

**STATE UNIVERSITIES RETIREMENT
SYSTEM OF ILLINOIS**
ACTUARIAL VALUATION REPORT
AS OF JUNE 30, 2012





September 21, 2012

Board of Trustees
State Universities Retirement System of Illinois
1901 Fox Drive
Champaign, Illinois 61820

Dear Members of the Board:

At your request, we present the report of the actuarial valuation of the State Universities Retirement System of Illinois ("SURS") as of June 30, 2012. GRS has prepared this report exclusively for the Trustees of the State Universities Retirement System; GRS is not responsible for reliance upon this report by any other party. This report may be provided to parties other than the System only in its entirety and only with the permission of the Board.

This valuation provides information on the funding status and the contribution requirements of SURS. This valuation includes a determination of the State contribution level (the "Statutory Contribution") for the fiscal year ending June 30, 2014, under Section 15-155 of the SURS Article of the Illinois Pension Code and provides estimates of Statutory contributions for subsequent years. This valuation also provides the Annual Required Contribution (ARC) as determined pursuant to the Governmental Accounting Standards Board (GASB) and information as required by GASB Statement No. 25 and No. 27. This report should not be relied on for any purpose other than the purpose described.

The Statutory funding policy does not currently meet the requirements for amortizing the unfunded liability provided under GASB Statement No. 25. The Statutory contribution is projected to first exceed the GASB Annual Required Contribution under Statement No. 25 in fiscal year 2015.

This valuation is based on the provisions of SURS in effect as of June 30, 2012, data on the SURS membership and information on the asset value of the trust fund as of that date. The valuation was based upon the information furnished by SURS staff, concerning SURS benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. We checked for internal and year-to-year consistency, but did not otherwise audit the data. We are not responsible for the accuracy or completeness of the information provided by SURS.

The benefit provisions for members hired on or after January 1, 2011, were changed under Public Act 96-0889. Members hired on or after this date and the assumed new hires in the projections were valued under these benefit provisions and different actuarial assumptions, as applicable. The actuarial cost method (Projected Unit Credit, as required by statute) and all other assumptions and methods used in this valuation are the same as that used in the prior actuarial valuation of SURS.

To the best of our knowledge, this actuarial statement is complete and accurate, fairly presents the actuarial position of SURS as of June 30, 2012, and has been prepared in accordance with generally accepted actuarial principles and practices, with the Actuarial Standards of Practice issued by the Actuarial Standards Board, and with applicable statutes.

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, contribution amounts or applicable law. Due to the limited scope of the actuary's assignment, the actuary did not perform an analysis of the potential range of such future measurements in this report.

Valuations do not affect the ultimate cost of the Plan, only the timing of contributions into the Plan. Plan funding occurs over time. Contribution shortfalls (the difference between the actual contributions and the annual required contributions) 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 variance with a view to funding the plan over time. The current contribution variance, as measured by the Net Pension Obligation, is a cumulative \$8.562 billion dollar shortfall in required contributions.

The signing actuaries are independent of the plan sponsor.

The undersigned are members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein.

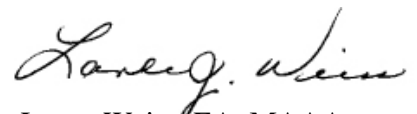
Respectfully submitted,



Leslie L. Thompson, FSA, EA, MAAA
Senior Consultant



Amy Williams, ASA, MAAA
Consultant



Lance Weiss, EA, MAAA
Senior Consultant

LLT/AW/LW:kb

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SUMMARY OF THE VALUATION

PURPOSES OF THE ACTUARIAL VALUATION

At your request we have performed the actuarial valuation of the State Universities Retirement System of Illinois (“SURS”) as of June 30, 2012.

The purposes of an actuarial valuation are as follows:

- To determine the funding status of SURS as of the valuation date based on the market value of assets and the actuarial value of assets,
- To determine the annually required contribution under the standards set by the Governmental Accounting Standards Board (GASB), and
- To develop the levels of contributions required under Section 15-155 of the SURS Article of the Illinois Pension Code (“Section 15-155”) for the fiscal year ending June 30, 2014, and to estimate contributions required under that Section for the subsequent years of the funding period ending in the year 2045.

REPORT HIGHLIGHTS

The Annual Required Contribution for the FY 2011 was \$1.259 billion, and increased to \$1.443 billion for the FY 2012. For the FY 2011, the State contribution was about \$0.774 billion, and for FY 2012 was \$0.986 billion. The shortfalls in this contribution become a part of the Net Pension Obligation, which as of this valuation totaled \$8.562 billion dollars. This Net Pension Obligation represents a running total of the annual contribution shortfalls.

The Statutory contribution for FY 2014 is \$1.552 billion, and includes the Self Managed Plan (SMP) contribution. The 2011 valuation had projected the Statutory contribution would increase, from \$1.443 billion for FY 2013 to \$1.496 billion for FY 2014. The key reasons for the increase in the Statutory contribution over that which was projected in the prior valuation are:

1. Actual investment return during FY 2012 of 0.5%, compared to the assumption of 7.75%;
2. Demographic losses, including retirement losses and higher benefits for new retirees than projected.

In the past 10 years, SURS incurred investment losses (or shortfalls in return compared to the actuarial assumption) in fiscal years 2003, 2008, 2009, and 2012. SURS experienced investment gains (compared to the actuarial assumption) in fiscal years 2004 through 2007, and 2010 and 2011. The returns for the year ending June 30, 2012 amounted to about 0.5% compared to a 23.8% return in FY 2011. The average market value investment return over the most recent 10 years has been approximately 7%.

The funded ratio decreased from 44.3% as of June 30, 2011, to 42.1% as of June 30, 2012, based on the actuarial value of assets and decreased from 45.3% as of June 30, 2011, to 41.3% as of June 30, 2012, based on the market value of assets.

ACTUARIAL ASSUMPTIONS

The actuarial assumptions and methods used in this valuation are the same as those used in the previous actuarial valuation as of June 30, 2011, and can be found in Appendix E of the report.

The investment rate of return assumption of 7.75% was decreased from 8.50% as of June 30, 2010, and other actuarial assumptions were first adopted for use with the actuarial valuation as of June 30, 2011, and were based on the recommendations from the experience review performed for the period from June 30, 2006, through June 30, 2010. The asset valuation method was changed from market value of assets to actuarial value of assets effective with the valuation as of June 30, 2009, as required by statute.

In addition, we have assumed that the Statutory contribution will be calculated as a level percentage of pensionable payroll. Pensionable payroll for members hired on or after January 1, 2011, is limited by the pay cap.

SURS BENEFITS

The benefit provisions valued in this valuation are identical to those valued in the prior valuation as of June 30, 2011. Members hired on or after January 1, 2011, were valued using the provisions of Public Act 96-0889, which establishes a second tier of benefits.

GRS made certain assumptions for provisions that were not specifically addressed in the legislation establishing a second tier of benefits. GRS assumed *employer contributions would be calculated as a level percentage of pensionable (capped) payroll*. The basis for this assumption comes from 40 ILCS 5/1-160 (b-5). Additional descriptions of the benefit provisions can be found in Appendix F of the report.

EXPERIENCE DURING 2012

The fund earned 0.5% on a market value basis during FY 2012 which fell short of the assumption of 7.75%. However, the fund earned 4.26% on an actuarial value of assets basis during FY 2012, due to recognition of deferred investment gains and losses under the asset smoothing method. Because 4.26% compares to the assumed rate of investment return of 7.75%, there was an asset loss of \$476.7 million on the actuarial value of assets. Led by this actuarial loss on assets, the SURS defined benefit programs experienced an overall actuarial loss of \$853.9 million. There was a loss of \$377.2 million from actuarial liabilities, including a loss of about \$381.2 million from demographic experience which was partially offset by a small gain of \$4.0 million from lower than expected pay increases.

The total gain or loss from liabilities for the system is calculated as follows (dollars in millions):

1. AAL - Prior Year	\$ 31,514.3
2. Normal Cost - Prior Year ¹	701.0
3. Benefits and Admin Expenses Paid in FY 2012	(1,822.0)
4. Interest on the above items	2,399.7
5. Expected AAL 6/30/2012 (1+2+3+4)	32,793.0
6. Actual AAL 6/30/2012	33,170.2
7. Actuarial (Gain)/Loss on Liabilities (6-5)	\$ 377.2

¹ Total Normal Cost from the previous valuation which includes both employee and employer portion.

The total net actuarial loss is the total of the loss from assets and the loss from liabilities. The total loss is as follows (dollars in millions):

1. Actuarial (Gain)/Loss on Assets	\$	476.7
2. Actuarial (Gain)/Loss on Liabilities		<u>377.2</u>
3. Total Actuarial (Gain)/Loss (1+2)	\$	853.9

The “behavior” of the population determines the liability gain or loss for the year. There was a small gain on salaries, due to lower salary increases than assumed. From last year to this year, there was a loss on retirement. There were significantly more retirements than last year, and there were more retirements than expected under the actuarial assumptions. In addition, the benefits for some new retirees were higher than projected. Retiree mortality experience produced a loss, meaning retirees are living a little bit longer than expected, and, as always, there was a new entrant loss. The new entrant loss occurs each year, but is offset by additional contributions in the assets. The other assumptions were so close that they generated very little actuarial gain or loss.

See Table 9 (page 18), Appendix C, for detail of the gains and losses by source.

ACTUARIAL AUDIT

There was an actuarial audit performed of the SURS actuarial valuation as of June 30, 2011. We have implemented the following changes as a result of the audit findings:

1. Defined all abbreviations in the report and have tied them to the glossary.
2. Disclosed certain assumptions in the assumption section of the report including
 - a. Price inflation (CPI)
 - b. Payroll Growth
 - c. Assumed benefit commencement age for inactive vested members
 - d. Composition and characteristics of new entrants
3. Corrected the description of annual cost of living increases for Tier 2 disabled members in the benefit provision section.
4. Included a return of employer contributions for members in the Portable Plan that are projected to die before benefit commencement in the actuarial liabilities.
5. Capped the maximum benefit for Tier 2 retirees to 80% of final average compensation before the early retirement reduction is applied in calculating the actuarial liabilities.
6. Changed the annual cost of living increases that are applied to Tier 2 disabled members to the Tier 1 cost of living increases.
7. Changed the interest crediting on Traditional Plan member contributions to 4.5% for purposes of refunds for death benefits.

The change to the actuarial liabilities as a result of these changes was approximately a \$25 million decrease in liabilities (less than 0.1% of the liabilities as of June 30, 2012).

In addition, the Board has approved an economic study to review the Effective Rate of Interest (ERI) assumption used in the valuation.

STATUTORY APPROPRIATIONS FOR THE 2014 FISCAL YEAR AND BEYOND

Section 15-155, which governs the development of Employer/State contributions to SURS, provides that:

1. Employer/State contributions are determined under the following process:
 - a) The overall objective of the statute is to achieve a funding ratio of 90% by the end of fiscal year (“FY”) 2045.
 - b) The Employer/State contribution for FY 2012 and each year thereafter to and including FY 2045 is to be based on a (theoretically) constant percentage of the payroll¹ of active members of SURS based on the actuarial value of assets at the valuation date and assuming the actuarial value of assets earns the assumed investment return in the future.
 - c) After 2045, the Employer/State contribution rate is to be sufficient to maintain the funding level at 90%.

¹ We have assumed the contribution would be based on pensionable payroll. Pensionable payroll for the members hired on or after January 1, 2011, is limited by the pay cap.

2. During the period of amortization of the 2003 bond issue, the Employer/State contribution in any fiscal year may not exceed the excess of:
 - a) the contribution, as developed in 1. above, assuming that the special contribution (from the bond proceeds) has not been made, over
 - b) the debt service on the bond issue for the fiscal year.
3. Pursuant to Public Act 97-0694, Section 15-165, the dollar amount of Employer/State contribution required for a fiscal year shall be certified to the Governor no later than November 1 for the fiscal year commencing on the following July 1. The required amounts are budgeted pursuant to the continuing appropriations process.

Based on the actuarial value of assets, Employer/State contributions for FY 2014 and estimates of the required contributions for the subsequent five fiscal years follow. The estimates for fiscal years 2014-2019 are calculated based on the expected actuarial value of assets at each of the future corresponding valuations, including the recognition of deferred gains and losses that will be recognized in future years as shown in Table 7 (page 16). In addition, the following table shows the certified Employer/State contributions for FY 2013 for comparison purposes, as calculated in the actuarial valuation as of June 30, 2011.

Fiscal Year ¹	Estimated Statutory Contribution (in Millions)		
	15% of New Members to SMP		
	SURS	SMP ²	Total
2013	\$ 1,399.0	\$ 43.8	\$ 1,442.8
2014	1,503.7	48.1	1,551.8
2015	1,577.1	48.7	1,625.8
2016	1,586.8	50.4	1,637.2
2017	1,613.2	52.2	1,665.4
2018	1,671.1	54.1	1,725.2
2019	1,712.6	56.0	1,768.6
Seven year total	\$ 11,063.5	\$ 353.3	\$ 11,416.8

¹FY 2013 Contribution based on June 30, 2011, valuation. FY 2014 Contribution and projected FY 2014- 2019 contributions based on June 30, 2012, valuation. The Statutory contribution does not include debt service.

² Projected Self Managed Plan (SMP) contribution is based on projection of current SMP members and 15% of new members electing SMP, which is the defined contribution plan option.

The Statutory contribution for FY 2014 is \$1,551,766,000. This is equal to a gross Statutory contribution of \$1,554,512,000 less \$2,746,000 in SMP forfeitures. The projected SMP contributions for FY 2014- 2019 are net of assumed projected SMP forfeitures.

The Statutory contribution increased from \$1.443 billion for fiscal year 2013 to \$1.552 billion for fiscal year 2014.

Estimates of Statutory contributions through 2045, assuming that 15% of future new members elect SMP and all other assumptions are realized, are set out in Table 15 (page 27).

The Statutory contributions set out in this report represent the contribution amount determined consistent with the state Statute. The net State appropriation certified to the Governor is the total shown in this report, adjusted by contributions from federal and trust funds.

ASSET INFORMATION

The Governmental Accounting Standards Board (“GASB”) has promulgated Statements No. 25 and 27 that mandate, among other things, the use of market or market-related (actuarial) asset value. Prior to the valuation as of June 30, 2009, it was agreed that market value, without adjustment, would be used for all actuarial purposes. Legislation in 2009 determined that first effective in the valuation as of June 30, 2009, contribution projections will be set out based on the actuarial value of assets. Funding status determinations and the Annual Required Contribution (ARC) were calculated based on the actuarial value of assets.

The market value of the assets of the fund that is available for benefits has decreased from \$14,274.0 million as of June 30, 2011, to \$13,705.1 million as of June 30, 2012. This decrease is due to unfavorable return on fund assets. The actuarial value of assets is \$13,949.9 million, which is \$244.8 million higher than the market value of assets. This difference is due to the continuing recognition of deferred investment gains and losses. Twenty percent of these gains and losses are recognized each year. The \$244.8 million, which is the value of net deferred losses, will be smoothed into the

actuarial value of assets over the next four years. The remaining unrecognized FY 2009 losses will be smoothed in over the next year, the remaining net asset gains from FY 2010 and FY 2011 will be smoothed in over the next two and three years, respectively, and the remaining asset loss from FY 2012 will be smoothed in over the next four years.

The detailed determinations of asset values utilized in this valuation and asset growth in the last year are set out in Appendix A and Table 7 (page 16) of Appendix C.

FUNDING STATUS

The funding status of SURS is measured by the Funding Ratio. The Funding Ratio is the ratio of the assets available for benefits to the actuarial accrued liability of the System. Thus, it reflects the portion of benefits earned by SURS members, which are covered by System assets.

A funding ratio of 100% means that all of the benefits earned to date by SURS members are covered by assets. By monitoring changes in the funding ratio each year we can determine whether or not funding progress is being made.

Based on the actuarial value of assets, the SURS funding ratio decreased from 44.3% at June 30, 2011, to 42.1% at June 30, 2012. The funded ratio is 41.3% based on the market value of assets at June 30, 2012.

The table below shows a comparison for fiscal years 2008 through 2012 of the percentage of benefits that are covered by the market value of assets. The employer financed liabilities for current active and inactive members are 0% funded by the assets. Only a portion of the retiree liabilities are funded by current assets and the percentage covered decreased from 45.2% as of June 30, 2011 to 39.0% as of June 30, 2012.

Percentage of Benefits Covered by Net Assets							
(in Millions)							
Fiscal Year	Member Acc Contrib.	Members Receiving Benefits	Act/Inact Employer Portion	Net Market Value of Assets	% of Benefits Covered by Assets		
	(1)	(2)	(3)		(1)	(2)	(3)
2008	\$ 5,426.8	\$ 13,978.1	\$ 5,512.8	\$ 14,586.3	100.0%	65.5%	0.0%
2009	5,688.9	14,802.6	5,824.7	11,033.0	100.0%	36.1%	0.0%
2010	5,697.6	16,834.4	7,588.4	12,121.5	100.0%	38.2%	0.0%
2011	5,730.4	18,918.1	6,865.8	14,274.0	100.0%	45.2%	0.0%
2012	5,656.6	20,651.4	6,862.2	13,705.1	100.0%	39.0%	0.0%

ACTUARIAL FUNDING AND STATUTORY FUNDING

GASB requirements, as amplified by the Actuarial Standards of Practice, provide guidance on how to determine the Annual Required Contribution (ARC) for a retirement plan. This ARC is the sum of the normal cost and amortization of the unfunded accrued liability. The reason for this accrual pattern is to have benefits accrued within the same generation that has earned them as well as to ensure that all benefit obligations will be met.

The actual SURS contribution (excluding SMP) for FY 2012 was \$0.986 billion. This compares to the projected SURS contribution of \$0.977 billion (of the total contribution of \$1.019 billion) determined in the valuation as of June 30, 2010, and the FY 2012 ARC of \$1.443 billion.

The Total Actuarially Determined Contribution (ADC) for FY 2013 is \$1.794 billion (Table 11, page 20). Projected member contributions for FY 2013 are \$0.284 billion, for an estimated net ARC of about \$1.510 billion. On a Statutory appropriation basis the contribution for SURS (which excludes the SMP amount) for FY 2013 (from the June 30, 2011 report) was \$1.401 billion. The cumulative difference between the ARC and the contributions represents a “net pension obligation” (NPO) as defined under GASB. An NPO is viewed as the accumulated value of contribution variances – where GASB defines contribution variances as the difference between the ARC and the Statutory appropriation. In lay terms, this NPO could be viewed as a “past due” on the annual required contributions.

The Statutory funding policy creates a perpetual contribution variance. In the case of SURS, the Statutory funding policy creates a temporary underfunding of the plan in earlier years, and in later years that Statutory contribution will exceed the GASB ARC (calculated using 30-open period level percent of pay amortization of the unfunded liability). In the earlier years until 2015, the Statute determines a contribution that is less than the ARC – thereby adding to the NPO. As shown in Table 12 (page 21) of this report, the NPO (accumulated missed contributions) is almost \$8.6 billion as of June 30, 2012. A large and growing NPO may raise concerns in the capital markets and impact the cost of debt and borrowing for the State. As shown in Table 15 (page 27), the Statutory contributions are projected to remain below the ARC until fiscal year 2015. Beginning in 2015, the Statutory contributions exceed the ARC and continue to rise in order to meet the ultimate funding objective of a 90% funded ratio in 2045. This underfunding puts the plan at serious risk for exhaustion of the trust, leaving the responsibility for the payment of benefits elsewhere.

Based on projections assuming that the Statutory contributions are made every year (as shown in Table 15, page 27) and an investment return of 7.75% each year, the funded ratio is projected to decline from the current level until 2013. Beginning in 2014, the funded ratio is projected to begin to increase from about 43% funded to 90% funded at 2045. The funded status is not projected to exceed 70% until 2040, and is projected to increase to 90% during the five year period from 2040 until 2045. If the Statutory contributions are not made or investment return is less than the assumption of 7.75%, the funded ratio will be lower and the cash flow strain will be higher.

The projected actuarial accrued liability of current retirees, current active and inactive members and future members is expected to increase from \$33.170 billion as of the end of FY 2012 to \$53.312 billion as of the end of FY 2045 (as shown in Graph 2, page 24). Total benefit payments are projected to increase from \$1.809 billion in fiscal year 2012 to \$4.542 billion in fiscal year 2045. Graph 3 (page 25) shows projected benefit payments separately for retirees as of June 30, 2012, active and inactive members as of June 30, 2012, and future members.

RECOMMENDATIONS

The calculations in this report were prepared based on the methods required by the Statutory funding policy including the asset smoothing method that was adopted for the first time in the June 30, 2009 actuarial valuation. In light of the current funded status of this Retirement System, we do not endorse this funding policy because the Statutory funding policy defers funding for these benefits into the future and places a higher burden on future generations of taxpayers. In addition, maintaining the Statutory funding policy in combination with the benefit provision changes for new hires further

delays funding of benefits.

We recommend a funding policy that contributes normal cost plus 30-year (or shorter) closed period amortization for paying off the current unfunded accrued liability (i.e. the amortization period declines by one year with each actuarial valuation) such that the funded ratio is projected to be 100 percent funded by 2043 or earlier. A closed amortization period methodology pays off the unfunded accrued liability in full by the end of the 30 year period. The fiscal year 2014 contribution would be \$1,675.744 (including SMP) under this funding policy. An open amortization policy (the current method for calculating the Annual Required Contribution for accounting purposes) resets the funding period to 30 years each year, and pushes a portion of the unfunded accrued liability beyond the 30 year period. The current Statutory contribution does not comply with this recommendation. Underfunding the System creates the risk that ultimately benefit obligations cannot be met from the trust, and will require a greater amount of funding from other State resources. In addition, continually underfunding the System also creates more of a funding need from contributions and less is available from investment return – thereby creating a more expensive plan. Projected contributions under the current Statutory policy and the recommended policy are shown in Graph 4 on page 28.

In addition, we recommend that an asset corridor on the actuarial value of assets be implemented, in the event that there is another significant market downturn similar to fiscal year 2009. The actuarial value of assets was about 30% higher than the market value of assets as of June 30, 2009, and was about 15% higher than the market value of assets as of June 30, 2010. The actuarial value of assets was within 2% of market value as of June 30, 2011, and June 30, 2012. Using an actuarial value of assets that is significantly higher than the market value of assets delays funding to the system by further deferring the contributions into the future. The plan is already in serious funding jeopardy, and we cannot recommend a policy such as “no corridor” which could further bring risk to the funding of the benefit obligations if another downturn occurred.

We recognize that the Statute governs the funding policy of the System. The purpose of these comments is to highlight the difference between the Statutory appropriation and the recommended actuarially determined funding policy and to highlight the risks and additional costs of underfunding the System.

GASB DISCLOSURE

The accounting policies of the State of Illinois relative to its retirement systems are currently based on the terms of GASB Statement No. 25 and 27. Tables 10 and 11 (pages 19 and 20) are Required Supplemental Information tables mandated by those statements. Table 12 (page 21) provides additional supporting information.

GASB Statement No. 67 and 68 are new accounting standards which are replacing Statement No. 25 and 27. GASB Statement No. 67 is first effective for fiscal year 2014 and GASB Statement No. 68 is first effective for fiscal year 2015.

The significant provisions of GASB Statement No. 67 and 68 include:

1. Recognizing the entire Net Pension Liability (similar to the unfunded liability) on the balance sheet (compared with the Net Pension Obligation which is currently recognized).
2. Use of a blended discount rate to calculate liabilities for accounting purposes.
3. Use of market value of assets to calculate the Net Pension Liability.
4. Elimination of the Annual Required Contribution (ARC) and having a pension expense that requires a much shorter amortization period than 30 years.

Illustrations of the impact of GASB Statements 67 and 68 have been performed outside of this report.

FUTURE CONSIDERATIONS

Recent changes (such as five-year asset smoothing and the addition of the new benefit tier) have had the effect of reducing the contribution amounts that would have otherwise been made. We recognize that this is the effect of the statute. However, the change in the investment return assumption and other assumptions to align the assumptions with current market expectations increased the contribution amounts that would otherwise have been made.

APPENDICES

APPENDIX A
ASSET INFORMATION

TABLE 1
STATEMENT OF PLAN NET ASSETS
AS OF JUNE 30, 2012 AND JUNE 30, 2011

	Defined Benefit Plan	Self Managed Plan	Reporting Entity Totals	
			2012	2011
Assets				
Cash and short-term investments	\$ 499,250,768	-	\$ 499,250,768	\$ 505,492,014
Receivables				
Participants	12,680,102	\$ 2,497,706	15,177,808	12,198,383
Federal, trust funds, and other	208,318,893	1,399,039	209,717,932	4,627,020
Pending investment sales	369,412,417	-	369,412,417	597,196,141
Interest and dividends	33,913,766	-	33,913,766	40,462,379
Total receivables	624,325,178	3,896,745	628,221,923	654,483,923
Prepaid expenses	243,561	-	243,561	22,777
Investments, at fair value				
Equity investments	9,237,816,964	45,915,566	9,283,732,530	10,131,613,173
Fixed income investments	3,641,674,426	21,207,523	3,662,881,949	3,210,020,243
Real estate investments	416,548,808	710,748	417,259,556	375,589,750
Mutual fund and variable annuities		971,088,663	971,088,663	890,678,243
Total investments	13,296,040,198	1,038,922,500	14,334,962,698	14,607,901,409
Securities lending collateral	12,121,093	-	12,121,093	1,516,154,400
Capital assets, at cost, net of accum deprec \$ 18,428,111 and \$ 17,977,466 respectively	5,777,719	-	5,777,719	6,003,179
Total assets	14,437,758,517	1,042,819,245	15,480,577,762	17,290,057,702
Liabilities				
Benefits payable	5,093,488	-	5,093,488	7,159,269
Refunds payable	4,758,501	-	4,758,501	3,416,995
Securities lending collateral	11,758,885	-	11,758,885	1,515,998,213
Payable to brokers for unsettled trades	696,571,091	-	696,571,091	511,135,516
Administrative expenses payable	14,433,274	-	14,433,274	17,806,560
Total liabilities	732,615,239	-	732,615,239	2,055,516,553
Net assets held in trust for pension benefits	\$ 13,705,143,278	\$ 1,042,819,245	\$ 14,747,962,523	\$ 15,234,541,149

TABLE 2
STATEMENT OF CHANGES IN PLAN NET ASSETS
FOR YEARS ENDED JUNE 30, 2012 AND JUNE 30, 2011

	Defined Benefit	Self Managed	Reporting Entity Totals	
	Plan	Plan	2012	2011
Additions				
Contributions				
Employer	\$ 985,814,621	\$ 45,923,874	\$ 1,031,738,495	\$ 818,435,806
Participant	258,236,014	54,121,798	312,357,812	309,934,408
Total Contributions	<u>1,244,050,635</u>	<u>100,045,672</u>	<u>1,344,096,307</u>	<u>1,128,370,214</u>
Investment Income				
Net appreciation				
in fair value of investments	(235,505,443)	16,659,356	(218,846,087)	2,646,764,487
Interest	81,396,519	-	81,396,519	192,587,174
Dividends	200,831,741	-	200,831,741	181,007,663
Securities lending	5,641,433	-	5,641,433	5,347,769
Gross Investment Income	<u>52,364,250</u>	<u>16,659,356</u>	<u>69,023,606</u>	<u>3,025,707,093</u>
Less investment expense				
Asset management expense	42,734,709	-	42,734,709	51,574,569
Securities lending expense	562,132	-	562,132	518,100
Net investment income	<u>9,067,409</u>	<u>16,659,356</u>	<u>25,726,765</u>	<u>2,973,614,424</u>
Total additions	<u>1,253,118,044</u>	<u>116,705,028</u>	<u>1,369,823,072</u>	<u>4,101,984,638</u>
Deductions				
Benefits	1,743,745,957	13,929,534	1,757,675,491	1,622,452,595
Refunds of contributions	65,065,250	20,105,200	85,170,450	73,895,151
Administrative expense	13,166,856	388,901	13,555,757	12,618,044
Total deductions	<u>1,821,978,063</u>	<u>34,423,635</u>	<u>1,856,401,698</u>	<u>1,708,965,790</u>
Net increase	(568,860,019)	82,281,393	(486,578,626)	2,393,018,848
Net assets held in trust for pension benefits				
Beginning of year	<u>14,274,003,297</u>	<u>960,537,852</u>	<u>15,234,541,149</u>	<u>12,841,522,301</u>
End of Year	<u>\$ 13,705,143,278</u>	<u>\$ 1,042,819,245</u>	<u>\$ 14,747,962,523</u>	<u>\$ 15,234,541,149</u>

APPENDIX B
MEMBERSHIP DATA

TABLE 3
SUMMARY OF DATA CHARACTERISTICS
(\$ IN MILLIONS)

	<u>June 30, 2011</u>		<u>June 30, 2012</u>	
	<u>Number</u>	<u>Earnings</u>	<u>Number</u>	<u>Earnings</u>
Active Members				
Full time				
Traditional SURS	48,253	\$2,260.3	47,048	\$2,238.2
Portable SURS	18,589	1,044.5	18,546	1,079.8
SMP	9,157	553.9	9,548	601.2
Total Full Time ¹	75,999	\$3,858.7	75,142	\$3,919.2
Part time				
Traditional SURS	4,121	\$ 24.3	4,571	\$ 26.8
Portable SURS	925	6.7	891	6.6
SMP	566	3.7	552	4.0
Total Part Time	5,612	\$ 34.7	6,014	\$ 37.4
Total	81,611	\$3,893.4	81,156	\$3,956.6

Inactive Members

Traditional/Portable	72,903	74,034
SMP	7,019	7,307
Total	79,922	81,341

¹ Includes 653 police officers and firefighters as of June 30, 2011 and 666 as of June 30, 2012.

	<u>Annual</u>		<u>Annual</u>	
	<u>Number</u>	<u>Benefits</u>	<u>Number</u>	<u>Benefits</u>
Benefit Recipients				
Retirement				
Traditional SURS	40,263	\$1,431.2	42,547	\$1,552.3
Portable SURS	2,419	60.9	3,001	82.0
Total Retirement	42,682	\$1,492.1	45,548	\$1,634.3
Survivor				
Traditional SURS	7,503	\$ 105.8	7,777	\$ 114.9
Portable SURS	75	1.0	93	1.3
Total Survivor	7,578	\$ 106.8	7,870	\$ 116.2
Disability				
Traditional SURS	936	\$ 16.7	933	\$ 16.9
Portable SURS	174	4.0	181	4.1
Total Disability	1,110	\$ 20.7	1,114	\$ 21.0
Total	51,370	\$1,619.6	54,532	\$1,771.5

TABLE 4
DISTRIBUTION OF FULL-TIME* ACTIVE MEMBERS BY AGE AND YEARS OF SERVICE
AS OF JUNE 30, 2012

Age	Years of Service								Totals
	Under 1	1-4	5-9	10-14	15-19	20-24	25-29	30 & Over	
Under 20	8	8	-	-	-	-	-	-	16
	\$ 51,985	\$ 114,534	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 166,519
20-24	319	614	29	-	-	-	-	-	962
	\$ 3,392,153	\$ 15,335,102	\$ 742,840	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 19,470,095
25-29	673	3,307	888	20	-	-	-	-	4,888
	\$ 9,535,310	\$ 117,702,219	\$ 33,472,701	\$ 618,109	\$ -	\$ -	\$ -	\$ -	\$ 161,328,339
30-34	654	3,813	2,643	655	10	-	-	-	7,775
	\$ 11,318,061	\$ 162,419,596	\$ 123,177,514	\$ 32,034,170	\$ 474,143	\$ -	\$ -	\$ -	\$ 329,423,484
35-39	377	2,769	2,962	1,756	350	13	-	-	8,227
	\$ 6,943,933	\$ 129,823,258	\$ 157,992,716	\$ 97,241,146	\$ 18,884,592	\$ 829,115	\$ -	\$ -	\$ 411,714,761
40-44	348	2,285	3,024	2,285	1,181	355	29	-	9,507
	\$ 6,793,902	\$ 105,541,727	\$ 166,195,724	\$ 143,012,509	\$ 75,608,586	\$ 21,026,916	\$ 1,640,477	\$ -	\$ 519,819,842
45-49	321	1,901	2,610	2,419	1,485	1,104	441	11	10,292
	\$ 5,751,310	\$ 78,623,760	\$ 129,975,187	\$ 149,988,718	\$ 100,927,908	\$ 75,917,762	\$ 27,313,566	\$ 733,909	\$ 569,232,118
50-54	276	1,709	2,481	2,527	1,725	1,513	1,033	202	11,466
	\$ 4,913,699	\$ 72,524,979	\$ 115,235,119	\$ 144,842,952	\$ 116,998,617	\$ 112,555,766	\$ 76,399,493	\$ 14,431,540	\$ 657,902,166
55-59	212	1,429	2,194	2,274	1,579	1,543	918	299	10,448
	\$ 4,062,164	\$ 58,449,929	\$ 102,166,082	\$ 124,092,283	\$ 98,823,638	\$ 114,751,200	\$ 84,409,148	\$ 28,343,013	\$ 615,097,456
60-64	79	925	1,719	1,507	1,146	1,045	602	326	7,349
	\$ 1,566,637	\$ 34,890,716	\$ 71,471,818	\$ 82,193,997	\$ 67,658,431	\$ 68,635,492	\$ 57,041,512	\$ 36,291,412	\$ 419,750,014
65 & Over	26	443	1,010	927	638	577	249	342	4,212
	\$ 501,465	\$ 12,138,236	\$ 33,529,284	\$ 44,710,271	\$ 30,375,955	\$ 31,122,161	\$ 21,790,192	\$ 41,128,390	\$ 215,295,955
Total Count	3,293	19,203	19,560	14,370	8,114	6,150	3,272	1,180	75,142
Total Payroll	\$ 54,830,618	\$ 787,564,058	\$ 933,958,984	\$ 818,734,155	\$ 509,751,869	\$ 424,838,412	\$ 268,594,389	\$ 120,928,265	\$ 3,919,200,749

* Includes part-time members with at least three years of service.

TABLE 5
DISTRIBUTION OF BENEFIT RECIPIENTS BY AGE
AS OF JUNE 30, 2012

<u>Age</u>	<u>Number</u>	<u>Annual Benefit</u>
Retirees and Survivors		
Under 50	532	\$ 3,941,735
50-54	688	23,679,819
55-59	4,425	147,220,901
60-64	9,155	306,050,458
65-69	11,211	397,616,561
70-74	9,270	334,802,645
75-79	7,012	236,151,053
80-84	5,534	168,192,241
85-89	3,546	91,482,048
90 & Over	<u>2,045</u>	<u>41,298,770</u>
Total	53,418	\$ 1,750,436,231
Disabilitants		
Under 50	190	\$ 3,658,420
50-54	201	3,983,823
55-59	225	4,322,923
60-64	215	4,057,143
65-69	133	2,654,158
70-74	78	1,488,238
75-79	33	423,854
80-84	28	301,915
85-89	6	74,660
90 & Over	<u>5</u>	<u>38,042</u>
Total	1,114	\$ 21,003,176

APPENDIX C
ACTUARIAL DETERMINATIONS

TABLE 6
SUMMARY OF ACTUARIAL VALUES
AS OF JUNE 30, 2012
(\$ IN MILLIONS)

	Actuarial Present Value of Projected Benefits (APV)	Projected Unit Credit Values		Gross NC % of Pay ¹
		Actuarial Accrued Liability (AAL)	Gross Normal Cost (NC) ¹	
1. Active Members				
a. Retirement	\$13,200.5	\$ 8,515.3	\$510.6	14.53%
b. Death	271.0	171.1	11.4	0.32%
c. Disability	638.4	396.4	36.5	1.04%
d. Termination	1,673.6	1,056.0	127.5	3.63%
Total - Active Members	\$15,783.5	\$ 10,138.8	\$686.0	19.52%
2. Benefit Recipients				
a. Retirement	\$19,288.7	\$19,288.7	\$ 0.0	
b. Survivor	1,042.4	1,042.4	0.0	
c. Disability	320.3	320.3	0.0	
Total - Benefit Recipients	\$20,651.4	\$20,651.4	\$ 0.0	
3. Other Inactive	\$ 2,380.0	\$ 2,380.0		
4. Grand Total	\$38,814.9	\$33,170.2	\$686.0	19.52%
5. Operating Expense			\$ 13.7	0.39%
6. Total Normal Cost			\$699.7	19.91%
7. Expected Pay During Fiscal Year 2013 for Defined Benefit Plans ¹				\$ 3,514.2
8. Present Value of Future Salaries (PVFS) ²				\$ 26,731.7

¹ For members currently active as of June 30, 2012, in the Traditional and Portable defined benefit plans and includes the use of capped payroll for members hired on or after January 1, 2011.

² For members currently active in the defined benefits plan as of June 30, 2012.

TABLE 7
DEFINED BENEFIT PLAN DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS
FOR THE YEAR ENDING JUNE 30, 2012

	2011	2012	2013	2014	2015	2016
Beginning of Year:						
(1) Market Value of Assets	\$ 12,121,542,111	\$ 14,274,003,297				
(2) Actuarial Value of Assets	13,966,642,826	13,945,680,453				
End of Year:						
(3) Market Value of Assets	14,274,003,297	13,705,143,278				
(4) Net of Contributions and Disbursements	(648,647,641)	(577,927,428)				
(5) Total Investment Income						
=(3)-(1)-(4)	2,801,108,827	9,067,409				
(6) Projected Rate of Return	7.75%	7.75%				
(7) Projected Investment Income						
=(1)x(6)+([1+(6)] ^{.5} -1)x(4)	914,753,406	1,084,258,424				
(8) Investment Income in Excess of Projected Income	1,886,355,421	(1,075,191,015)				
(9) Excess Investment Income Recognized						
This Year (5 year recognition)						
(9a) From This Year	377,271,084	(215,038,203)				
(9b) From One Year Ago	147,916,952	377,271,084	\$ (215,038,203)			
(9c) From Two Years Ago	(812,256,174)	147,916,952	377,271,084	\$ (215,038,203)		
(9d) From Three Years Ago	0	(812,256,174)	147,916,952	377,271,084	\$ (215,038,203)	
(9e) From Four Years Ago	0	0	(812,256,174)	147,916,951	377,271,085	\$ (215,038,203)
(9f) Total Recognized Investment Gain/(Loss)	(287,068,138)	(502,106,341)	(502,106,341)	310,149,832	162,232,882	(215,038,203)
(10) Change in Actuarial Value of Assets						
=(4)+(7)+9[a..e]	(20,962,373)	4,224,655				
End of Year:						
(3) Market Value of Assets	14,274,003,297	13,705,143,278				
(11) Final Actuarial Value of Assets	13,945,680,453	13,949,905,108				
(12) Difference Between Market & Actuarial Values	328,322,844	(244,761,830)				
(13) Actuarial Value Rate of Return	4.60 %	4.26 %				
(14) Estimated Market Value Rate of Return	23.74 %	0.06 %				
(15) Ratio of Actuarial Value to Market Value	98 %	102 %				
(16) SURS Reported Market Value Rate of Return	23.80 %	0.50 %				

TABLE 8
ANALYSIS OF CHANGE IN
UNFUNDED ACTUARIAL ACCRUED LIABILITY
FOR THE YEAR ENDING JUNE 30, 2012
(\$ IN MILLIONS)

1. Actuarial (Gain)/Loss on AAL		
(a) AAL 6/30/11		\$ 31,514.3
(b) Normal Cost FY12	\$ 701.0	
(c) Benefits and Admin Expenses Paid FY12	(1,822.0)	
(d) Interest on (a), (b), and (c) at 7.75%	2,399.7	
(e) Expected AAL 6/30/2012 (a+b+c+d)		32,793.0
(f) Actual AAL 6/30/2012		<u>33,170.2</u>
(g) Actuarial (Gain)/Loss on AAL (f-e)		\$ 377.2
2. Actuarial (Gain)/Loss on Assets		
(a) Actuarial Value of Assets 6/30/11		\$ 13,945.7
(b) Contributions FY12	1,244.1	
(c) Benefits and Admin Expenses	(1,822.0)	
(d) Interest on (a), (b), and (c) at 7.75%	1,058.8	
(e) Expected Assets 6/30/2012 (a+b+c+d)		\$ 14,426.6
(f) Actual Actuarial Value of Assets 6/30/2012		<u>13,949.9</u>
(g) Actuarial (Gain)/Loss on Assets (e-f)		\$ 476.7
3. Total Actuarial (Gain)/Loss		
(a) (Gain)/Loss on AAL		\$ 377.2
(b) (Gain)/Loss on Assets		<u>476.7</u>
(c) Net (Gain)/Loss (a+b)		\$ 853.9

TABLE 9
ANALYSIS OF ACTUARIAL GAINS AND LOSSES
(\$ IN MILLIONS)

	Amount of (Gain) or Loss			
	FY 2009	FY 2010	FY 2011	FY 2012
Investment Return ¹	\$ 4,061.1	\$ 940.5	\$ 430.0	\$ 476.7
Salary Increase	(1.3)	(113.1)	(172.3)	(4.0)
Age and Service Retirement	(47.1)	(59.2)	(31.4)	126.3
General Employment Termination	57.8	32.0	34.0	59.9
Disability Incidence	(6.6)	(6.1)	(5.2)	5.9
In Service Mortality	(5.5)	2.3	(2.6)	2.2
Benefit Recipient ²	88.9	104.7	100.8	55.5
New Entrants	85.1	65.6	75.0	75.2
Other	(19.4)	71.5	81.2	56.2
Total Actuarial (Gain)/Loss	\$ 4,213.0	\$ 1,038.2	\$ 509.5	\$ 853.9

¹Gain/Loss is based on market value of assets prior to FY 2010, and actuarial value of assets thereafter.

²Benefit recipient (gain)/loss includes mortality gains and losses as well as gains and losses due to unexpected changes in benefit amounts from year to year. Unexpected changes may occur when benefits that are initially paid as preliminary estimates are finalized. Beginning with the valuation as of June 30, 2011, there is an additional load of 10% on the liabilities of those retirees who are currently receiving benefits as a preliminary estimate.

TABLE 10
SCHEDULE OF FUNDING STATUS
(\$ IN 000'S)

Plan Year	Assets	AAL	UAAL	Funding Ratio	Payroll/DB*	UAAL as % of Payroll
1999	\$ 10,762,157	\$ 12,617,495	\$1,855,338	85.30 %	\$2,411,118	76.95 %
2000	12,063,950	13,679,039	1,615,089	88.19	2,424,209	66.62
2001	10,753,297	14,915,317	4,162,020	72.10	2,474,631	168.19
2002	9,814,677	16,654,041	6,839,364	58.93	2,607,155	262.33
2003	9,714,547	18,025,032	8,310,485	53.89	2,763,428	300.73
2004	12,586,305	19,078,583	6,492,278	65.97	2,814,071	230.71
2005	13,350,278	20,349,922	6,999,644	65.60	2,939,185	238.15
2006	14,175,147	21,688,935	7,513,788	65.36	3,054,100	246.02
2007	15,985,730	23,362,079	7,376,349	68.43	3,180,985	231.89
2008	14,586,325	24,917,678	10,331,353	58.54	3,303,220	312.77
2009	11,032,973	26,316,231	15,283,258	41.92	3,463,922	441.21
2009 **	14,281,998	26,316,231	12,034,233	54.27	3,463,922	347.42
2010 ***	13,966,643	30,120,427	16,153,784	46.37	3,491,071	462.72
2011	13,945,680	31,514,336	17,568,656	44.25	3,460,838	507.64
2012	13,949,905	33,170,216	19,220,311	42.06	3,477,166	552.76

AAL - Actuarial Accrued Liability

UAAL - Unfunded Actuarial Accrued Liability

* *Payroll is rolled forward with salary scale for one year and uses capped payroll for members hired on and after January 1, 2011.*

** *Assets at Actuarial Value (Market Value through first 2009, then Actuarial Value)*

*** *Investment rate of return assumption decreased from 8.50 percent to 7.75 percent.*

This information is presented in draft form for review by the System's auditor. Please let us know if there are any changes so that we may maintain consistency with the System's financial statements.

TABLE 11
SCHEDULE OF CONTRIBUTIONS
(\$ IN MILLIONS)

Fiscal Year	(1) Total Normal Cost	(2) Amortization of UAAL	(3) (1) + (2) Total ADC	(4) Member Contributions	(5) (3) - (4) Net State ARC*	(6) Actual State Contribution	(7) (6) / (5) State Cont. as Percent of Net ARC
1999			\$ 509.2	\$ 213.0	\$ 296.2	\$ 237.9	80.32 %
2000			547.8	222.5	325.3	241.1	74.11
2001			548.1	221.6	326.5	247.1	75.69
2002			686.9	251.6	435.3	256.1	58.84
2003			843.8	246.3	597.5	285.3	47.74
2004			934.8	243.8	691.0	1,757.5	254.36
2005			859.7	251.9	607.8	285.4	46.96
2006			914.9	252.9	662.0	180.0	27.19
2007			968.3	262.4	705.9	261.1	36.99
2008			971.6	264.1	707.5	344.9	48.75
2009			1,147.3	273.3	874.0	451.6	51.67
2010 **			1,278.3	275.0	1,003.3	696.6	69.43
2011 ***	\$ 723.798	\$ 795.427	1,519.225	260.177	1,259.048	773.595	61.44
2012	700.972	1,000.612	1,701.584	258.236	1,443.348	985.815	68.30
2013	699.747	1,094.681	1,794.428				

* ARC - Annual Required Contribution as defined in GASB Statements No. 25 and 27. This is the Actuarially Determined Contribution (ADC) net of member contributions.

** Assets at Actuarial Value (Market Value through 2009, then Actuarial Value beginning with fiscal year 2010).

*** Investment rate of return assumption decreased from 8.50 percent to 7.75 percent.

Beginning in fiscal year 2011, dollars are shown rounded to three decimal places.

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TABLE 12
GENERAL INFORMATION GASB #25 AND #27
(\$ IN MILLIONS)

Fiscal Year	(1) Total ADC	(2) Interest on NPO	(3) NPO Adjustment	(4) (1) + (2) + (3) Total Expense	(5) Member Contributions	(6) (4) - (5) State Expense	(7) Actual State Contribution	(8) Beg. of Year NPO	(9) (8) + (6) - (7) End of Year NPO
2009	\$1,147.332	\$520.287	\$(329.542)	\$1,338.077	\$273.292	\$1,064.785	\$451.617	\$6,121.020	\$6,734.188
2010	1,278.331	572.406	(362.553)	1,488.184	275.000	1,213.184	696.595	6,734.188	7,250.777
2011	1,519.225	561.935	(357.035)	1,724.125	260.177	1,463.948	773.595	7,250.777	7,941.130
2012	1,701.584	615.438	(452.282)	1,864.740	258.236	1,606.504	985.815	7,941.130	8,561.819
2013	1,794.428	663.541	(487.633)	1,970.336				8,561.819	

Notes in Trend Data

<u>Information</u>	<u>Data</u>
Valuation Date	June 30, 2012
Actuarial Cost Method	Projected Unit Credit
Amortization Method	Level Percent, Open
Remaining Amortization Period	30 years
Asset Valuation Method	5-Year Smoothed Market
Actuarial Assumptions	
Investment rate of return*	7.75%
Projected salary increases*	3.75% - 12.00%
Cost-of-living adjustment (pre/post 1/1/2011 hires)	3.0%/1.375%

*Includes price inflation of 2.75%

This information is presented in draft form for review by the System's auditor. Please let us know if there are any changes so that we may maintain consistency with the System's financial statements.

APPENDIX D
ACTUARIAL PROJECTIONS

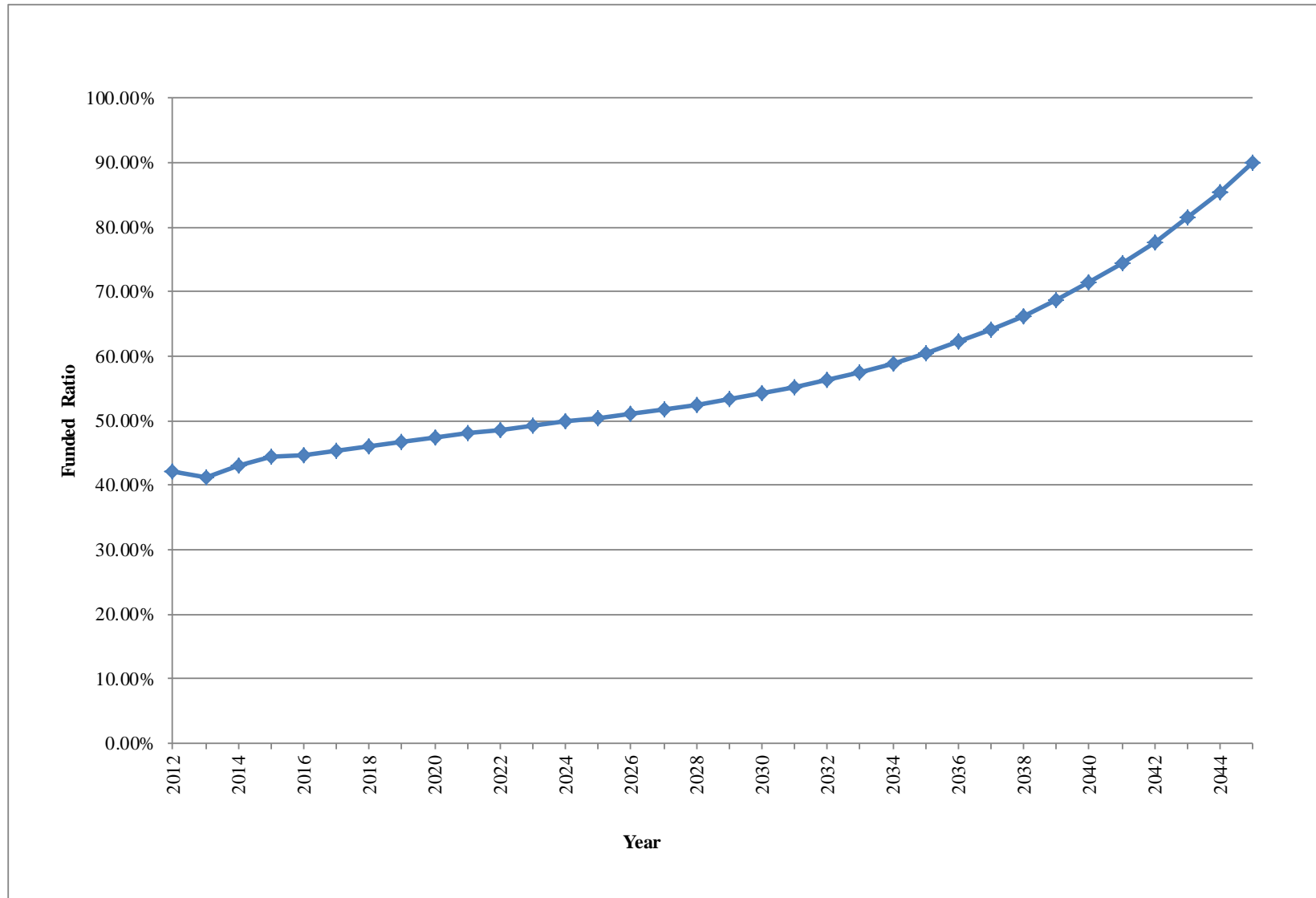
TABLE 13
BASELINE PROJECTIONS – ACTUARIAL VALUATION JUNE 30, 2012
ASSUMES CONTRIBUTIONS BASED ON TABLE 15 & INVESTMENT RETURN OF 7.75% EACH YEAR
(\$ IN MILLIONS)

Fiscal Year Ending	Total Payroll¹	SMP Payroll	DB Payroll¹	Total Contributions²	Benefits	Expenses	Assets EOY	AAL	Funding Ratio
2012	\$ 3,956.639	\$ 605.153	\$ 3,351.486	\$ 1,231.798	\$ 1,808.811	\$ 13.167	\$ 13,949.905	\$ 33,170.216	42.06 %
2013	4,185.092	641.573	3,543.519	1,682.860	1,967.713	13.746	14,199.994	34,429.839	41.24
2014	4,274.039	663.012	3,611.027	1,792.929	2,053.186	14.261	15,345.629	35,684.026	43.00
2015	4,371.759	686.809	3,684.950	1,872.246	2,159.268	14.796	16,379.760	36,921.346	44.36
2016	4,468.632	711.443	3,757.189	1,887.734	2,275.271	15.351	16,999.279	38,129.662	44.58
2017	4,577.435	736.419	3,841.016	1,920.858	2,396.837	15.927	17,806.111	39,301.578	45.31
2018	4,689.965	762.606	3,927.358	1,985.730	2,525.862	16.524	18,608.261	40,427.315	46.03
2019	4,806.414	789.927	4,016.487	2,034.363	2,657.432	17.144	19,385.843	41,501.696	46.71
2020	4,926.738	818.243	4,108.495	2,084.607	2,790.750	17.787	20,136.788	42,519.434	47.36
2021	5,050.799	846.021	4,204.778	2,136.526	2,920.636	18.454	20,864.306	43,480.579	47.99
2025	5,580.208	961.237	4,618.971	2,349.654	3,416.176	21.381	23,565.049	46,729.044	50.43
2030	6,299.669	1,103.474	5,196.195	2,637.086	3,881.775	25.702	26,949.030	49,668.332	54.26
2035	7,074.734	1,276.812	5,797.922	2,985.314	4,281.120	30.897	31,101.373	51,469.882	60.43
2040	7,908.219	1,503.690	6,404.529	3,330.894	4,524.667	37.141	37,366.007	52,382.019	71.33
2045	8,880.566	1,797.793	7,082.773	3,731.693	4,541.646	44.647	47,981.016	53,312.240	90.00

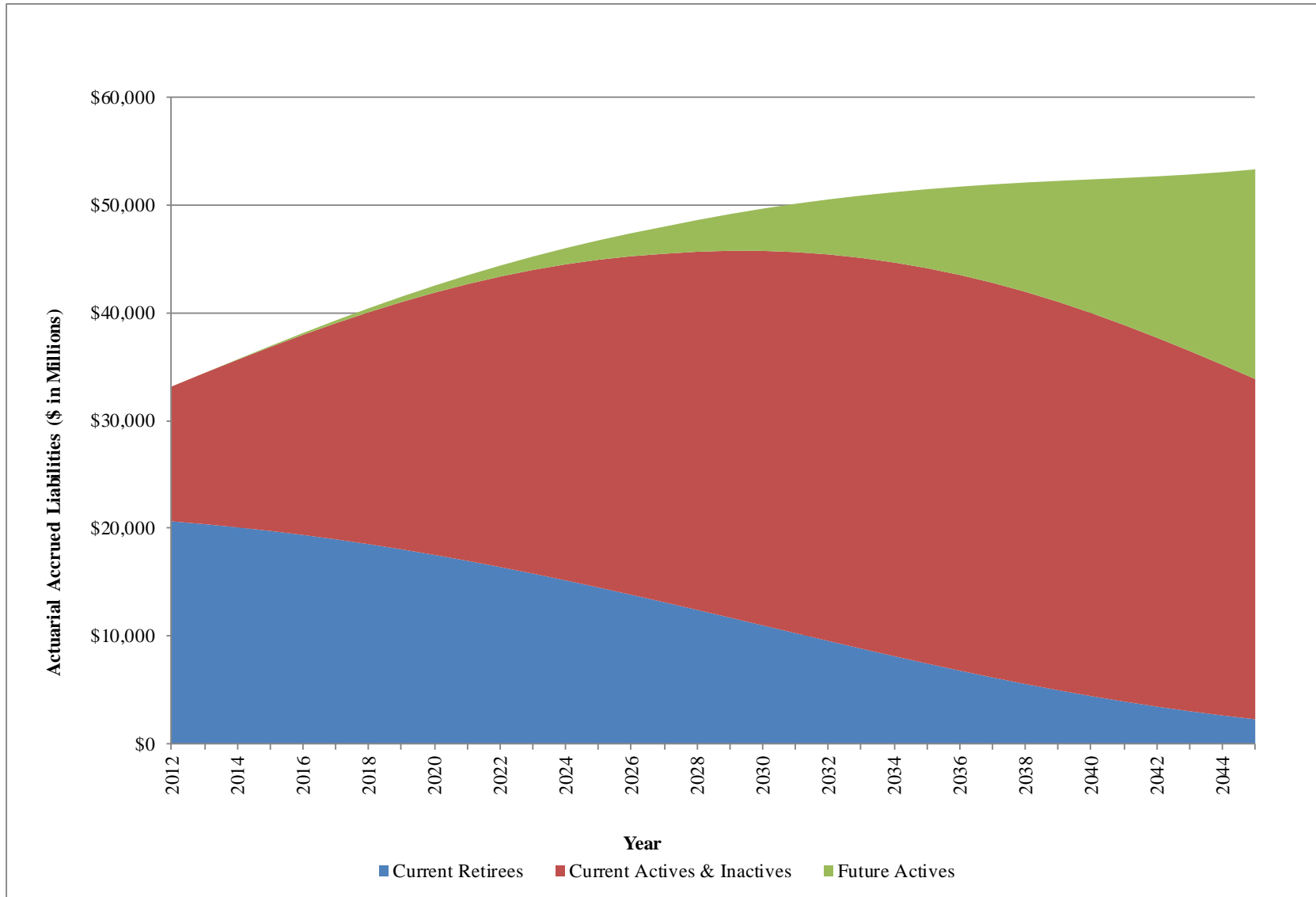
¹ Payroll shown is pensionable pay. It does not include amounts in excess of the pay cap that is applicable to members hired on or after January 1, 2011, participating in the Traditional and Portable plans.

² Includes member and employer contributions. Excludes SMP contributions.

GRAPH 1
PROJECTED FUNDED RATIO BASED ON STATUTORY CONTRIBUTIONS
ACTUARIAL VALUATION AS OF JUNE 30, 2012



GRAPH 2
PROJECTED ACTUARIAL ACCRUED LIABILITIES
ACTUARIAL VALUATION AS OF JUNE 30, 2012



GRAPH 3
PROJECTED BENEFIT PAYMENTS
ACTUARIAL VALUATION AS OF JUNE 30, 2012

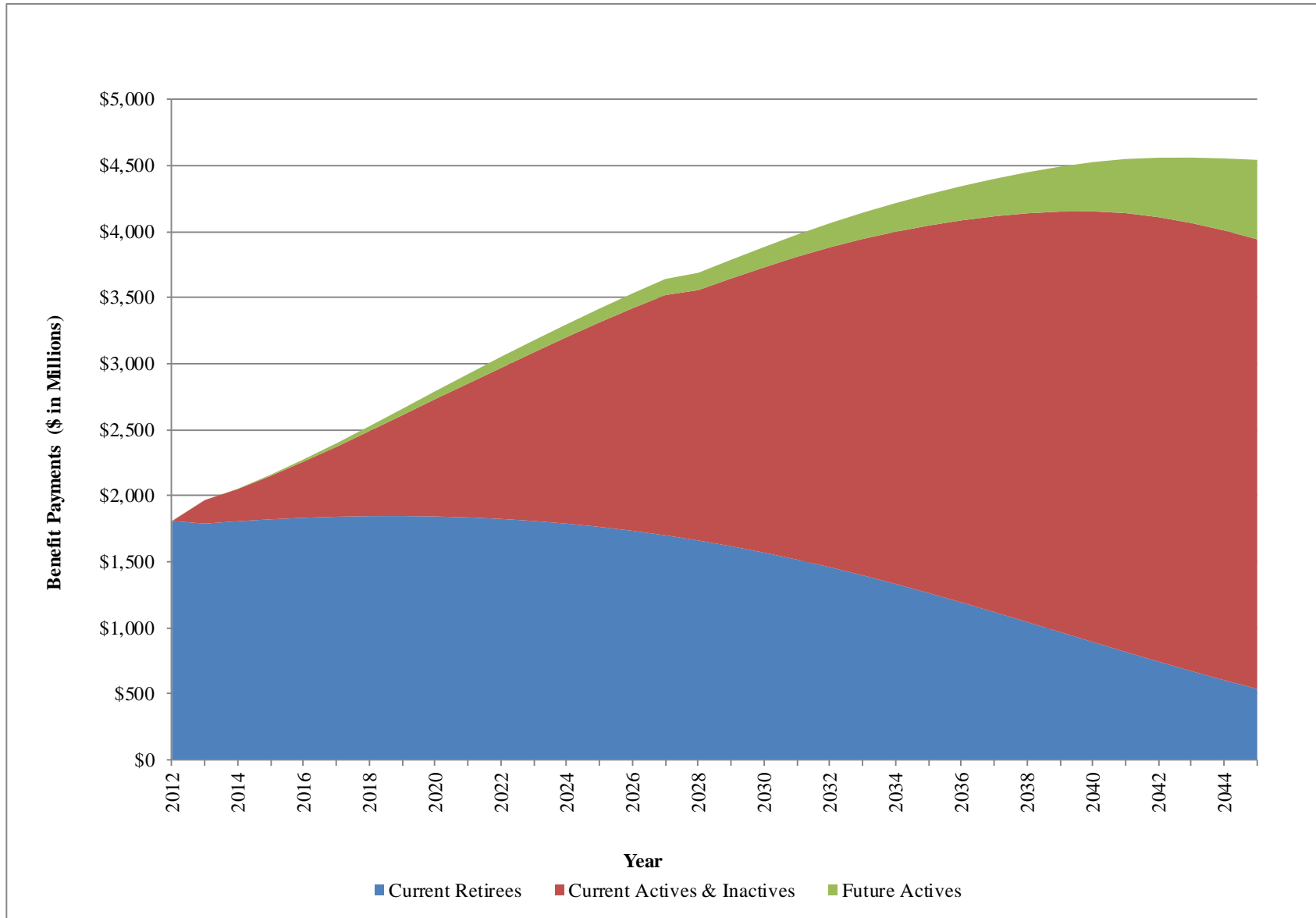


TABLE 14
PROJECTED STATUTORY CONTRIBUTIONS
ACTUARIAL VALUATION AS OF JUNE 30, 2012
BEFORE IMPACT OF BONDS ISSUED IN 2004
(\$ IN MILLIONS)

FYE	15% of New Members to SMP			
	SURS Cont.	SMP Cont.	Total Contribution	
			\$	% of Pay ¹
2014	\$ 1,634.801	\$ 48.080	\$ 1,682.881	39.37 %
2015	1,702.632	48.698	1,751.331	40.06
2016	1,720.768	50.442	1,771.210	39.64
2017	1,753.144	52.209	1,805.353	39.44
2018	1,810.593	54.062	1,864.655	39.76
2019	1,855.549	55.995	1,911.544	39.77
2020	1,902.001	57.999	1,960.000	39.78
2021	1,949.896	59.964	2,009.860	39.79
2022	1,999.165	61.961	2,061.126	39.80
2023	2,049.851	64.012	2,113.864	39.81
2024	2,101.510	66.068	2,167.578	39.82
2025	2,154.278	68.120	2,222.398	39.83
2026	2,208.067	70.163	2,278.230	39.83
2027	2,262.934	72.191	2,335.125	39.84
2028	2,318.806	74.195	2,393.001	39.84
2029	2,375.207	76.187	2,451.394	39.84
2030	2,432.031	78.199	2,510.229	39.85
2031	2,489.672	80.348	2,570.020	39.85
2032	2,548.478	82.687	2,631.165	39.86
2033	2,608.729	85.167	2,693.896	39.87
2034	2,669.754	87.765	2,757.519	39.87
2035	2,731.250	90.475	2,821.725	39.88
2036	2,793.390	93.307	2,886.696	39.90
2037	2,856.129	96.285	2,952.414	39.91
2038	2,920.097	99.501	3,019.598	39.92
2039	2,985.736	102.935	3,088.670	39.94
2040	3,053.022	106.528	3,159.551	39.95
2041	3,123.890	110.332	3,234.221	39.97
2042	3,197.415	114.308	3,311.723	39.99
2043	3,272.937	118.463	3,391.400	40.00
2044	3,350.150	122.810	3,472.961	40.02
2045	3,428.404	127.323	3,555.726	40.04
Total	\$78,260.285	\$2,576.779	\$80,837.064	

¹ Percent of pay amounts are calculated based on pensionable pay. Pensionable pay does not include amounts in excess of the pay cap that is applicable to members hired on or after January 1, 2011, participating in the Traditional and Portable plans.

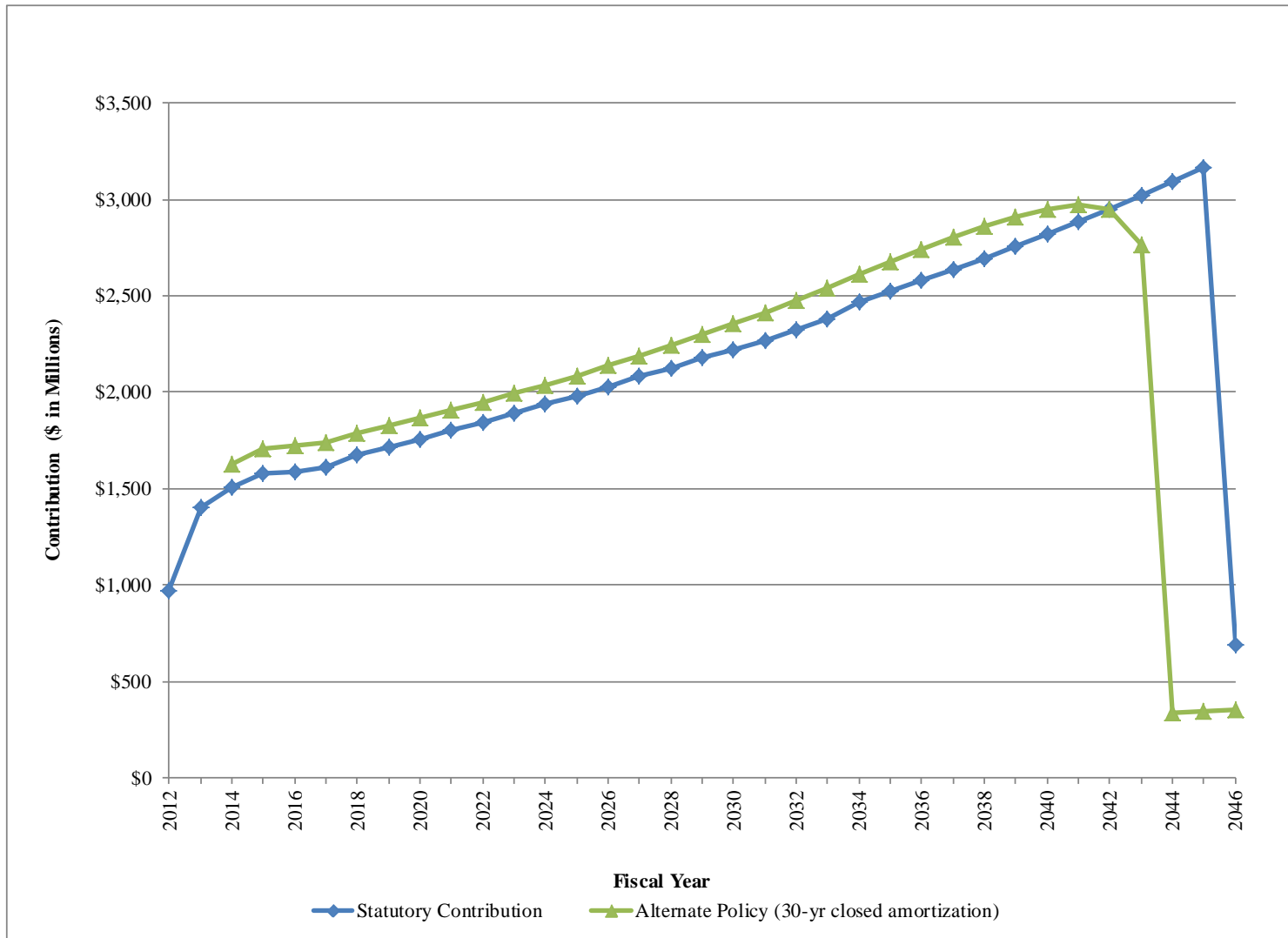
TABLE 15
PROJECTED STATUTORY CONTRIBUTIONS
ACTUARIAL VALUATION AS OF JUNE 30, 2012
INCLUDING IMPACT OF BONDS ISSUED IN 2004
(\$ IN MILLIONS)

FYE	15% of New Members to SMP				Debt Service		GASB Annual Required Contribution (ARC)	Projected % of ARC Contributed ²
	SURS Cont.	SMP Cont.	Total Contribution		\$	% of Pay ¹		
			\$	% of Pay ¹				
2014	\$ 1,503.685	\$ 48.080	\$ 1,551.766	36.31 %	\$ 114.000	2.67 %	\$ 1,560.973	96.33 %
2015	1,577.081	48.698	1,625.780	37.19	113.227	2.59	1,558.880	101.17
2016	1,586.783	50.442	1,637.225	36.64	112.435	2.52	1,562.374	101.56
2017	1,613.192	52.209	1,665.401	36.38	116.476	2.54	1,586.889	101.66
2018	1,671.149	54.062	1,725.211	36.79	120.304	2.57	1,599.276	104.49
2019	1,712.643	55.995	1,768.638	36.80	123.920	2.58	1,609.956	106.38
2020	1,755.517	57.999	1,813.516	36.81	132.009	2.68	1,619.569	108.39
2021	1,799.723	59.964	1,859.687	36.82	139.615	2.76	1,627.901	110.55
2022	1,845.198	61.961	1,907.159	36.83	146.736	2.83	1,635.299	112.84
2023	1,891.980	64.012	1,955.993	36.84	153.373	2.89	1,641.225	115.28
2024	1,937.093	66.068	2,003.161	36.80	164.417	3.02	1,645.262	117.74
2025	1,979.674	68.120	2,047.794	36.70	174.604	3.13	1,647.290	120.18
2026	2,028.918	70.163	2,099.081	36.70	179.149	3.13	1,647.497	123.15
2027	2,079.739	72.191	2,151.930	36.71	183.195	3.13	1,645.327	126.40
2028	2,127.172	74.195	2,201.367	36.65	191.634	3.19	1,640.518	129.66
2029	2,175.882	76.187	2,252.068	36.60	199.325	3.24	1,632.771	133.26
2030	2,220.871	78.199	2,299.069	36.50	211.160	3.35	1,621.482	136.97
2031	2,267.675	80.348	2,348.023	36.41	221.997	3.44	1,606.453	141.16
2032	2,321.535	82.687	2,404.221	36.42	226.944	3.44	1,587.422	146.25
2033	2,382.480	85.167	2,467.647	36.52	226.249	3.35	1,564.165	152.32
2034	2,464.141	87.765	2,551.906	36.90			1,536.126	160.41
2035	2,520.900	90.475	2,611.375	36.91			1,501.252	167.92
2036	2,578.254	93.307	2,671.561	36.92			1,460.462	176.54
2037	2,636.162	96.285	2,732.447	36.93			1,413.259	186.53
2038	2,695.203	99.501	2,794.704	36.95			1,359.147	198.30
2039	2,755.787	102.935	2,858.722	36.96			1,297.899	212.33
2040	2,817.891	106.528	2,924.420	36.98			1,229.375	229.21
2041	2,883.301	110.332	2,993.633	37.00			1,154.012	249.85
2042	2,951.163	114.308	3,065.471	37.01			1,071.744	275.36
2043	3,020.869	118.463	3,139.332	37.03			981.110	307.90
2044	3,092.136	122.810	3,214.946	37.05			880.704	351.10
2045	3,164.362	127.323	3,291.685	37.07			769.151	411.41
Total	\$ 72,058.159	\$ 2,576.779	\$ 74,634.938		\$ 3,250.768		\$ 46,894.770	

¹ Percent of pay amounts are calculated based on pensionable pay. Pensionable pay does not include amounts in excess of the pay cap that is applicable to members hired on or after January 1, 2011, participating in the Traditional and Portable plans.

² Compares SURS Contribution against GASB ARC calculated using a 30-year open amortization period as a level percentage of pay.

GRAPH 4
PROJECTED STATUTORY CONTRIBUTIONS VS. CONTRIBUTIONS UNDER ALTERNATE POLICY
(NORMAL COST PLUS 30-YEAR CLOSED PERIOD LEVEL PERCENT OF PAY AMORTIZATION)



Compares SURS Statutory Contribution against a funding policy which contributes normal cost plus 30-year closed period level percent of pay amortization. Under the current funding policy, the funded ratio is projected to be 90% in 2045 and under the alternate funding policy the funded ratio is projected to be 100% in 2043.

APPENDIX E

ACTUARIAL METHODS AND ASSUMPTIONS

PROJECTED UNIT CREDIT METHOD

The Projected Unit Credit Method is mandated under Section 15-155 as the funding method to be used for all purposes under SURS.

The concept of this method is that funding of benefits should occur as benefits are accrued (earned) by active members of SURS.

The Normal Cost (NC) for a fiscal year under this method is the actuarial present value of all benefits expected to be accrued during the fiscal year. The Actuarial Accrued Liability (AAL) under this method is the actuarial present value of all benefits accrued to the valuation date. To the extent that the assets of the fund are insufficient to cover the AAL, an Unfunded Actuarial Accrued Liability (UAAL) develops. Under the classical application of this method, the contribution for a year is the NC for that year plus an amount to amortize the UAAL.

Under Section 15-155, the employer/State contribution is determined such that the assets of SURS reach 90% of the AAL by the end of FY 2045.

This contribution is determined as a level percentage of pay for all years except that the contribution rates through 2010 shall grade in equal steps to the desired level contribution rate. *We have assumed the contribution would be based on pensionable (capped) payroll for members hired on or after January 1, 2011.* Pensionable pay does not include amounts in excess of the pay cap (\$108,883 in 2012, increased by the lesser of 3% and 1/2 of the increase in CPI-U as measured in the preceding 12-month calendar year) that is applicable to members hired on or after January 1, 2011, participating in the defined benefit plans.

ASSET VALUATION METHOD

Prior to the valuation as of June 30, 2009, market value of assets was used. Beginning with the June 30, 2009, valuation, the asset value is the actuarial value of assets which is calculated by recognizing 20% of the investment gain or loss (the difference between the actual investment return and the expected investment return, which is 8.5% prior to June 30, 2010, and 7.75% thereafter) on the market value of assets for each of the five following fiscal years. This method was not applied retroactively to recognize a portion of investment gains or losses from previous fiscal years.

ACTUARIAL ASSUMPTIONS
(MOST ADOPTED EFFECTIVE WITH THE JUNE 30, 2011 ACTUARIAL
VALUATION)

Rate of Investment Return. For all purposes under the system the rate of investment return is assumed to be 7.75% per annum beginning with the **June 30, 2010**, valuation. This assumption is net of investment expenses.

Price Inflation (Increase in Consumer Price Index “CPI”). The assumed rate is 2.75% per annum.

Effective Rate of Interest. The actuarial valuation assumed rate credited to member accounts is 7.75% per annum.

Cost of living adjustment “COLA”. The assumed rate is 3.00% per annum for members hired before January 1, 2011, based on the benefit provision of 3.00% annual compound increases. The assumed rate is 1.375% for members hired on or after January 1, 2011, based on the benefit provision of increases equal to ½ of the increase in CPI with a maximum increase of 3.00%.

Annual Compensation Increases. Each member’s compensation is assumed to increase by 3.75% each year, 2.75% reflecting salary inflation and 1.00% reflecting standard of living increases. That rate is increased for members with less than 9 years of service. The total assumed increase follows:

<u>Service Year</u>	<u>Total Increase</u>
0	12.00%
1	10.00%
2	8.50%
3	7.25%
4	6.50%
5	6.25%
6	6.00%
7	5.75%
8	5.50%
9-13	5.00%
14-19	4.75%
19-33	4.25%
34+	3.75%

Payroll Growth. The assumed rate of total payroll growth is 3.75%.

ACTUARIAL ASSUMPTIONS
(MOST ADOPTED EFFECTIVE WITH THE JUNE 30, 2011 ACTUARIAL
VALUATION)
(CONTINUED)

Mortality. The mortality assumption for retirees, beneficiaries and disabilities is based on the RP2000 Combined Mortality table, projected with Scale AA to 2017, sex-distinct, with rates multiplied by 0.80 for males and 0.85 for females. The assumed mortality rates for active members are 85 percent of the postretirement assumption for males and 60 percent for females. *Based on the most recent experience study, the current mortality assumption has an estimated margin of 10% for future mortality improvements.*

Sample Mortality Rates

Age	Postretirement		Preretirement	
	Male	Female	Male	Female
35	0.0568%	0.0335%	0.0483%	0.0201%
40	0.0753%	0.0464%	0.0640%	0.0278%
45	0.0966%	0.0726%	0.0821%	0.0436%
50	0.1256%	0.1064%	0.1068%	0.0639%
55	0.2093%	0.2015%	0.1779%	0.1209%
60	0.4103%	0.3946%	0.3488%	0.2367%
65	0.8018%	0.7576%	0.6815%	0.4546%
70	1.3740%	1.3068%	1.1679%	0.7841%
75	2.3817%	2.0841%	2.0244%	1.2505%

Disability. A table of disability incidence with sample rates follows:

Age	Males/Females
20	0.050%
25	0.063%
30	0.075%
35	0.095%
40	0.145%
45	0.195%
50	0.270%
55	0.345%
60	0.420%
65	0.495%
70	0.570%

ACTUARIAL ASSUMPTIONS
(MOST ADOPTED EFFECTIVE WITH THE JUNE 30, 2011 ACTUARIAL
VALUATION)
(CONTINUED)

Retirement. Upon eligibility, active members are assumed to retire as follows:

Age	Members Hired Before January 1, 2011 and Eligible for		Members Hired on or after January 1, 2011 and Eligible for	
	Normal Retirement	Early Retirement	Normal Retirement	Early Retirement
Under 50	40.0%	-	-	-
50	38.0	-	-	-
51	38.0	-	-	-
52	38.0	-	-	-
53	38.0	-	-	-
54	34.0	-	-	-
55	32.0	7.0%	-	-
56	26.0	5.0	-	-
57	26.0	4.5	-	-
58	26.0	5.5	-	-
59	26.0	6.0	-	-
60	11.0	-	-	-
61	11.0	-	-	-
62	13.0	-	-	35.0%
63	13.0	-	-	15.0
64	13.0	-	-	15.0
65	17.0	-	-	15.0
66	15.0	-	-	15.0
67	15.0	-	50.0%	-
68	15.0	-	35.0	-
69	15.0	-	30.0	-
70-79	30.0	-	30.0	-
80+	100.0	-	100.0	-

Members that retire are assumed to elect the most valuable option on a present value basis – refund of contributions (or portable lump sum retirement, if applicable) or a retirement annuity.

ACTUARIAL ASSUMPTIONS
(MOST ADOPTED EFFECTIVE WITH THE JUNE 30, 2011 ACTUARIAL
VALUATION)
(CONTINUED)

General Turnover. A table of termination rates based on experience in the 2006-2010 period. The assumption is a table of turnover rates by years of service. A sample of these rates follows:

<u>Years of Service</u>	<u>All Members</u>
0	22.0%
1	22.0
2	16.0
3	14.0
4	12.0
5	10.5
6	9.0
7	7.5
8	6.5
9	6.0
10	5.5
11	4.5
12	4.0
13	3.7
14	3.2
15	3.0
16	2.6
17	2.3
18	2.1
19	2.0
20	1.7
21	1.5
22	1.5
23	1.5
24	1.5
25	1.5
26	1.5
27	1.5
28	1.5
29	1.5

Part time members with less than 3 years of service (all members classified as part time for valuation purposes) are assumed to terminate at the valuation date.

Members that terminate with at least 5 years of service are assumed to elect the most valuable option on a present value basis – refund of contributions or a deferred benefit.

ACTUARIAL ASSUMPTIONS
(MOST ADOPTED EFFECTIVE WITH THE JUNE 30, 2011 ACTUARIAL
VALUATION)
(CONTINUED)

Operational Expenses. The amount of operational expenses for administration incurred in the latest fiscal year are supplied by SURS staff and incorporated in the Normal Cost.

Marital Status. Members are assumed to be married in the following proportions:

<u>Age</u>	<u>Males</u>	<u>Females</u>
20	25 %	40 %
30	70	75
40	80	80
50	85	80
60	85	70

Spouse Age. The female spouse is assumed to be 3 years younger than the male spouse.

Benefit Commencement Age. Inactive members eligible for a deferred benefit are assumed to commence benefits at their earliest normal retirement age. For Tier 1 members this is age 62 with at least 5 years of service, age 60 with at least 8 years of service, or immediately if at least 30 years of service.

Load on Final Average Salary. No load is assumed to account for higher than assumed pay increases in final years of employment before retirement.

Load on Liabilities for Service Retirees With Non-finalized Benefits. A load of 10% on liabilities for service retirees whose benefits have not been finalized as of the valuation date is assumed to account for finalized benefits that on average are 10% higher than 100% of the preliminary estimated benefit.

Valuation of Inactives. An annuity benefit is estimated based on information provided by staff for inactive members with five or more years of service.

Assumption for Missing Data. Members with an unknown gender are assumed to be female. Active and inactive members with an unknown date of birth are assumed to be 30 years old at the valuation. An assumed spouse date of birth is calculated for current service retirees in the traditional plan for purposes of calculating future survivor benefits. The female spouse is assumed to be 3 years younger than the male spouse. 70% of current total male retirees and 80% of current total female retirees in the traditional plan that have not elected a survivor refund are assumed to have a spouse at the valuation date.

ACTUARIAL ASSUMPTIONS
(MOST ADOPTED EFFECTIVE WITH THE JUNE 30, 2011 ACTUARIAL
VALUATION)
(CONTINUED)

Reciprocal Service. Reciprocal service is included for current inactive members for purposes of determining vesting eligibility and eligibility age to commence benefits. The recently updated actuarial assumptions (including retirement and termination rates) were based on SURS service only.

Therefore, reciprocal service was not included for current active members. Reciprocal service will be collected and analyzed in the future and will be considered in the next experience review.

Projection Assumptions:

The number of total active members will remain the same as the total number of active members in the current valuation throughout the projection period.

15% of total future hires will elect to participate in the Self Managed Plan.

New entrants have an average age of 37.3 and average pay of \$34,115 (2012 dollars). These values are based on the average age and average pay of current members with service between one and four years.

APPENDIX F

SUMMARY OF BENEFIT PROVISIONS OF TRADITIONAL SURS

It should be noted that the purpose of this Appendix is to describe the benefit structures of SURS for which actuarial values have been generated. There is no description of the Self Managed Plan (SMP) and many portions of the defined plans are described in a manner which is not legally complete or precise.

It is not our intent to provide an exhaustive description of all benefits provided under SURS or the policies and procedures utilized by SURS staff. A more precise description of the provisions of SURS is contained in the Member's Guide, published by SURS staff. Of course, the statute is controlling.

GENERAL

Plans

There are two defined benefit plans available under SURS, the Traditional Plan and the Portable Plan, and one defined contribution plan, the Self Managed Plan (SMP). A Member must select one of these plans within the first six months of participation. If no choice is made in that time, the Traditional Plan is deemed chosen. Members hired on or after January 1, 2011, are eligible to choose one of the benefit plans. Members hired on or after January 1, 2011, that participate in the Traditional and Portable Plans are subject to the pay cap established under Public Act 96-0889. The pay cap history is as follows:

Year	Pensionable Pay Cap
2011	\$106,800
2012	\$108,883

The Self Managed Plan is a defined contribution plan under which members contribute 8.0% of compensation and the State contributes 7.6% of compensation. A portion of the employer contribution is used to fund disability benefits for SMP participants. Members hired on or after January 1, 2011, that participate in the SMP are not subject to the pay cap established under Public Act 96-0889.

The provisions of the defined benefit plans are identical in many areas. The description below is primarily of the Traditional Plan. Where different, the Portable plan provisions will be described in *italics*.

Member Contributions

Most members contribute a total of 8% of compensation, broken down as follows:

Retirement Annuity	6.5%
Survivor Benefits	1.0%
Annual Increases in Retirement Benefits	0.5%

Police officers and firefighters contribute a total of 9.5% of compensation, with the additional 1.5% allocated to the retirement annuity.

Portable Plan members contribute a total of 8% of compensation, but the breakdown set out above does not apply.

Contributions for members hired on or after January 1, 2011, are assumed not to be made on pay in excess of \$106,800 in 2010 (\$108,883 in 2012), increased by the lesser of 3% and 1/2 of the increase in CPI-U as measured in the preceding 12-month calendar year.

Since January 1, 1981, the member contributions under SURS have been “picked up” by employers.

Effective Rate of Interest

The Effective Rate of Interest (“ERI”) is the interest rate that is applied to member contribution

balances. Effective for the 2006 fiscal year, the ERI for the purpose of determining the money purchase benefit is established by the State Comptroller annually. The ERI for other purposes such as the calculation of purchases of service credit, refunds for excess contributions, portable plan refunds and lump sum portable retirements is determined by the SURS Board annually and certified to the Governor. For purposes of the actuarial valuation, the assumed ERI is 7.75%.

For the purposes of withdrawal of contributions at termination or death by Traditional Plan Members, this rate is not greater than 4.5% by statute.

RETIREMENT BENEFITS

Normal Retirement:

Eligibility

For police officers and firefighters, separation from service on or after the attainment of the earlier of:

1. Age 55 with 20 years of service, or
2. Age 50 with 25 years of service.

For other members hired before January 1, 2011, separation from service on or after attainment of the earlier of:

1. Age 62 with 5 years of service,
2. Age 60 with 8 years of service, and
3. 30 years of service regardless of age.

For members hired on or after January 1, 2011, separation from service on or after attainment age 67 with 10 years of service.

Initial Benefit Amount

There are 3 alternate formulae. The initial benefit is the largest produced by one of the three:

1. General Formula: The following percentages of high 4 consecutive year average compensation for each year of service:

<u>Year of Service</u>	<u>General</u>	<u>Police/Fire</u>
1 st 10 Years	2.20 %	2.25 %
Next 10 Years	2.20	2.50
Over 20	2.20	2.75

For members hired on or after January 1, 2011, the above percentages of high final eight consecutive year average compensation within the last 10 years of service for each year of service. Final rate of earnings is limited to \$106,800 in 2010, which is the Social Security Taxable Wage Base (SSTWB) (\$108,883 in 2012). The

maximum final rate of earnings will be increased by the lesser of 3% and 1/2 of the increase in CPI-U as measured in the preceding 12-month calendar year. We have assumed the limit applies to individual pay amounts that are used to develop the final average compensation.

2. Money Purchase Formula:

- a) The member contributions for retirement benefits accumulated with interest at the ERI, plus
- b) An imputed employer contribution match at \$1.40 per dollar of member contribution accumulated with interest at the ERI.
- c) The total of the accumulations in (a) and (b) is converted into an annuity using a life annuity factor that takes into account neither the automatic 50% spousal survivor benefit nor the automatic annual increases.

Members hired on or after July 1, 2005 no longer receive the Money Purchase Formula under the plan.

3. Minimum Benefit - A benefit for each year of service, up to 30, based on final annual pay, as follows:

Under 3,500	\$ 8
\$3,500 - \$4,500	9
\$4,500 - \$5,500	10
\$5,500 - \$6,500	11
\$6,500 - \$7,500	12
\$7,500 - \$8,500	13
\$8,500 - \$9,500	14
Over \$9,500	15

Minimum Retirement Annuity – No retiree shall receive a retirement annuity less than \$25 per month for each year of service up to 30. The comparable benefit for survivor benefit recipients is \$17.50 per month for each year of service up to 30.

Maximum Benefit

80% of high 4-year average compensation for members hired before January 1, 2011, and 80% of final 8-year average for members hired on or after January 1, 2011.

Contribution waivers are applicable to members whose benefits are capped at 80% of final average compensation. Member contributions made once the maximum benefit is achieved are refunded to the member with interest (at the Effective Rate of Interest).

The present value of the benefits for pay increases in excess of 6% during the last four years prior to retirement will be paid by the employer. The employer will pay this amount in a lump sum to the Retirement System.

Benefit Duration

The Normal Retirement benefit is payable for the lifetime of the retired member. If the retiree under the Traditional Plan has a spouse at date of retirement and if that spouse survives the

retiree the spouse will receive, upon the death of the retiree, a survivor benefit equal to 50% of the monthly benefit being paid to the retiree as of the date of death. Such benefit will continue for the lifetime of the surviving spouse.

The survivor benefit for members hired on or after January 1, 2011, is equal to 66 2/3% of the monthly benefit being paid to the retiree as of the date of death.

For retirees under the Portable Plan, the normal form of benefit is a single-life annuity for unmarried participants and a reduced 50% joint and survivor benefit for married participants. With spousal consent, a member may designate a contingent annuitant to receive a joint and survivor annuity or elect a single-life annuity or lump sum distribution. Those providing a joint and survivor annuity will have their benefit reduced to cover the cost of the option. The available joint and survivor options are 50%, 75% and 100%. A member may elect the 75% or 100% spousal joint and survivor annuity without consent.

Portable Plan members may also elect to receive their retirement benefit as a lump sum equal to member contributions with an equal employer match (if have at least five years of service), accumulated with interest (at the Effective Rate of Interest that is certified annually by the SURS Board).

Annual Increases

For members hired before January 1, 2011, each January 1 subsequent to retirement date the monthly benefit being paid each retiree shall be increased by 3%. The adjustment for the first January after retirement shall be proportional based on the portion of the year retired.

For members hired on or after January 1, 2011, each January 1 subsequent to retirement date the monthly benefit being paid each retiree shall be increased fifty percent of the Consumer Price Index (CPI) up to a maximum of 3% applied to the original benefit. The first increase will be granted upon the later of the attainment of age 67 or the first anniversary of the commencement of the annuity.

Early Retirement

Eligibility

For members hired before January 1, 2011, other than police and fire employees, separation from service on or after attainment of age 55 with 8 years of service but not eligible for Normal Retirement. For members hired on or after January 1, 2011, separation from service on or after attainment of age 62 with 10 years of service but not eligible for Normal Retirement.

Benefits

The benefit amounts and all terms of benefit payment are the same as that for Normal

Retirement, except that the benefit amounts calculated under the General Formula and the Minimum Formula shall be reduced by .5% for each month by which the retirement date precedes the 60th birthday for members hired before January 1, 2011. The Minimum Formula shall be reduced by .5% for each month by which the retirement date precedes the 67th birthday for members hired on or after January 1, 2011.

BENEFITS ON DEATH BEFORE RETIREMENT

Survivor Benefits

Traditional Plan

Eligibility

Payable to eligible survivor(s) (spouse, child, or dependent parent) for the death of an active member with at least 1.5 years of service or a terminated member with at least 10 years of service. For this purpose, service under the State Employees' Retirement System, the Teachers' Retirement System of the State of Illinois, and the Public School Teachers' Pension Fund of Chicago is recognized.

Benefits

For members hired before January 1, 2011, an annuity to the eligible survivor(s) equal to the greater of:

1. 50% of the benefit accrued to the date of the death of the member, and
2. The lowest applicable benefit from the following list:
 - a) \$400 per month to a single eligible survivor or \$600 per month to two or more eligible survivors
 - b) 30% (one survivor), or 60% (two survivors), or 80% (three or more survivors) of the member's final rate of earnings.
 - c) If member inactive, 80% of base retirement annuity.

For members hired on or after January 1, 2011, an annuity to the survivor(s) equal to 66 2/3% of the benefit accrued to the date of the death of the member.

Benefit Duration

Surviving spouse

May receive a lifetime benefit commencing at the later of the member's date of death and the spouse's attainment of age 50. May be payable at the date of death if a dependent child in their care is also receiving benefits.

Dependent child

Payable to unmarried child(ren) under age 18 (over 18 if disabled prior to age 18), and children age 18-22 if a qualified full-time student.

Dependent parent

Payable until dependency conditions are not met, so long as they were dependent upon the member at the time of their death.

Annual Increases

For members hired before January 1, 2011, each January 1 subsequent to retirement date the monthly benefit being paid each survivor annuity recipient shall be increased by 3%. The adjustment for the first January after retirement shall be proportional.

For members hired on or after January 1, 2011, each January 1 subsequent to retirement date the monthly benefit being paid each survivor annuity recipient shall be increased fifty percent of the Consumer Price Index (CPI) up to a maximum of 3% of the originally granted survivor annuity. The first increase will be granted upon January 1 following the first anniversary of the commencement of the annuity.

Portable Plan

Eligibility

Payable to an eligible spouse for the death of an active or inactive member with at least 1.5 years of SURS service.

Benefits

An annuity to the eligible spouse equal to 50% of the member's earned retirement benefit after the reductions to pay for the cost of providing the pre-retirement survivor annuity. (Applicable to both Tier 1 and Tier 2 members.)

Benefit Duration

Surviving spouse

May receive a lifetime benefit commencing at the member's earliest retirement age.

Annual Increases

For members hired before January 1, 2011, each January 1 subsequent to retirement date the monthly benefit being paid each survivor annuity recipient shall be increased by 3%. The adjustment for the first January after retirement shall be proportional.

For members hired on or after January 1, 2011, each January 1 subsequent to retirement date the monthly benefit being paid each survivor annuity recipient shall be increased fifty percent of the Consumer Price Index (CPI) up to a maximum of 3% of the originally granted survivor annuity. The first increase will be granted upon January 1 following the first anniversary of the commencement of the annuity.

Lump Sum Death Benefit

Eligibility

Death of member prior to retirement.

Traditional Plan

Benefit

With Eligible Survivor

- Refund of accumulated member contributions for retirement and annual adjustment at 4.5% interest

Without Eligible Survivor

- Refund of the total accumulated member contribution at 4.5% interest, and
- \$5,000 to a dependent beneficiary or \$2,500 to a non-dependent beneficiary

Portable Plan

Benefit

With Eligible Spouse

- Refund of total accumulated member contributions at the full Effective Rate of Interest, plus, if the member has at least 1.5 years of service at death, a like amount of imputed employer contributions – less the actuarial equivalent of the Pre-Retirement Survivor Annuity.

Without Eligible Spouse

- Refund of total accumulated member contributions at the full Effective Rate of Interest, plus, if the member has at least 1.5 years of service at death, a like amount of imputed employer contributions.

BENEFITS ON DEATH AFTER RETIREMENT

In addition to survivor/spouse benefits payable from the System, the following death benefit is payable if a member does not have an eligible survivor/spouse/contingent annuitant:

- The greater of the total accumulated member contributions or \$1,000.

BENEFITS FOR DISABILITY

Disability Benefit

Eligibility

Disablement after completing 2 years of service. The service requirement is waived if the disablement is accidental.

Disability definition - inability to perform the duties of “own occupation”.

Pregnancy and childbirth are, by definition, disablement.

Benefit

50% of the basic compensation paid at date of disablement. This base benefit level is offset dollar for dollar by each of the following:

1. Earnings while disabled in excess of the disability benefit.
2. Other disability insurance either fully or partially employer provided.
3. Worker's compensation benefits.

Duration of Benefit

Benefits become payable on the later of the termination of salary and sick leave, or the 61st day after disablement and continue to the earlier of the following:

1. Recovery or death.
2. Benefits paid equal 50% of total compensation during the period of SURS service.
3. If disablement occurs prior to age 65, the disability benefit may not continue past the August 31 following 70th birthday.
4. If disablement occurs at or after attainment of age 65, completion of 5 years in disablement.

Survivor and death benefits are payable if a member dies while receiving disability benefits.

If, at discontinuance of the disability benefit, the member is eligible for a retirement benefit (based on service, which includes the period of disability and may also include time receiving a disability retirement annuity), the member may retire and receive that benefit. The member may commence the retirement benefit once age and service requirements are met. The early retirement reduction does not apply for members that began first participating prior to January 1, 2011 (Tier 1). The benefit is based on the greatest of 3 formulas (General Formula, Money Purchase, and Minimum Benefit), subject to applicable maximums. Contributions are not made during the disability period. However, accumulated contributions continue to accrue interest.

Annual Increases

Each January 1 subsequent to retirement date the monthly benefit being paid each retiree shall be increased by 3%. The adjustment for the first January after retirement shall be proportional.

Disability Retirement Annuity

Eligibility

Continuing disablement after discontinuation of the disability benefit as a result of reaching the "50% of total earnings" limitation. Disability is defined in accordance with the Social Security disability definition.

Benefit

35% of the compensation being earned at disablement.

Duration of Benefit

Benefits become payable upon discontinuance of the disability benefit and continue to the earlier of the following:

1. Recovery or death
2. Election to receive a retirement benefit

Survivor and death benefits are payable if a member dies while receiving a disability retirement annuity.

Annual Increases

Each January 1 subsequent to retirement date the monthly benefit being paid each retiree shall be increased by 3%. The adjustment for the first January after retirement shall be proportional.

For members hired on or after January 1, 2011, if the member converts to a service retirement annuity (item 2 above), each January 1 subsequent to retirement date the monthly benefit being paid each retiree shall be increased fifty percent of the Consumer Price Index (CPI) up to a maximum of 3% of the originally granted benefit. The first increase will be granted upon the later of the attainment of age 67 or the first anniversary of the commencement of the annuity.

BENEFITS FOR DEFERRED MEMBERS

Eligibility

For members hired before January 1, 2011, separation from employment with at least 5 years of service and separation from employment with at least 10 years of service for members hired on or after January 1, 2011.

Benefit

Benefit as defined for normal retirement purposes, but calculated based on final average compensation and service at date of termination.

Commencement of Benefit

Benefits commence when member reaches the age condition for either normal or early retirement.

Annual Increases

For members hired before January 1, 2011, each January 1 subsequent to retirement date the monthly benefit being paid each retiree shall be increased by 3%. The adjustment for the first January after retirement shall be proportional.

For members hired on or after January 1, 2011, each January 1 subsequent to retirement date the monthly benefit being paid each retiree shall be increased fifty percent of the Consumer Price Index (CPI) up to a maximum of 3% applied to the original benefit. The first increase will be granted upon the later of the attainment of age 67 or the first anniversary of the commencement of the annuity.

APPENDIX G
GLOSSARY OF TERMS

GLOSSARY OF TERMS

Actuarial Value of Assets (AVA). Smoothed value of assets that recognizes the difference between the expected investment return using the valuation assumption of 8.0 percent and the actual investment return over a five-year period. Dampens volatility of asset value over time.

Actuarial Accrued Liability (AAL). The difference between (i) the actuarial present value of future plan benefits, and (ii) the actuarial present value of future normal cost. Sometimes referred to as “accrued liability” or “past service liability.”

Actuarial Assumptions. Estimates of future plan experience such as investment return, expected lifetimes and the likelihood of receiving a pension from the Pension Plan. Demographic, or “people” assumptions, include rates of mortality, retirement and separation. Economic, or “money” assumptions, include expected investment return, inflation and salary increases.

Actuarial Cost Method. A mathematical budgeting procedure for allocating the dollar amount of the “actuarial present value of future plan benefits” between the actuarial present value of future normal cost and the actuarial accrued liability. Sometimes referred to as the “actuarial funding method.”

Actuarial Present Value of Future Plan Benefits (APV). The amount of funds presently required to provide a payment or series of payments in the future. It is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Amortization. Paying off an interest-bearing liability by means of periodic payments of interest and principal, as opposed to paying it off with a lump sum payment.

Actuarially Determined Contribution (ADC). The sum of the gross normal cost (including employee contributions) and amortization of the unfunded actuarial accrued liability over a period not to exceed 30 years.

Annual Required Contribution (ARC). The sum of the normal cost (net of employee contributions) and amortization of the unfunded actuarial accrued liability over a period not to exceed 30 years. Currently required for accounting purposes by the Governmental Accounting Standards Board (GASB).

Asset Return. The net investment return for the asset divided by the mean asset value. Example: if \$1.00 is invested and yields \$1.08 after a year, the asset return is 8.00 percent.

Funded Ratio. The actuarial value of assets divided by the actuarial accrued liability. Measures the portion of the actuarial accrued liability that is currently funded.

GLOSSARY OF TERMS

Market Value of Assets (MVA). The value of assets currently held in the trust available to pay for benefits of the Pension Plan. Each of the investments in the trust is valued at market price which is the price at which buyers and sellers trade similar items in the open market

Net Pension Obligation (NPO). The accumulated value of contribution variances (the difference between the Annual Pension Contribution and the actual employer contributions). Currently required for accounting purposes by the Governmental Accounting Standards Board (GASB).

Normal Cost (NC). The annual cost assigned, under the actuarial funding method, to current and subsequent plan years. Sometimes referred to as “current service cost.” Any payment toward the unfunded actuarial accrued liability is not part of the normal cost.

Unfunded Actuarial Accrued Liability (UAAL). The difference between the actuarial accrued liability and valuation assets. Sometimes referred to as “unfunded accrued liability.”

December 11, 2012

Board of Trustees
State Universities Retirement System of Illinois
1901 Fox Drive
Champaign, Illinois 61820

**Re: Addendum to Actuarial Valuation Report as of June 30, 2012 Based on
Recommendations from the State Actuary**

Dear Members of the Board:

The attached exhibits are an addendum to State Universities Retirement System of Illinois actuarial valuation as of June 30, 2012, and contain additional disclosures as requested by the State Actuary, Cheiron.

Exhibit I is a summary of the key valuation results based on the valuation as of June 30, 2012, and includes an additional breakout of the total contributions between members contributions and those required by the State to be contributed to the SURS defined benefit plan, the debt service payment, the maximum contribution amount defined by statute if the bonds in 2004 had not been issued, and the SURS defined benefit plan contribution amount as a percentage of payroll (this does not include the SMP contribution). The SURS contributions recognize the impact of smoothing in the deferred asset gains and losses in the calculation of the contributions after fiscal year 2014 and represent the best estimate as of June 30, 2012, of the future required contributions.

Exhibit II is a summary of the key valuation results based on the valuation as of June 30, 2012, and contains the same information as Exhibit I. Exhibit II reflects the projected contributions assuming that the actuarial value of assets earns 7.75% in each future year beginning in fiscal year 2013. This is the method used to determine the fiscal year 2014 SURS contribution under the asset smoothing method that was required by status beginning with the actuarial valuation as of June 30, 2009.

Exhibit III provides the details of the reconciliation of assets from June 30, 2011, to June 30, 2012, of the System assets used in the valuation (including the impact of the bonds issued in 2004) and the hypothetical assets (excluding the impact of the bonds issued in 2004) that are used in determining the maximum annual contribution.

Exhibit IV is a summary of the key results based on the valuation as of June 30, 2012, and hypothetical assets as if the bonds in 2004 had not been issued. The purpose of this calculation is to determine the maximum SURS contribution. The maximum contribution equals the contribution calculated in Exhibit IV less the debt service payment for the year.

Exhibit V is similar to Exhibit II, except the calculations are based on if the 2004 bonds had not been issued. Exhibit V reflects the projected contributions assuming that the actuarial value of assets earns 7.75% in each future year beginning in fiscal year 2013. This is the method used to determine the fiscal year 2014 maximum contribution (before subtracting out the debt service payment) under the asset smoothing method that was required by status beginning with the actuarial valuation as of June 30, 2009.

Exhibit VI contains additional breakouts of Normal Cost, Actuarial Accrued Liability (AAL), benefit payments and payroll between Tier 1 and Tier 2 and active, new hire, inactive and retirees, as requested by the State Actuary. Beginning with the valuation as of June 30, 2013, the State Actuary has requested that the active member information be further broken out into members hired prior to January 1, 2011 (Tier 1 current actives), members hired on or after January 1, 2011 (Tier 2 current actives) and assumed new hires after the valuation date (Tier 2 future actives). In addition, they have requested a projection of the present value of future benefits for actives.

Per Cheiron's request, following is a complete description as to how the New Entrant Profile assumption was developed:

New entrants have an average age of 37.3 and average pay of \$34,115 (2012 dollars) and are based on a range profile of members. The range profile is based on the age at hire and assumed pay at hire (using the actuarial assumptions, inflated to 2012 dollars) of current active members with service between one and four years.

All disclosures and additional information contained in the full valuation report are also applicable to this addendum.

The undersigned actuaries are independent of the plan sponsor. To the best of our knowledge, this actuarial statement is complete and accurate, and has been prepared in accordance with generally accepted actuarial principles and practices.

The undersigned are members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein.

Sincerely,



Leslie Thompson, FSA, EA, MAAA
Senior Consultant



Amy Williams, ASA, MAAA
Consultant

AW:kb

cc: Bill Mabe, State Universities Retirement System of Illinois
Kristen Brundirks, Gabriel, Roeder, Smith & Company
Lance Weiss, Gabriel, Roeder, Smith & Company

Includes Impact of Bonds Issued in 2004 (Current State)
Reflects Recognition of Deferred Asset Gains and Losses in Projected Actuarial Value of Assets
In Years After June 30, 2012 in the Development of the Future Statutory Contribution Requirements
\$ in Millions

Fiscal Year Ending	Total Payroll ¹	SMP Payroll	DB Payroll ¹	SURS Contributions ²	Member Contributions	Benefits	Expenses	Assets EOY	AAL	Funding Ratio	Debt Service	Maximum Contribution	SURS Contribution % of Total Payroll
2012	\$ 3,956.639	\$ 605.153	\$ 3,351.486	\$ 973.562	\$ 258.236	\$ 1,808.811	\$ 13.167	\$ 13,949.905	\$ 33,170.216	42.06 %	\$ 115.487	\$ 973.562	24.61%
2013	4,185.092	641.573	3,543.519	1,399.024	283.836	1,967.713	13.746	14,199.994	34,429.839	41.24	114.754	1,418.285	33.43%
2014	4,274.039	663.012	3,611.027	1,503.685	289.243	2,053.186	14.261	15,345.629	35,684.026	43.00	114.000	1,520.800	35.18%
2015	4,371.759	686.809	3,684.950	1,577.081	295.164	2,159.268	14.796	16,379.760	36,921.346	44.36	113.227	1,589.405	36.07%
2016	4,468.632	711.443	3,757.189	1,586.783	300.951	2,275.271	15.351	16,999.279	38,129.662	44.58	112.435	1,608.334	35.51%
2017	4,577.435	736.419	3,841.016	1,613.192	307.665	2,396.837	15.927	17,806.111	39,301.578	45.31	116.476	1,636.668	35.24%
2018	4,689.965	762.606	3,927.358	1,671.149	314.581	2,525.862	16.524	18,608.261	40,427.315	46.03	120.304	1,690.289	35.63%
2019	4,806.414	789.927	4,016.487	1,712.643	321.721	2,657.432	17.144	19,385.843	41,501.696	46.71	123.920	1,731.629	35.63%
2020	4,926.738	818.243	4,108.495	1,755.517	329.090	2,790.750	17.787	20,136.788	42,519.434	47.36	132.009	1,769.992	35.63%
2021	5,050.799	846.021	4,204.778	1,799.723	336.803	2,920.636	18.454	20,864.306	43,480.579	47.99	139.615	1,810.281	35.63%
2022	5,178.421	874.236	4,304.184	1,845.198	344.765	3,051.304	19.146	21,567.320	44,380.882	48.60	146.736	1,852.429	35.63%
2023	5,309.713	903.217	4,406.496	1,891.980	352.960	3,175.539	19.864	22,252.183	45,223.334	49.21	153.373	1,896.479	35.63%
2024	5,443.524	932.256	4,511.268	1,937.093	361.353	3,297.619	20.608	22,918.165	46,006.186	49.82	164.417	1,937.093	35.59%
2025	5,580.208	961.237	4,618.971	1,979.674	369.980	3,416.176	21.381	23,565.049	46,729.044	50.43	174.604	1,979.674	35.48%
2026	5,719.538	990.081	4,729.456	2,028.918	378.829	3,530.872	22.183	24,202.481	47,392.037	51.07	179.149	2,028.918	35.47%
2027	5,861.660	1,018.712	4,842.948	2,079.739	387.920	3,640.230	23.015	24,837.123	47,996.868	51.75	183.195	2,079.739	35.48%
2028	6,006.384	1,046.996	4,959.388	2,127.172	397.247	3,686.881	23.878	25,530.547	48,604.807	52.53	191.634	2,127.172	35.42%
2029	6,152.479	1,075.092	5,077.387	2,175.882	406.699	3,785.724	24.773	26,234.553	49,162.306	53.36	199.325	2,175.882	35.37%
2030	6,299.669	1,103.474	5,196.195	2,220.871	416.215	3,881.775	25.702	26,949.030	49,668.332	54.26	211.160	2,220.871	35.25%
2031	6,448.976	1,133.803	5,315.173	2,267.675	425.745	3,975.431	26.666	27,679.138	50,121.136	55.22	221.997	2,267.675	35.16%
2032	6,601.302	1,166.819	5,434.483	2,321.535	435.302	4,061.907	27.666	28,440.855	50,523.884	56.29	226.944	2,321.535	35.17%
2033	6,757.369	1,201.850	5,555.518	2,382.480	444.997	4,141.670	28.704	29,251.057	50,880.180	57.49	226.249	2,382.480	35.26%
2034	6,915.443	1,238.536	5,676.906	2,464.141	454.720	4,214.221	29.780	30,142.484	51,194.594	58.88	NA	2,669.754	35.63%
2035	7,074.734	1,276.812	5,797.922	2,520.900	464.414	4,281.120	30.897	31,101.373	51,469.882	60.43	NA	2,731.250	35.63%
2036	7,235.694	1,316.813	5,918.881	2,578.254	474.102	4,342.415	32.056	32,139.340	51,708.879	62.15	NA	2,793.390	35.63%
2037	7,398.207	1,358.894	6,039.313	2,636.162	483.749	4,397.565	33.258	33,269.376	51,915.247	64.08	NA	2,856.129	35.63%
2038	7,563.902	1,404.348	6,159.554	2,695.203	493.380	4,447.458	34.505	34,505.189	52,092.011	66.24	NA	2,920.097	35.63%
2039	7,733.927	1,452.883	6,281.044	2,755.787	503.112	4,490.016	35.799	35,864.249	52,245.076	68.65	NA	2,985.736	35.63%
2040	7,908.219	1,503.690	6,404.529	2,817.891	513.003	4,524.667	37.141	37,366.007	52,382.019	71.33	NA	3,053.022	35.63%
2041	8,091.786	1,557.473	6,534.313	2,883.301	523.398	4,548.302	38.534	39,036.858	52,515.634	74.33	NA	3,123.890	35.63%
2042	8,282.237	1,613.706	6,668.531	2,951.163	534.149	4,558.074	39.979	40,907.160	52,663.463	77.68	NA	3,197.415	35.63%
2043	8,477.863	1,672.472	6,805.390	3,020.869	545.112	4,558.896	41.478	43,003.737	52,838.435	81.39	NA	3,272.937	35.63%
2044	8,677.866	1,733.963	6,943.904	3,092.136	556.207	4,552.575	43.034	45,353.239	53,051.749	85.49	NA	3,350.150	35.63%
2045	8,880.566	1,797.793	7,082.773	3,164.362	567.330	4,541.646	44.647	47,981.016	53,312.240	90.00	NA	3,428.404	35.63%

¹ Payroll shown is pensionable pay. It does not include amounts in excess of the pay cap that is applicable to members hired on or after January 1, 2011, participating in the Traditional and Portable plans.

² Excludes SMP contributions.

Includes Impact of Bonds Issued in 2004 (Current State)
Does Not Reflect Recognition of Deferred Asset Gains and Losses in Projected Actuarial Value of Assets
In Years After June 30, 2012 in the Development of the Future Statutory Contribution Requirements
Assume Return of 7.75% on Actuarial Value of Assets after June 30, 2012
\$ in Millions

Fiscal	Total	SMP	DB	SURS	Member			Assets	Funding	Debt	Maximum	SURS Contribution	
Year	Payroll¹	Payroll	Payroll¹	Contributions²	Contributions	Benefits	Expenses	EOY	AAL	Ratio	Service	Contribution	% of Total Payroll
Ending													
2012	\$ 3,956.639	\$ 605.153	\$ 3,351.486	\$ 973.562	\$ 258.236	\$ 1,808.811	\$ 13.167	\$ 13,949.905	\$ 33,170.216	42.06 %	\$ 115.487	\$ 973.562	24.61%
2013	4,185.092	641.573	3,543.519	1,399.024	283.836	1,967.713	13.746	14,721.069	34,429.839	42.76	114.754	1,418.285	33.43%
2014	4,274.039	663.012	3,611.027	1,503.685	289.243	2,053.186	14.261	15,576.994	35,684.026	43.65	114.000	1,520.800	35.18%
2015	4,371.759	686.809	3,684.950	1,538.065	295.164	2,159.268	14.796	16,430.415	36,921.346	44.50	113.227	1,558.951	35.18%
2016	4,468.632	711.443	3,757.189	1,572.147	300.951	2,275.271	15.351	17,270.371	38,129.662	45.29	112.435	1,596.797	35.18%
2017	4,577.435	736.419	3,841.016	1,610.426	307.665	2,396.837	15.927	18,095.341	39,301.578	46.04	116.476	1,634.372	35.18%
2018	4,689.965	762.606	3,927.358	1,650.016	314.581	2,525.862	16.524	18,897.969	40,427.315	46.75	120.304	1,673.586	35.18%
2019	4,806.414	789.927	4,016.487	1,690.985	321.721	2,657.432	17.144	19,675.522	41,501.696	47.41	123.920	1,714.512	35.18%
2020	4,926.738	818.243	4,108.495	1,733.317	329.090	2,790.750	17.787	20,425.873	42,519.434	48.04	132.009	1,752.446	35.18%
2021	5,050.799	846.021	4,204.778	1,776.964	336.803	2,920.636	18.454	21,152.171	43,480.579	48.65	139.615	1,792.293	35.18%
2022	5,178.421	874.236	4,304.184	1,821.864	344.765	3,051.304	19.146	21,853.273	44,380.882	49.24	146.736	1,833.987	35.18%
2023	5,309.713	903.217	4,406.496	1,868.055	352.960	3,175.539	19.864	22,535.462	45,223.334	49.83	153.373	1,877.569	35.18%
2024	5,443.524	932.256	4,511.268	1,915.132	361.353	3,297.619	20.608	23,200.602	46,006.186	50.43	164.417	1,917.706	35.18%
2025	5,580.208	961.237	4,618.971	1,959.801	369.980	3,416.176	21.381	23,848.746	46,729.044	51.04	174.604	1,959.801	35.12%
2026	5,719.538	990.081	4,729.456	2,008.549	378.829	3,530.872	22.183	24,487.020	47,392.037	51.67	179.149	2,008.549	35.12%
2027	5,861.660	1,018.712	4,842.948	2,058.864	387.920	3,640.230	23.015	25,122.044	47,996.868	52.34	183.195	2,058.864	35.12%
2028	6,006.384	1,046.996	4,959.388	2,105.780	397.247	3,686.881	23.878	25,815.345	48,604.807	53.11	191.634	2,105.780	35.06%
2029	6,152.479	1,075.092	5,077.387	2,153.970	406.699	3,785.724	24.773	26,518.678	49,162.306	53.94	199.325	2,153.970	35.01%
2030	6,299.669	1,103.474	5,196.195	2,198.435	416.215	3,881.775	25.702	27,231.886	49,668.332	54.83	211.160	2,198.435	34.90%
2031	6,448.976	1,133.803	5,315.173	2,244.707	425.745	3,975.431	26.666	27,960.074	50,121.136	55.78	221.997	2,244.707	34.81%
2032	6,601.302	1,166.819	5,434.483	2,298.025	435.302	4,061.907	27.666	28,719.159	50,523.884	56.84	226.944	2,298.025	34.81%
2033	6,757.369	1,201.850	5,555.518	2,358.414	444.997	4,141.670	28.704	29,525.950	50,880.180	58.03	226.249	2,358.414	34.90%
2034	6,915.443	1,238.536	5,676.906	2,432.980	454.720	4,214.221	29.780	30,406.334	51,194.594	59.39	NA	2,645.126	35.18%
2035	7,074.734	1,276.812	5,797.922	2,489.021	464.414	4,281.120	30.897	31,352.581	51,469.882	60.91	NA	2,706.054	35.18%
2036	7,235.694	1,316.813	5,918.881	2,545.650	474.102	4,342.415	32.056	32,376.172	51,708.879	62.61	NA	2,767.620	35.18%
2037	7,398.207	1,358.894	6,039.313	2,602.825	483.749	4,397.565	33.258	33,489.959	51,915.247	64.51	NA	2,829.781	35.18%
2038	7,563.902	1,404.348	6,159.554	2,661.120	493.380	4,447.458	34.505	34,707.488	52,092.011	66.63	NA	2,893.158	35.18%
2039	7,733.927	1,452.883	6,281.044	2,720.938	503.112	4,490.016	35.799	36,046.051	52,245.076	68.99	NA	2,958.192	35.18%
2040	7,908.219	1,503.690	6,404.529	2,782.257	513.003	4,524.667	37.141	37,524.909	52,382.019	71.64	NA	3,024.858	35.18%
2041	8,091.786	1,557.473	6,534.313	2,846.839	523.398	4,548.302	38.534	39,170.228	52,515.634	74.59	NA	3,095.071	35.18%
2042	8,282.237	1,613.706	6,668.531	2,913.843	534.149	4,558.074	39.979	41,012.126	52,663.463	77.88	NA	3,167.918	35.18%
2043	8,477.863	1,672.472	6,805.390	2,982.668	545.112	4,558.896	41.478	43,077.184	52,838.435	81.53	NA	3,242.744	35.18%
2044	8,677.866	1,733.963	6,943.904	3,053.033	556.207	4,552.575	43.034	45,391.789	53,051.749	85.56	NA	3,319.245	35.18%
2045	8,880.566	1,797.793	7,082.773	3,124.346	567.330	4,541.646	44.647	47,981.016	53,312.240	90.00	NA	3,396.776	35.18%

¹ Payroll shown is pensionable pay. It does not include amounts in excess of the pay cap that is applicable to members hired on or after January 1, 2011, participating in the Traditional and Portable plans.

² Excludes SMP contributions.

**Development of Market and Actuarial Value of Assets as of June 30, 2012
After Bonds (Valuation Basis) and Before Bonds (Hypothetical Basis)**

	After Bonds (Valuation Basis)	Before Bonds (Hypothetical)	
1	Market Value at 6/30/2011	\$14,274,003,297	\$12,149,293,079
2a	Employer Contributions	985,814,621	1,089,049,126
2b	Member Contributions	258,236,014	258,236,014
2c	Benefits and Expenses	1,821,978,063	1,821,978,063
2d	Net Non-Investment Cash Flow	-577,927,428	-474,692,923
3	Investment Return (Based on Estimated Rate of 0.06%)	9,067,409	7,723,313
4	Expected Return (Based on Estimated Rate of 7.75%)	1,084,258,424	923,519,078
5	Market Value at 6/30/2012 (1+2d+3)	13,705,143,278	11,682,323,469
6	Expected Market Value at 6/30/2012 (1+2d+4)	14,780,334,293	12,598,119,234
7a	Actuarial Gain/(Loss) Current Year	-1,075,191,015	-915,795,765
7b	Actuarial Gain/(Loss) 1 Year Prior	1,886,355,421	1,598,970,107
7c	Actuarial Gain/(Loss) 2 Years Prior	739,584,759	622,380,585
7d	Actuarial Gain/(Loss) 3 Years Prior	-4,061,280,870	-3,409,515,486
7e	Actuarial Gain/(Loss) 4 Years Prior	0	0
8	Actuarial Value at 6/30/2011	13,945,680,452	11,860,494,837
9	Actuarial Value at 6/30/2012 (8+2d+4+.2*(7a+7b+7c+7d+7e))	13,949,905,108	11,888,528,880

**Before Impact of Bonds Issued in 2004 (Hypothetical to Determine Maximum Contribution)
Reflects Recognition of Deferred Asset Gains and Losses in Projected Actuarial Value of Assets
In Years After June 30, 2012 in the Development of the Future Statutory Contribution Requirements
\$ in Millions**

Fiscal	Total	SMP	DB	SURS	Member	Assets		Funding	Debt	SURS Contribution		
Year	Payroll ¹	Payroll	Payroll ¹	Contributions ²	Contributions	Benefits	Expenses	Ratio	Service	% of Total Payroll		
Ending						EOY		AAL				
2012	\$ 3,956.639	\$ 605.153	\$ 3,351.486	\$ 1,089.049	\$ 258.236	\$ 1,808.811	\$ 13.167	\$ 11,888.529	\$ 33,170.216	35.84 %	NA	27.52%
2013	4,185.092	641.573	3,543.519	1,533.038	283.836	1,967.713	13.746	12,202.274	34,429.839	35.44	NA	36.63%
2014	4,274.039	663.012	3,611.027	1,634.801	289.243	2,053.186	14.261	13,276.834	35,684.026	37.21	NA	38.25%
2015	4,371.759	686.809	3,684.950	1,702.632	295.164	2,159.268	14.796	14,255.848	36,921.346	38.61	NA	38.95%
2016	4,468.632	711.443	3,757.189	1,720.768	300.951	2,275.271	15.351	14,884.193	38,129.662	39.04	NA	38.51%
2017	4,577.435	736.419	3,841.016	1,753.144	307.665	2,396.837	15.927	15,672.379	39,301.578	39.88	NA	38.30%
2018	4,689.965	762.606	3,927.358	1,810.593	314.581	2,525.862	16.524	16,453.912	40,427.315	40.70	NA	38.61%
2019	4,806.414	789.927	4,016.487	1,855.549	321.721	2,657.432	17.144	17,212.873	41,501.696	41.48	NA	38.61%
2020	4,926.738	818.243	4,108.495	1,902.001	329.090	2,790.750	17.787	17,947.467	42,519.434	42.21	NA	38.61%
2021	5,050.799	846.021	4,204.778	1,949.896	336.803	2,920.636	18.454	18,661.196	43,480.579	42.92	NA	38.61%
2022	5,178.421	874.236	4,304.184	1,999.165	344.765	3,051.304	19.146	19,353.292	44,380.882	43.61	NA	38.61%
2023	5,309.713	903.217	4,406.496	2,049.851	352.960	3,175.539	19.864	20,030.441	45,223.334	44.29	NA	38.61%
2024	5,443.524	932.256	4,511.268	2,101.510	361.353	3,297.619	20.608	20,694.908	46,006.186	44.98	NA	38.61%
2025	5,580.208	961.237	4,618.971	2,154.278	369.980	3,416.176	21.381	21,350.733	46,729.044	45.69	NA	38.61%
2026	5,719.538	990.081	4,729.456	2,208.067	378.829	3,530.872	22.183	22,002.516	47,392.037	46.43	NA	38.61%
2027	5,861.660	1,018.712	4,842.948	2,262.934	387.920	3,640.230	23.015	22,656.823	47,996.868	47.20	NA	38.61%
2028	6,006.384	1,046.996	4,959.388	2,318.806	397.247	3,686.881	23.878	23,380.195	48,604.807	48.10	NA	38.61%
2029	6,152.479	1,075.092	5,077.387	2,375.207	406.699	3,785.724	24.773	24,124.454	49,162.306	49.07	NA	38.61%
2030	6,299.669	1,103.474	5,196.195	2,432.031	416.215	3,881.775	25.702	24,894.589	49,668.332	50.12	NA	38.61%
2031	6,448.976	1,133.803	5,315.173	2,489.672	425.745	3,975.431	26.666	25,695.916	50,121.136	51.27	NA	38.61%
2032	6,601.302	1,166.819	5,434.483	2,548.478	435.302	4,061.907	27.666	26,539.506	50,523.884	52.53	NA	38.61%
2033	6,757.369	1,201.850	5,555.518	2,608.729	444.997	4,141.670	28.704	27,437.207	50,880.180	53.93	NA	38.61%
2034	6,915.443	1,238.536	5,676.906	2,669.754	454.720	4,214.221	29.780	28,401.492	51,194.594	55.48	NA	38.61%
2035	7,074.734	1,276.812	5,797.922	2,731.250	464.414	4,281.120	30.897	29,443.803	51,469.882	57.21	NA	38.61%
2036	7,235.694	1,316.813	5,918.881	2,793.390	474.102	4,342.415	32.056	30,576.624	51,708.879	59.13	NA	38.61%
2037	7,398.207	1,358.894	6,039.313	2,856.129	483.749	4,397.565	33.258	31,813.882	51,915.247	61.28	NA	38.61%
2038	7,563.902	1,404.348	6,159.554	2,920.097	493.380	4,447.458	34.505	33,170.340	52,092.011	63.68	NA	38.61%
2039	7,733.927	1,452.883	6,281.044	2,985.736	503.112	4,490.016	35.799	34,664.642	52,245.076	66.35	NA	38.61%
2040	7,908.219	1,503.690	6,404.529	3,053.022	513.003	4,524.667	37.141	36,317.503	52,382.019	69.33	NA	38.61%
2041	8,091.786	1,557.473	6,534.313	3,123.890	523.398	4,548.302	38.534	38,156.833	52,515.634	72.66	NA	38.61%
2042	8,282.237	1,613.706	6,668.531	3,197.415	534.149	4,558.074	39.979	40,214.548	52,663.463	76.36	NA	38.61%
2043	8,477.863	1,672.472	6,805.390	3,272.937	545.112	4,558.896	41.478	42,519.101	52,838.435	80.47	NA	38.61%
2044	8,677.866	1,733.963	6,943.904	3,350.150	556.207	4,552.575	43.034	45,098.870	53,051.749	85.01	NA	38.61%
2045	8,880.566	1,797.793	7,082.773	3,428.404	567.330	4,541.646	44.647	47,981.016	53,312.240	90.00	NA	38.61%

¹ Payroll shown is pensionable pay. It does not include amounts in excess of the pay cap that is applicable to members hired on or after January 1, 2011, participating in the Traditional and Portable plans.

² Excludes SMP contributions.

**Before Impact of Bonds Issued in 2004 (Hypothetical to Determine Maximum Contribution)
Does Not Reflect Recognition of Deferred Asset Gains and Losses in Projected Actuarial Value of Assets
In Years After June 30, 2012 in the Development of the Future Statutory Contribution Requirements
Assume Return of 7.75% on Actuarial Value of Assets after June 30, 2012
\$ in Millions**

Fiscal												
Year	Total	SMP	DB	SURS	Member			Assets		Funding	Debt	SURS Contribution
Ending	Payroll ¹	Payroll	Payroll ¹	Contributions ²	Contributions	Benefits	Expenses	EOY	AAL	Ratio	Service	% of Total Payroll
2012	\$ 3,956.639	\$ 605.153	\$ 3,351.486	\$ 1,089.049	\$ 258.236	\$ 1,808.811	\$ 13.167	\$ 11,888.529	\$ 33,170.216	35.84 %	NA	27.52%
2013	4,185.092	641.573	3,543.519	1,533.038	283.836	1,967.713	13.746	12,639.047	34,429.839	36.71	NA	36.63%
2014	4,274.039	663.012	3,611.027	1,634.801	289.243	2,053.186	14.261	13,469.715	35,684.026	37.75	NA	38.25%
2015	4,371.759	686.809	3,684.950	1,672.178	295.164	2,159.268	14.796	14,299.036	36,921.346	38.73	NA	38.25%
2016	4,468.632	711.443	3,757.189	1,709.232	300.951	2,275.271	15.351	15,116.106	38,129.662	39.64	NA	38.25%
2017	4,577.435	736.419	3,841.016	1,750.848	307.665	2,396.837	15.927	15,919.883	39,301.578	40.51	NA	38.25%
2018	4,689.965	762.606	3,927.358	1,793.890	314.581	2,525.862	16.524	16,703.259	40,427.315	41.32	NA	38.25%
2019	4,806.414	789.927	4,016.487	1,838.432	321.721	2,657.432	17.144	17,463.776	41,501.696	42.08	NA	38.25%
2020	4,926.738	818.243	4,108.495	1,884.455	329.090	2,790.750	17.787	18,199.602	42,519.434	42.80	NA	38.25%
2021	5,050.799	846.021	4,204.778	1,931.908	336.803	2,920.636	18.454	18,914.199	43,480.579	43.50	NA	38.25%
2022	5,178.421	874.236	4,304.184	1,980.723	344.765	3,051.304	19.146	19,606.759	44,380.882	44.18	NA	38.25%
2023	5,309.713	903.217	4,406.496	2,030.941	352.960	3,175.539	19.864	20,283.923	45,223.334	44.85	NA	38.25%
2024	5,443.524	932.256	4,511.268	2,082.123	361.353	3,297.619	20.608	20,947.911	46,006.186	45.53	NA	38.25%
2025	5,580.208	961.237	4,618.971	2,134.404	369.980	3,416.176	21.381	21,602.714	46,729.044	46.23	NA	38.25%
2026	5,719.538	990.081	4,729.456	2,187.697	378.829	3,530.872	22.183	22,252.882	47,392.037	46.95	NA	38.25%
2027	5,861.660	1,018.712	4,842.948	2,242.058	387.920	3,640.230	23.015	22,904.921	47,996.868	47.72	NA	38.25%
2028	6,006.384	1,046.996	4,959.388	2,297.415	397.247	3,686.881	23.878	23,625.316	48,604.807	48.61	NA	38.25%
2029	6,152.479	1,075.092	5,077.387	2,353.295	406.699	3,785.724	24.773	24,365.828	49,162.306	49.56	NA	38.25%
2030	6,299.669	1,103.474	5,196.195	2,409.595	416.215	3,881.775	25.702	25,131.380	49,668.332	50.60	NA	38.25%
2031	6,448.976	1,133.803	5,315.173	2,466.704	425.745	3,975.431	26.666	25,927.218	50,121.136	51.73	NA	38.25%
2032	6,601.302	1,166.819	5,434.483	2,524.968	435.302	4,061.907	27.666	26,764.330	50,523.884	52.97	NA	38.25%
2033	6,757.369	1,201.850	5,555.518	2,584.663	444.997	4,141.670	28.704	27,654.474	50,880.180	54.35	NA	38.25%
2034	6,915.443	1,238.536	5,676.906	2,645.126	454.720	4,214.221	29.780	28,610.032	51,194.594	55.88	NA	38.25%
2035	7,074.734	1,276.812	5,797.922	2,706.054	464.414	4,281.120	30.897	29,642.350	51,469.882	57.59	NA	38.25%
2036	7,235.694	1,316.813	5,918.881	2,767.620	474.102	4,342.415	32.056	30,763.809	51,708.879	59.49	NA	38.25%
2037	7,398.207	1,358.894	6,039.313	2,829.781	483.749	4,397.565	33.258	31,988.224	51,915.247	61.62	NA	38.25%
2038	7,563.902	1,404.348	6,159.554	2,893.158	493.380	4,447.458	34.505	33,330.231	52,092.011	63.98	NA	38.25%
2039	7,733.927	1,452.883	6,281.044	2,958.192	503.112	4,490.016	35.799	34,808.333	52,245.076	66.63	NA	38.25%
2040	7,908.219	1,503.690	6,404.529	3,024.858	513.003	4,524.667	37.141	36,443.095	52,382.019	69.57	NA	38.25%
2041	8,091.786	1,557.473	6,534.313	3,095.071	523.398	4,548.302	38.534	38,262.244	52,515.634	72.86	NA	38.25%
2042	8,282.237	1,613.706	6,668.531	3,167.918	534.149	4,558.074	39.979	40,297.511	52,663.463	76.52	NA	38.25%
2043	8,477.863	1,672.472	6,805.390	3,242.744	545.112	4,558.896	41.478	42,577.152	52,838.435	80.58	NA	38.25%
2044	8,677.866	1,733.963	6,943.904	3,319.245	556.207	4,552.575	43.034	45,129.339	53,051.749	85.07	NA	38.25%
2045	8,880.566	1,797.793	7,082.773	3,396.776	567.330	4,541.646	44.647	47,981.016	53,312.240	90.00	NA	38.25%

¹ Payroll shown is pensionable pay. It does not include amounts in excess of the pay cap that is applicable to members hired on or after January 1, 2011, participating in the Traditional and Portable plans.

² Excludes SMP contributions.

Additional Projection Details
\$ in Millions

Fiscal Year Ending	Normal Cost ¹			Benefits				AAL				DB Payroll ²		
	Tier 1	Tier 2	Total	Current	Current Actives	Future	Total	Current	Current Actives	Future	Total	Tier 1	Tier 2	Total
				Retirees	& Inactives	Actives		Retirees	& Inactives	Actives				
2012	\$ 667.076	\$ 18.925	\$ 686.001	\$ 1,808.811	\$ 0.000	\$ 0.000	\$ 1,808.811	\$ 20,651.373	\$ 12,518.844	\$ 0.000	\$ 33,170.217	\$ 3,179.143	\$ 172.343	\$ 3,351.486
2013	641.135	42.641	683.776	1,789.011	178.701	0.000	1,967.712	20,393.519	14,024.694	11.627	34,429.840	3,097.768	445.751	3,543.519
2014	615.415	65.473	680.888	1,806.967	243.559	2.660	2,053.186	20,097.029	15,541.415	45.582	35,684.026	2,932.118	678.909	3,611.027
2015	590.002	88.038	678.040	1,821.676	328.288	9.304	2,159.268	19,762.284	17,059.574	99.488	36,921.346	2,777.802	907.148	3,684.950
2016	565.463	109.697	675.160	1,833.026	425.554	16.692	2,275.272	19,389.805	18,567.079	172.778	38,129.662	2,631.472	1,125.717	3,757.189
2017	541.760	131.312	673.072	1,841.106	528.917	26.814	2,396.837	18,980.066	20,057.811	263.702	39,301.579	2,504.388	1,336.628	3,841.016
2018	518.514	153.328	671.842	1,845.559	643.534	36.769	2,525.862	18,533.946	21,519.752	373.616	40,427.314	2,382.039	1,545.319	3,927.358
2019	495.490	175.788	671.278	1,846.197	762.558	48.677	2,657.432	18,052.590	22,946.812	502.295	41,501.697	2,263.463	1,753.024	4,016.487
2020	473.020	198.440	671.460	1,843.125	887.673	59.952	2,790.750	17,537.119	24,330.371	651.944	42,519.434	2,147.294	1,961.201	4,108.495
2021	451.496	221.326	672.822	1,835.964	1,012.457	72.215	2,920.636	16,989.139	25,667.967	823.473	43,480.579	2,036.489	2,168.289	4,204.778
2022	430.656	244.333	674.989	1,824.631	1,141.706	84.967	3,051.304	16,410.462	26,952.247	1,018.174	44,380.883	1,929.640	2,374.544	4,304.184
2023	410.172	267.526	677.698	1,808.958	1,275.597	90.983	3,175.538	15,803.217	28,174.976	1,245.141	45,223.334	1,826.289	2,580.207	4,406.496
2024	390.014	290.911	680.925	1,788.780	1,411.608	97.231	3,297.619	15,169.872	29,329.678	1,506.637	46,006.187	1,724.602	2,786.666	4,511.268
2025	370.379	314.473	684.852	1,764.044	1,547.685	104.447	3,416.176	14,513.136	30,411.430	1,804.478	46,729.044	1,626.044	2,992.927	4,618.971
2026	351.181	338.304	689.485	1,734.590	1,683.674	112.608	3,530.872	13,836.099	31,415.276	2,140.663	47,392.038	1,530.049	3,199.407	4,729.456
2027	332.345	362.493	694.838	1,700.448	1,818.246	121.537	3,640.231	13,142.056	32,337.163	2,517.649	47,996.868	1,436.789	3,406.159	4,842.948
2028	313.494	387.022	700.516	1,661.568	1,894.147	131.166	3,686.881	12,434.612	33,232.076	2,938.119	48,604.807	1,345.688	3,613.700	4,959.388
2029	294.184	411.975	706.159	1,617.919	2,025.768	142.037	3,785.724	11,717.680	34,040.123	3,404.503	49,162.306	1,255.104	3,822.283	5,077.387
2030	274.161	437.407	711.568	1,569.561	2,158.048	154.166	3,881.775	10,995.420	34,753.436	3,919.476	49,668.332	1,164.228	4,031.967	5,196.195
2031	253.576	463.312	716.888	1,516.612	2,291.203	167.615	3,975.430	10,272.183	35,363.058	4,485.895	50,121.136	1,072.811	4,242.362	5,315.173
2032	233.166	489.567	722.733	1,459.290	2,420.217	182.400	4,061.907	9,552.440	35,864.680	5,106.764	50,523.884	982.087	4,452.396	5,434.483
2033	213.111	516.082	729.193	1,397.868	2,544.989	198.814	4,141.671	8,840.719	36,254.523	5,784.939	50,880.181	894.933	4,660.585	5,555.518
2034	192.781	542.977	735.758	1,332.688	2,664.611	216.921	4,214.220	8,141.545	36,529.641	6,523.408	51,194.594	809.256	4,867.650	5,676.906
2035	172.114	570.319	742.433	1,264.206	2,780.019	236.895	4,281.120	7,459.320	36,685.251	7,325.311	51,469.882	723.503	5,074.419	5,797.922
2036	151.225	597.955	749.180	1,192.968	2,890.519	258.928	4,342.415	6,798.222	36,716.853	8,193.805	51,708.880	639.351	5,279.530	5,918.881
2037	130.151	625.907	756.058	1,119.567	2,994.683	283.315	4,397.565	6,162.134	36,621.146	9,131.967	51,915.247	556.022	5,483.291	6,039.313
2038	109.482	654.083	763.565	1,044.617	3,092.566	310.275	4,447.458	5,554.603	36,394.536	10,142.872	52,092.011	474.656	5,684.898	6,159.554
2039	89.908	682.369	772.277	968.883	3,181.076	340.056	4,490.015	4,978.657	36,036.961	11,229.459	52,245.077	397.826	5,883.218	6,281.044
2040	73.020	710.629	783.649	893.089	3,258.574	373.004	4,524.667	4,436.807	35,550.787	12,394.424	52,382.018	327.112	6,077.417	6,404.529
2041	59.704	738.535	798.239	817.966	3,320.745	409.591	4,548.302	3,930.998	34,944.709	13,639.927	52,515.634	270.220	6,264.093	6,534.313
2042	49.070	766.101	815.171	744.263	3,363.580	450.231	4,558.074	3,462.547	34,233.216	14,967.701	52,663.464	223.766	6,444.765	6,668.531
2043	40.431	793.317	833.748	672.688	3,390.828	495.380	4,558.896	3,032.139	33,427.067	16,379.230	52,838.436	185.600	6,619.790	6,805.390
2044	33.219	820.151	853.370	603.879	3,403.184	545.511	4,552.574	2,639.850	32,536.271	17,875.628	53,051.749	153.480	6,790.424	6,943.904
2045	27.127	846.562	873.689	538.387	3,401.835	601.425	4,541.647	2,285.190	31,569.733	19,457.317	53,312.240	126.002	6,956.771	7,082.773

¹ Normal Cost excludes expense portion and is for the following fiscal year.

² Payroll shown is pensionable pay at the valuation date. It does not include amounts in excess of the pay cap that is applicable to members hired on or after January 1, 2011, participating in the Traditional and Portable plans.