers may add due to rounding