Teachers' Retirement System of the State of Illinois

SB 1 as amended May 1, 2013 (House Amendments 1 & 3)

Comparison of Contributions and Actuarial Accrued Liability

($ Amounts in Billions)

	A					B					C					D				
	Current Law					Funding Provisions					Pension Stabilization Fund Provisions					Funding and Benefit Provisions				
	Results of the June 30, 2012 Actuarial Valuation					**Entry Age Normal Cost puts TRS in actuarial mainstream**					**Supplemental Contributions after FY2019 reduce subsequent regular State/Fed contributions**					**For all active and retired Tier 1 and Tier 2 members**				
	90% Funded Ratio by end of FY 2045 based on Illinois Math					*100% Funded Ratio by end of FY 2044based on Actuarial Math*					*PSF contributions provide for financing savings and TRS stability*					*Changes to COLA, Reportable Salary, Member Contributions and Retirement Eligibility*				
	Contributions					Contributions					Contributions					Contributions				
Year Ended June 30	Member	School District	Federal Funds	State	Total	Member	School District	Federal Funds	State	Total	Member	School District	Federal Funds	State	Total	Member	School District	Federal Funds	State	Total
2014	$ 1.00	$ 0.12	$ 0.10	$ 3.44	$ 4.66	$ 1.00	$ 0.12	$ 0.11	$ 3.44	$ 4.67	$ 1.00	$ 0.12	$ 0.11	$ 3.44	$ 4.67	$ 1.09	$ 0.12	$ 0.10	$ 3.44	$ 4.75
2015	1.03	0.13	0.10	3.55	4.81	1.03	0.13	0.11	3.91	5.18	1.03	0.13	0.11	3.91	5.18	1.21	0.13	0.07	2.47	3.88
2016	1.06	0.13	0.10	3.68	4.97	1.06	0.13	0.12	4.09	5.40	1.06	0.13	0.12	4.09	5.40	1.23	0.13	0.07	2.54	3.97
2017	1.10	0.14	0.11	3.85	5.20	1.10	0.14	0.12	4.23	5.59	1.10	0.14	0.12	4.23	5.59	1.27	0.14	0.07	2.62	4.10
2018	1.15	0.15	0.11	4.00	5.41	1.15	0.15	0.12	4.35	5.77	1.15	0.15	0.12	4.35	5.77	1.31	0.15	0.08	2.69	4.23
2023	1.39	0.20	0.14	4.85	6.58	1.39	0.20	0.14	5.04	6.77	1.39	0.20	0.14	5.50	7.23	1.50	0.20	0.08	2.94	4.72
2028	1.72	0.28	0.17	5.87	8.04	1.72	0.28	0.16	5.73	7.89	1.72	0.28	0.15	5.91	8.06	1.74	0.28	0.08	2.91	5.01
2033	2.04	0.36	0.20	6.90	9.50	2.04	0.36	0.18	6.31	8.89	2.04	0.36	0.16	6.07	8.63	1.97	0.36	0.08	2.77	5.18
2038	2.29	0.38	0.25	8.75	11.67	2.29	0.38	0.19	6.58	9.44	2.29	0.38	0.15	5.75	8.57	2.20	0.38	0.07	2.32	4.97
2045	2.41	0.16	0.28	9.75	12.60	2.41	0.16	0.00	0.00	2.57	2.41	0.16	0.00	0.00	2.57	2.39	0.16	0.00	0.00	2.55
Total	56.92	8.16	5.89	207.94	278.91	56.92	8.16	4.94	173.42	243.44	56.92	8.16	4.25	162.41	231.74	57.67	8.16	2.16	77.20	145.19
June 30, 2012 Pension Benefit Obligation					90.02					94.13					94.13					79.38

Amount of CHANGE from Current Law	A					B Member	B School District	B Federal Funds	B State	B Total	C Member	C School District	C Federal Funds	C State	C Total	D Member	D School District	D Federal Funds	D State	D Total
2014						0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.01	0.00	0.01	0.09	0.00	0.00	0.00	0.09
2015						0.00	0.00	0.01	0.36	0.37	0.00	0.00	0.01	0.36	0.37	0.18	0.00	(0.03)	(1.08)	(0.93)
2016						0.00	0.00	0.02	0.41	0.43	0.00	0.00	0.02	0.41	0.43	0.17	0.00	(0.03)	(1.14)	(1.00)
2017						0.00	0.00	0.01	0.38	0.39	0.00	0.00	0.01	0.38	0.39	0.17	0.00	(0.04)	(1.23)	(1.10)
2018						0.00	0.00	0.01	0.35	0.36	0.00	0.00	0.01	0.35	0.36	0.16	0.00	(0.03)	(1.31)	(1.18)
2023						0.00	0.00	0.00	0.19	0.19	0.00	0.00	0.00	0.65	0.65	0.11	0.00	(0.06)	(1.91)	(1.86)
2028						0.00	0.00	(0.01)	(0.14)	(0.15)	0.00	0.00	(0.02)	0.04	0.02	0.02	0.00	(0.09)	(2.96)	(3.03)
2033						0.00	0.00	(0.02)	(0.59)	(0.61)	0.00	0.00	(0.04)	(0.83)	(0.87)	(0.07)	0.00	(0.12)	(4.13)	(4.32)
2038						0.00	0.00	(0.06)	(2.17)	(2.23)	0.00	0.00	(0.10)	(3.00)	(3.10)	(0.09)	0.00	(0.18)	(6.43)	(6.70)
2045						0.00	0.00	(0.28)	(9.75)	(10.03)	0.00	0.00	(0.28)	(9.75)	(10.03)	(0.02)	0.00	(0.28)	(9.75)	(10.05)
Total						0.00	0.00	(0.95)	(34.52)	(35.47)	0.00	0.00	(1.64)	(45.53)	(47.17)	0.75	0.00	(3.73)	(130.74)	(133.72)
June 30, 2012 Pension Benefit Obligation										4.11					4.11					(10.64)
State Contribution Savings:	Total state contributions required to achieve 90% funding in FY 2045 under Illinois math are $207.94 billion.					The change to Actuarial Math from Illinois Math results in earlier contributions, reducing state financing charges. Technically, state contribution savings are $34.52 billion. The total financial benefit is $61.45 billion, the sum of the finance savings of $34.52 billion and the additional TRS assets of $26.93 billion in 2045.					The change in cost method, actuarial funding, and additional financing savings due to supplemental contributions reduce state contributions by a total of $45.53 billion. This is $11.01 billion in additional savings between Columns B and C. The supplemental contribution payments do not need to be subtracted from the $45.53 billion above.					The total effect of all changes under SB 1 is to reduce state contributions by $130.74 billion. This is $85.21 billion in additional savings between Columns C and D due to benefit reductions and member contribution increases.				

Refer to Side 2 of this exhibit for important information regarding this analysis

Teachers' Retirement System of the State of Illinois

SB 1 as amended May 1, 2013 (House Amendments 1 & 3)

Provisions Valued and Commentary

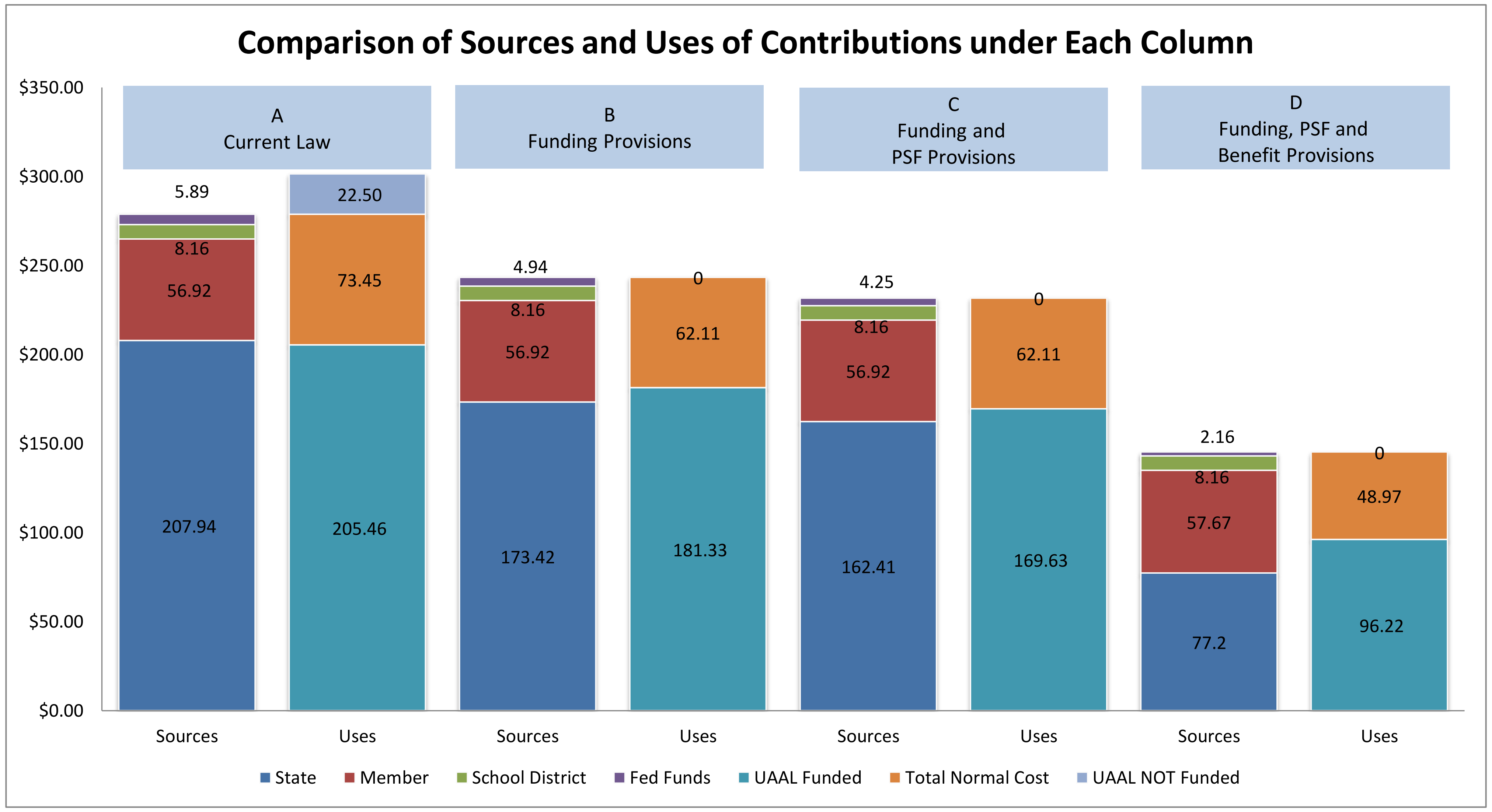
A	B	C	D
Current Law	Funding Provisions	Pension Stabilization Fund Provisions	Funding and Benefit Provisions
Orientation to Exhibit: **Exhibit reflects all provisions of SB 1**. Column A is based on the results of the June 30, 2012 Actuarial Valuation and reflects Illinois Pension math of 90% funded by 2045. Column B reflects Actuarial Math of 100% funded by the end of FY 2044 based on the entry age normal cost method and level percent of payroll funding. (This interpretation of legislative intent is based on legislative debate and the HA-3 preamble; Section 16-158 of the amendment contains slightly inconsistent language.) Column C reflects supplemental contributions being made after the pension obligation bonds are paid off. Column D reflects proposed plan changes in combination with the funding provsions from Column C. The top half of the exhibit contains a projection of contributions and pension benefit obligations; the bottom half contains a projection of the *difference* in contributions and pension benefit obligation from Column A. Assumptions are those used for the June 30, 2012 actuarial valuation unless otherwise noted. ERO is assumed to continue so differences between baseline and scenarios can be seen	**Actuarial Math implemented** • Entry age normal cost method • Unfunded liability paid off as a level percent of payroll by FY 2044 to achieve 100% funding	**Contributions from Pension Stabilization Fund:** • Supplemental contributions of $1 billion in FY'20 and each year thereafter until system is 90% funded; assume 55% goes to TRS • Supplemental contributions are treated as gains that are not reflected in the Fed/State's regular contributions until after each allocation is made. These supplemental contributions are included in the development of the contributions above.	**Benefit Changes for Tier 1 and retirees:** • COLA Formula with threshhold of $1,000 times service credit; 3% COLA on current pension while pension is below the threshold, and on the threshold amount otherwise • COLA Eligibility of the earlier of age 67 or five years of retirement for all members; COLAs may be suspended, but no previous COLAs lost • Reportable Salary provision caps at Tier 2 Salary Cap, with cap set at member's maximum salary upon enactment • Contributions 10.4% in 13/14 then 11.4% • Retirement age based on a sliding scale: Age 45 &over: no change 40 to 44: 61 unreduced; 56 & 20 yrs of svc reduced 35 to 39: 63 unreduced; 58 & 20 yrs of svc reduced 34 & under: 65 unreduced; 60 & 20 yrs of svc red'd

Explanation on exhibit to the right:

• State contribution is reduced by 63% due to financing savings (22%) and benefit decreases /member contribution increases (41%)

• Responsibility for paying off the unfunded actuarial accrued liability is partially shifted from the state to the membership under SB1. In the past, state contributions were sufficient to pay for the unfunded liability of TRS; under SB1, state contributions are sufficient to pay 76% of the unfunded liability, with Tier 1 and Tier 2 member contributions paying the remainder.

• The Normal costs under entry age are lower than that provided under projected unit credit. However, they are consistent with the level percent of pay nature of member contributions. Under actuarial math and current provisions, Tier 1 members pay for about 60% of their benefit, while Tier 2 members pay for 150% of their benefit. SB1 provisions result in Tier 1 and Tier 2 members paying for more than the cost of their benefits



TRS and Buck Consultants are available to discuss the analysis above or any of the following topics:

1. The current proposal does not fix Tier 2 and creates a Social Security compliance issue for Tier 1 in addition to the existing issues for Tier 2. Consideration should be given to full indexation of salary and benefit caps.
2. The Tier 2 cap applied to Tier 1 causes state contributions to be front-loaded. If contributions are to be a level percent of pay and payroll is significantly reduced in later periods, more contributions are required earlier.
3. The Tier 1 employer normal cost is now negative due to a combination of benefit reductions, increased member contributions, and change in actuarial cost method.

buckconsultants