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OFFICE OF THE AUDITOR GENERAL  
 FRANK J. MAUTINO

**SUPPLEMENTAL DIGEST TO RETIREMENT SYSTEMS' AUDITS**

For the years ending June 30, 2017, and June 30, 2016

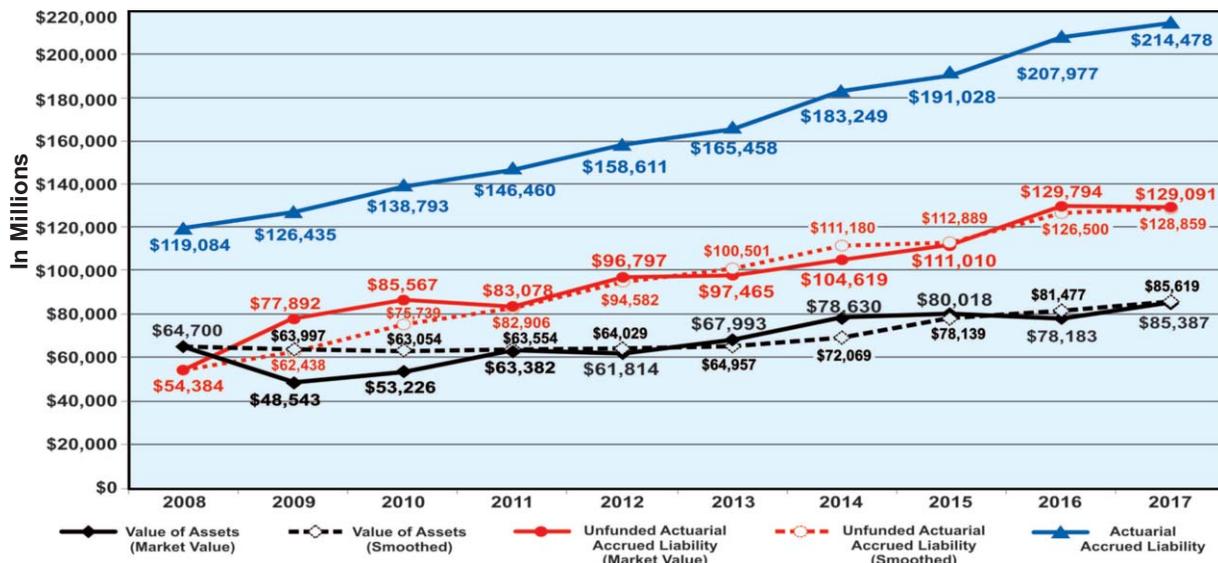
According to figures provided by the retirement systems for statutory funding purposes, the cumulative unfunded actuarial accrued liability increased \$2.4 billion to \$128.9 billion during FY17 when using the "smoothed" valuation of assets. This method "smooths" actuarial gains or losses incurred during a fiscal year in equal amounts over a five year period. When using the market value of assets, the cumulative unfunded actuarial accrued liability decreased \$0.7 billion during FY17 to \$129.1 billion. The cumulative funded ratio increased from 37.6% to 39.8% in FY17 when using the market value of assets and increased 0.7% to 39.9% when using the "smoothed" valuation of assets.

**Table No. 1 Unfunded Actuarial Accrued Liability and Funded Ratio for Statutory Funding**  
 For the Fiscal Years Ending June 30, 2016 and 2017 (in millions)

RETIREMENT SYSTEM	(a)	(b)	(c)	(d)	(e)	(f)	(a) - (c)	(b) - (d)	(a) - (e)	(b) - (f)	Funded Ratio <sup>(2)</sup>			
	Actuarial Accrued Liability		Actuarial Value of Assets - Smoothed		Net Assets at Market Value <sup>(1)</sup>		Unfunded Actuarial Accrued Liability - Smoothed		Unfunded Actuarial Accrued Liability - Market Value		Smoothed		Market Value	
	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017
Teachers'	\$ 118,630	\$ 122,904	\$ 47,222	\$ 49,468	\$ 45,251	\$ 49,376	\$ 71,408	\$ 73,436	\$ 73,379	\$ 73,528	39.8%	40.2%	38.1%	40.2%
State Universities	40,923	41,853	17,701	18,594	17,005	18,485	23,222	23,259	23,918	23,368	43.3%	44.4%	41.6%	44.2%
State Employees'	45,515	46,701	15,632	16,559	15,038	16,530	29,883	30,142	30,477	30,171	34.3%	35.5%	33.0%	35.4%
Judges'	2,546	2,649	871	943	840	942	1,675	1,706	1,706	1,707	34.2%	35.6%	33.0%	35.6%
General Assembly	363	371	51	55	49	54	312	316	314	317	14.0%	14.8%	13.5%	14.6%
<b>TOTAL</b>	<b>\$207,977</b>	<b>\$214,478</b>	<b>\$81,477</b>	<b>\$85,619</b>	<b>\$78,183</b>	<b>\$85,387</b>	<b>\$126,500</b>	<b>\$128,859</b>	<b>\$129,794</b>	<b>\$129,091</b>	<b>39.2%</b>	<b>39.9%</b>	<b>37.6%</b>	<b>39.8%</b>

<sup>(1)</sup> State Universities Retirement System's Net Assets at market value only include that portion of the Net Assets applicable to the defined benefit plan.  
<sup>(2)</sup> Some percentages may differ from amounts reported by the retirement systems when computing for this table because of rounding.

**Table No. 2 Ten Year Historical Trend**  
 For the Fiscal Years Ending June 30, 2008 through June 30, 2017



Source: Information derived from the current and previous Supplemental Digests to Retirement Systems' Audits and Retirement Systems' actuarial valuation reports.

Table No. 3

## Appropriations, Required State Contributions and Debt Service Payments for Pensions (in millions)

Retirement System	FY 2016		FY 2017		FY 2018 <sup>(1)</sup>		FY 2019 <sup>(2)</sup>	
	Increase (Decrease) from previous year	Total Appropriation & Debt Service	Increase (Decrease) from previous year	Required State Contribution & Debt Service	Increase (Decrease) from previous year	Required State Contribution & Debt Service	Increase (Decrease) from previous year	Total Appropriation & Debt Service
Teachers <sup>(3)</sup>	\$ 364.8	\$ 3,742.5	\$ 243.9	\$ 3,986.4	\$ 108.9	\$ 4,095.3	\$ 370.9	\$ 4,466.2
State Universities	57.3	1,601.5	69.9	1,671.4	(42.1)	1,629.3	25.9	1,655.2
State Employees'	77.9	1,882.2	(83.9)	1,798.3	231.3	2,029.6	136.2	2,165.8
Judges'	(1.9)	132.1	(0.8)	131.3	4.3	135.6	4.9	140.5
General Assembly	0.2	16.1	5.6	21.7	(0.5)	21.2	2.0	23.2
<b>REQUIRED STATE CONTRIBUTION</b>	<b>\$ 498.3</b>	<b>\$ 7,374.4</b>	<b>\$ 234.7</b>	<b>\$ 7,609.1</b>	<b>\$ 301.9</b>	<b>\$ 7,911.0</b>	<b>\$ 539.9</b>	<b>\$ 8,450.9</b>
<b>Debt Service Payments</b>								
<b>G.O. Bonds:</b>								
Pension Series, 06/03 <sup>(5)</sup>	\$ (4.1)	\$ 574.5	\$ 20.7	\$ 595.2	\$ 19.5	\$ 614.7	\$ 18.5	\$ 633.2
Taxable Series, 01/10 <sup>(6)</sup>	(723.8)	—	—	—	—	—	—	—
Taxable Series, 02/11 <sup>(7)</sup>	286.4	781.9	270.3	1,052.2	(48.3)	1,003.9	(51.0)	952.9
<b>TOTAL DEBT SERVICE<sup>(8)</sup></b>	<b>\$ (441.5)</b>	<b>\$ 1,356.4<sup>(4)</sup></b>	<b>\$ 291.0</b>	<b>\$ 1,647.4<sup>(4)</sup></b>	<b>\$ (28.8)</b>	<b>\$ 1,618.6<sup>(4)</sup></b>	<b>\$ (32.5)</b>	<b>\$ 1,586.1</b>
<b>TOTAL REQUIRED STATE CONTRIBUTION AND DEBT SERVICE</b>	<b>\$ 56.8</b>	<b>\$ 8,730.8</b>	<b>\$ 525.7</b>	<b>\$ 9,256.5</b>	<b>\$ 273.1</b>	<b>\$ 9,529.6</b>	<b>\$ 507.4</b>	<b>\$ 10,037.0</b>

(1) Unaudited; Required State Contribution amounts obtained from each State retirement system's annual actuarial valuation as of June 30, 2016, as recalculated in accordance with PA 100-0023.  
(2) Unaudited; Required State Contribution amounts obtained from each State retirement system's annual actuarial valuation as of June 30, 2017.  
(3) Includes General Revenue Fund reimbursements appropriated for minimum benefits paid under 40 ILCS 5/16-186.3 that are not part of the continuing appropriation.  
(4) Unaudited, summary of debt service payments.  
(5) Pursuant to the Pension Code, the effect of the allocation of the net proceeds and the State's debt service payments on the \$10.0 billion 2003 Pension Funding Series/June 2003 bonds are taken into consideration in computing the Required State Contribution.  
(6) \$3.466 billion of the FY2010 obligation owed to the retirement systems were provided by the State issuing General Obligation bonds. The debt service associated with these bonds does not affect the computation of the Required State Contribution. Debt service payments began in FY2011 and ran through FY2015.  
(7) The State issued \$3.7 billion in General Obligation bonds, Taxable Series/February 2011 to fund or reimburse a portion of the FY2011 obligation owed to the retirement systems. The debt service associated with these bonds does not affect the computation of the Required State Contribution.  
(8) Debt service is the obligation of the State of Illinois. FY2016 debt service includes \$700.0 million in principal payments. FY2017 debt service includes \$1,025.0 million in principal payments. FY2018 debt service includes \$1,050.0 million in principal payments. FY2019 debt service includes \$1,075.0 million in principal payments.

Table No. 4

## Required State Contributions and Debt Service for the Years Ended June 30 (unaudited) (in millions)

Retirement System	FY 2018 <sup>(1)</sup>	FY 2019 <sup>(2)</sup>	FY 2020 <sup>(2)</sup>	FY 2021 <sup>(2)</sup>	FY 2022 <sup>(2)</sup>	FY 2023 <sup>(2)</sup>
Teachers'	\$ 4,095.3	\$ 4,466.2	\$ 4,791.0	\$ 5,062.1	\$ 5,303.2	\$ 5,410.2
State Universities	1,629.3	1,655.2	1,740.6	1,824.9	1,861.0	1,891.3
State Employees'	2,029.6	2,165.8	2,311.2	2,432.8	2,552.5	2,592.6
Judges'	135.6	140.5	143.3	147.2	150.9	150.8
General Assembly	21.2	23.2	24.6	26.0	26.4	25.9
<b>REQUIRED STATE CONTRIBUTION</b>	<b>\$ 7,911.0</b>	<b>\$ 8,450.9</b>	<b>\$ 9,010.7</b>	<b>\$ 9,493.0</b>	<b>\$ 9,894.0</b>	<b>\$ 10,070.8</b>
<b>Debt Service Payments</b>						
<b>G.O. Bonds:</b>						
Pension Series, 06/03 <sup>(3)</sup>	\$ 614.7	\$ 633.2	\$ 674.6	\$ 713.4	\$ 749.8	\$ 783.7
Taxable Series, 02/11 <sup>(4)</sup>	1,003.9	952.9	—	—	—	—
<b>TOTAL DEBT SERVICE<sup>(5)</sup></b>	<b>\$ 1,618.6</b>	<b>\$ 1,586.1</b>	<b>\$ 674.6</b>	<b>\$ 713.4</b>	<b>\$ 749.8</b>	<b>\$ 783.7</b>
<b>TOTAL REQUIRED STATE CONTRIBUTION AND DEBT SERVICE</b>	<b>\$ 9,529.6</b>	<b>\$ 10,037.0</b>	<b>\$ 9,685.3</b>	<b>\$ 10,206.4</b>	<b>\$ 10,643.8</b>	<b>\$ 10,854.5</b>

(1) Required State Contribution amounts obtained from each State retirement system's annual actuarial valuation as of June 30, 2016, as recalculated in accordance with PA 100-0023.  
(2) Required State Contribution amounts obtained from each State retirement system's annual actuarial valuation as of June 30, 2017.  
(3) Pursuant to the Pension Code, the effect of the allocation of the net proceeds and the State's debt service payments on the \$10.0 billion 2003 Pension Funding Series/June 2003 bonds are taken into consideration in computing the Required State Contribution. Debt service payments began in FY2004 and are scheduled to run through FY2033.  
(4) The State issued \$3.7 billion in General Obligation bonds, Taxable Series/February 2011 to fund or reimburse a portion of the FY2011 obligation owed to the retirement systems. The debt service associated with these bonds does not affect the computation of the Required State Contribution. Debt service payments began in FY2012 and are scheduled to run through FY2019.  
(5) Debt service is the obligation of the State of Illinois.

**Table No. 5 Ten Year Comparison of Contributions Received by the Systems to Annual Actuarial Determined Contributions**  
 Combined Teachers', State Universities, State Employees', Judges' and General Assembly (in millions)

Fiscal Year Ending June 30	Contributions Received by Systems <sup>(1)</sup>	Actuarial Determined Contributions <sup>(2)(3)</sup>	Contributions per GASB Statement #25 <sup>(2)(4)</sup>	Difference
2017	\$ 7,736.3	\$ 10,422.9	\$ –	\$ (2,686.6)
2016	7,501.9	8,551.8	–	(1,049.9)
2015	7,004.4	7,928.7	–	(924.3)
2014	6,937.7	7,751.5	–	(813.8)
2013	5,893.9	–	7,015.2	(1,121.3)
2012	5,009.9	–	6,612.4	(1,602.5)
2011	4,299.3	–	5,399.8	(1,100.5)
2010	4,130.8	–	4,761.5	(630.7)
2009	2,897.0	–	4,076.5	(1,179.5)
2008	2,156.2	–	3,729.2	(1,573.0)
<b>TOTAL</b>	<b>\$ 53,567.4</b>	<b>\$ 34,654.9</b>	<b>\$ 31,594.6</b>	<b>\$ (12,682.1)</b>

Notes:

(1) Summarized per retirement systems' annual financial statements. Annual amounts for this table include, as applicable, payments for: ERO contributions, federal and trust funds, excess salary contributions, and 2.2 benefit formula contributions. These items are taken into consideration in determining the retirement systems' overall total pension liability. For State Universities, contributions received by the system only include that portion applicable to the defined benefit plan. Because of including or excluding the noted items, the annual amounts in this table will not agree with the "Total Appropriation & Debt Service, Required State Contribution" in Table No. 3 on page 2 of this digest.

(2) Summarized per retirement systems' annual actuarial valuations.

(3) The Actuarial Determined Contribution is a target or recommended contribution determined in conformity with Actuarial Standards of Practice, based on each system's actuarial assumptions for the period reported.

(4) The Governmental Accounting Standards Board (GASB) issued Statement 25, which required the computation of the annual required contribution for the year, calculated in accordance with each system's actuarial assumptions. The annual required contribution includes the employer's normal cost and a provision for amortizing the total unfunded actuarial liability, for a term of not more than 30 years. GASB issued Statement 67: *Financial Reporting for Pension Plans - An Amendment of GASB Statement No. 25*, effective for fiscal year 2014. GASB Statement 67 removed the requirement for computing an annual required contribution as set forth in GASB Statement 25, and now requires an actuarial determined contribution as defined in Note (3).

## TIMELINE OF SIGNIFICANT CHANGES TO PENSION LAWS

<u>Effective Date</u>	<u>Public Act Number/Summary of Change</u>
August 22, 1994	P.A. 88-0593: Created a 50-year funding plan designated to increase pension funding incrementally until a 90% funding level is achieved; established continuing appropriation mechanism for payment of State contributions.
June 25, 2002	P.A. 92-0566: Provided an early retirement incentive (ERI) for SERS participants retiring before 12/31/02 (4/30/03 in some cases).
April 7, 2003	P.A. 93-0002: Authorized the State to issue \$10 billion in general obligation bonds; bonds were issued 6/12/03; \$2.7 billion of the proceeds were used to pay part of FY2003 and all of FY2004 Required State Contributions, bond issuance costs and first year's interest on the bonds; balance of \$7.3 billion was allocated to the retirement systems.  Commencing with FY 2005, the maximum Required State Contribution to the systems equals the contribution that would have been required under the 50-year funding plan (P.A. 88-0593), if the general obligation bond contribution had not been made, reduced – but not below zero – by the State's debt service on the pension bonds (series June, 2003).
July 30, 2004	P.A. 93-0839: Changed the measurement and calculation of liabilities due to the ERI (see P.A. 92-0566); funding spread over a 12-year period.
June 1, 2005	P.A. 94-0004: Suspended payments required under P.A. 88-0593 for FY2006 and FY2007. Instead, fixed specific amounts for FY2006 and FY2007 contributions to retirement systems; ramps up contributions in FY2008 through FY2010 so that, by FY2011, contributions will be at an amount sufficient to meet the 90% funding level specified in P.A. 88-0593 by FY2045; beginning in FY2008, changes funding mechanism for ERI (eliminates 12 year funding mechanism provided in P.A. 93-0839).

(continued)

- July 15, 2009 P.A. 96-0043: Changed the measurement of the value of the systems' actuarial assets beginning in FY2009 from the market value to a smoothed value, where any actuarial gains or losses from investment return incurred in a fiscal year shall be recognized in equal amounts over a 5-year period.
- Bonds in the amount of \$3.466 billion were authorized by this Act to be used for the purpose of making a portion of the State's FY2010 required contributions to the retirement systems.
- April 14, 2010 P.A. 96-0889: Created a "second tier" of benefits for future members of the retirement systems hired after December 31, 2010. Some of the changes included raising the eligibility for normal benefits to age 67 with 10 years of service, limiting the final average compensation used to compute retirement benefits and increasing the number of months used to calculate the final average compensation.
- January 1, 2011 P.A. 96-1490: Clarified provisions set forth in P.A. 96-0889.
- January 14, 2011 P.A. 96-1497: Authorized the issuance of bonds in the amount of \$4.096 billion to be used for the purpose of making a portion of the State's FY2011 required contributions to the retirement systems.
- January 27, 2011 P.A. 96-1511: Required the State retirement systems to recalculate and recertify to the Governor the amount of the Required State Contribution for FY2011 on or before April 1, 2011, applying the changes made by P.A. 96-0889 to the retirement systems assets and liabilities as of June 30, 2009, as though P.A. 96-0889 was approved on that date.
- June 18, 2012 P.A. 97-0694: Directed the Auditor General to contract with or hire an actuary to serve as the State Actuary. In addition, the Act requires each State retirement system's Board of Trustees (Board) to submit to the State Actuary, the Governor and the General Assembly a proposed certification of the amount of the required State contribution to the Systems by November 1 of each year. On or before January 1 of each year the State Actuary shall issue a preliminary report concerning the proposed certification identifying, if necessary, recommended changes in actuarial assumptions that each State retirement system's Board must consider before finalizing its certification of the required State contributions. On or before January 15 of each year each State retirement system's Board shall certify to the Governor and the General Assembly the amount of the required State contribution for the next fiscal year. The Board's certification must note any deviation from the State Actuary's recommended changes, the reason or reasons for not following the State Actuary's recommended changes, and the fiscal impact of not following the State Actuary's recommended changes on the required State contribution.
- July 1, 2013 In June 2012, the Governmental Accounting Standards Board (GASB) approved a pair of related Statements that substantially changes the accounting and financial reporting of pensions by state and local governments and pension plans. GASB Statement No. 67, effective July 1, 2013, *Financial Reporting for Pension Plans*, addresses financial reporting for state and local government pension plans. GASB Statement No. 68, effective July 1, 2014, *Accounting and Financial Reporting for Pensions*, establishes new accounting and financial reporting requirements for governments that provide their employees with pensions. The guidance contained in these GASB Statements changed how governments calculate and report costs and obligations associated with pensions. The new GASB Statements relate to accounting and financial reporting issues only; the Statements do not address how governments approach pension plan funding.
- December 5, 2013 P.A. 98-599: The Act was signed by the Governor on December 5, 2013. The Act amended the Illinois Pension Code, with an effective date no earlier than June 1, 2014. The Act applied to all active, inactive and retired Tier I members (service before January, 2011). Tier II members were not affected.
- The Act's goal was to stabilize certain retirement systems' (Teachers' Retirement System, State Employees' Retirement System, State Universities Retirement System and General Assembly Retirement System) finances and eliminate each of the noted retirement systems' unfunded liability by 2045. The Act reduced the annual pension adjustments for current and future retirees and required the skipping of a certain number of the annual pension adjustments for employees retiring on or after July 1, 2014. The number of annual adjustments to be skipped was to be based on the employee's age at the time the Act became effective.
- In addition, the Act capped the pensionable salary amount, increased the retirement age on a graduated scale and created funding guarantees requiring the State to make applicable contributions. The Act also reduced the employee contribution toward retirement benefits by one percentage point.

*(continued)*

- May 8, 2015 On November 21, 2014, the Illinois 7th Judicial Circuit Court ruled that P.A. 98-599 was unconstitutional and void in its entirety. The State filed an appeal of the ruling directly to the State Supreme Court. On May 8, 2015, the Supreme Court affirmed the Circuit Court ruling that the law violated the pension protection clause of the Illinois Constitution and declared the law invalid.
- July 6, 2017 P.A. 100-0023: Created a third tier (Tier 3) of benefits for new members in SURS, excluding members who choose to participate in a self-managed plan; TRS; and for non-covered members of SERS hired after the implementation date. Non-covered members in SERS are those members who do not participate in the social security system. The effective date of this change is the "implementation date," which will be determined by each System's Board. The Tier 3 benefit is a hybrid plan that combines a reduced defined benefit plan with a defined contribution plan. The defined benefit plan reduces the benefit to 1.25% per service year compared to 2.2% for Tier 2. Annual retirement annuity increases are one-half of the increase in the consumer price index-w. New members in these Systems, not otherwise excluded, will automatically be enrolled in the Tier 3 hybrid plan unless they elect to participate in Tier 2. Current members in Tier 2 can also elect to convert to the Tier 3 hybrid plan.
- Tier 3 hybrid plan contributions: For the defined contribution portion of the hybrid plan employees will contribute a minimum of 4% of their salaries, and after one year of service, employers will contribute between 2%-6% of their salaries. For the defined benefit portion of the hybrid plan, the State will contribute 2% of the total payroll of new employees to the Systems for fiscal years 2018 through 2020. Beginning in fiscal year 2021, employers are responsible for this 2% contribution. Also beginning in fiscal year 2018, employees contribute the lesser of 6.2% or the defined benefit normal cost percentage of payroll to the System, and the employers are required to pay the defined benefit normal cost percentage of payroll to the Systems if it exceeds the maximum 6.2% employee contribution. Employers also must pay the normal cost percentage for the portion of any participant's salary that exceeds the salary of the governor, and the amount required to amortize any unfunded actuarial accrued liability determined as a level percentage of payroll over a 30-year rolling amortization period.
- In addition, the Act directs all five State Retirement Systems to smooth the effects of changes in assumptions on the State's contribution by amortizing the effect of the changes over a five-year period retroactive to 2014. The effect of this change applies beginning in fiscal year 2018 and thereafter. The Act also requires each of the five Systems to recalculate their fiscal year 2018 State contribution and report the recalculated State contribution calculation to the State Actuary by November 1, 2017, with final certification by the Boards to follow.
- August 25, 2017 P.A. 100-0340: Beginning July 1, 2017, payments by employers participating in the Teachers' Retirement System (TRS) from special trust and federal funds will be limited to the rate equal to the employer's normal cost. In previous fiscal years, TRS employers were also required to pay a portion of the unfunded liability each fiscal year.