

Senate Bill 1 as Amended by House Amendment #1

May 22, 2013



# Reform Studies – Opening Comments

- This report contains one scenario for SB 1, HA #1
  - ► Immediate effective date
  - ► Tier 1 benefit changes
  - ► Increase in Tier 1 employee contribution rates of 2% of pay
  - ► Establishes that the Comptroller set the Effective Rate of Interest (ERI) for all purposes and that it is set at a lower, more conservative rate
  - ► Changes actuarial cost method from Projected Unit Credit to Entry Age Normal
  - ► Changes State's funding policy to normal cost plus 30-year closed period level percentage of payroll amortization of the unfunded liability beginning in FY 2015 (100% funded in 2044)
  - ► Establishes State Funding Enforcement
  - Revitalizes Pension Stabilization Fund





- Tier 1 benefit changes
  - ► Caps pensionable earnings at the Social Security Taxable Wage Base (SSTWB). Members with current pay in excess of the SSTWB will be grandfathered and have their pay capped at their salary received 365 days prior to the effective date.
  - ► Increases normal retirement age for members retiring on or after July 1, 2013
    - Current retirement eligibility
      - Any age with 30 years
      - Age 60 with 8 years
      - Age 62 with 5 years
    - No change if age 45 or older at effective date
    - 1 year delay if age 40 45 at effective date (31 years, 61/8, 63/5)
    - 3 year delay if age 35 40 at effective date (33 years, 63/8, 65/5)
    - 5 year delay if younger than age 35 (35 years, 65/8, 67/5)
    - Delays also apply to early retirement eligibility (currently 55/8)



- Tier 1 benefit changes
  - ► Automatic Annual Increases (AAI) in Annuity
    - Impacts both current and future retirees
    - Limits the COLA increase to 3% of the lesser of:
      - The previous year's retirement annuity
      - \$1,000 multiplied by each year of service credit
    - COLA cap does not increase in future years
    - First increase is payable at the earlier of:
      - January 1 following the attainment of age 67
      - January 1 following the 5<sup>th</sup> anniversary of the annuity start date
      - Current retirees will have their benefits frozen until eligibility conditions (i.e. January 1 following the earlier of age 67 and the 5<sup>th</sup> anniversary of the annuity start date) are met
  - ▶ Increase in employee contribution rate of 1% of payroll in FY 2014 and an additional 1% increase in FY 2015. Members will contribute 2% of pay additional beginning in FY 2015.
    - Increased employee contributions are "carved out" of the money purchase benefit and Portable Plan lump sum calculations





- Effective Rate of Interest (ERI)
  - ► The ERI for all purposes will be set by the Comptroller
    - The ERI for portable lump sum retirements and refunds and other purposes except for crediting under the money purchase formula is currently set by the SURS Board
  - ▶ The rate will be set at a more conservative level
    - We have assumed the rate will be 4.00% for interest crediting on employee contributions for all purposes under both the Traditional and Portable Plans

### Actuarial Cost Method

- ► The actuarial cost method used to allocate the cost of future benefits over members' careers will be changed from Projected Unit Credit to Entry Age Normal
  - Entry Age Normal is the most commonly used cost method in the public sector
  - Entry Age Normal is the cost method required to be used for financial reporting under GASB 67 and 68





#### Pension Stabilization Fund

▶ The State contributes a total supplemental payment of \$1 billion beginning in FY 2020 to the Pension Stabilization Fund. The contributions are made and allocated between the five state systems until 100% funded. (Assumed that SURS is allocated 19.57% of the total amount which is based on the SURS allocation from the 2003 bonds, which results in \$195.7 million in FY 2020 and thereafter until 100% funded.)





# Reform Studies – Opening Comments

- Plan design changes apply to all Tier 1 members.
   Changes to Tier 1 benefits apply to all years of service.
   This is not an endorsement for or against changing benefits for current members. This is also not a comment on the contractual or constitutional implications of changing benefits for current members. It is for illustrative purposes only.
  - ► Changes in interest crediting are applicable prospectively only. No retroactive changes will be made to current member account balances.





# Reform Studies – Opening Comments

- The results are compared against the baseline, where the baseline represents the 6/30/2012 actuarial valuation results.
- The items developed for comparison are all based on projected amounts through 2045, and include:
  - The total statutory contribution (excluding SMP contributions and any debt service);
  - 2. The unfunded accrued liability;
  - 3. The funded ratio;
  - 4. The actuarial value of assets;
  - 5. The actuarial accrued liability;
  - 6. The employer normal cost;
  - 7. The payment toward amortization of the unfunded accrued liability.





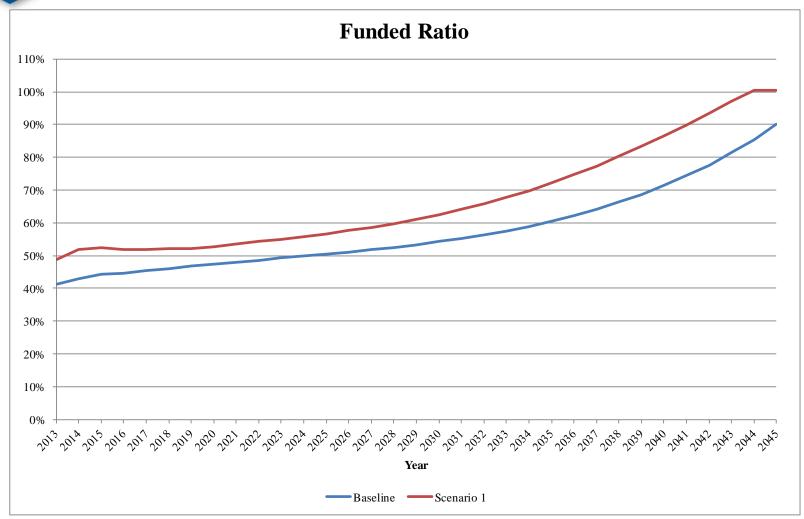
# Reform Studies – Key Results

### Key results

- ▶ The impact on the State's cumulative contributions for fiscal years 2013 through 2045 of each individual component of SB 1, HA #1 is shown on slide 17 and was measured in the following order
  - \$1.6 billion increase from changing to 30-year ARC funding
  - \$18.0 billion decrease from changing employee contributions and benefits (excluding ERI)
  - \$4.5 billion decrease from changing ERI
  - \$3.1 billion decrease from contributions from Pension Stabilization Fund (PSF)
  - Total projected net decrease in the State's contributions (includes contributions from PSF) from 2013 through 2045 of \$24.0 billion (\$6.3 billion on a present value basis) when compared to the projections shown in the July 1, 2012 actuarial valuation
- ► The savings from each component assumes that the changes measured first had already been implemented
- ▶ If certain components are added or removed from SB 1, HA #1 or had been measured in a different order, the impact from each component may vary from what is shown on slide 17
- ▶ Projected decrease of \$5.3 billion in the unfunded liability from \$20.2 billion to \$14.9 billion in fiscal year 2013



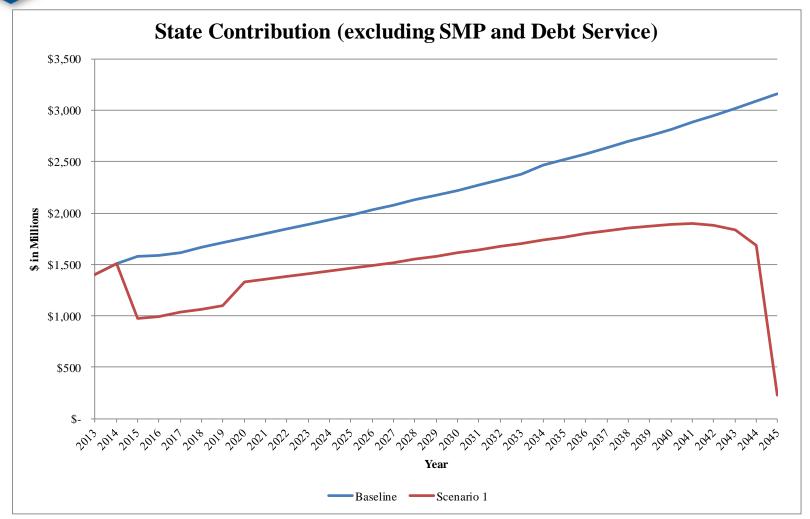
## Comparison of Funded Ratio







# Comparison of Statutory Contributions







# Reform Studies – Key Assumptions

- Key assumptions (used in the baseline under current provisions and/or Scenario 1 under SB 1, HA #1)
  - CPI increase of 2.75% (Tier 2 COLA of 1.375%)
  - Social Security Taxable Wage Base increases at 3.75% annually
  - ► Total payroll increases at 3.75% annually
  - ► Investment return assumption of 7.75%
  - ERI of 7.75% under the baseline (4.50% for Traditional Plan refunds) and 4.00% prospectively under SB 1, HA #1
  - Same retirement, mortality, termination, disability and salary increase assumptions used in the actuarial valuation as of June 30, 2012 unless otherwise noted
  - Accelerated retirement rates at first eligibility for Tier 1 members with delayed retirement under SB 1, HA #1
  - Contributions and benefits are based on pensionable (capped) payroll
    - Payroll cap is \$108,883 in 2012 for Tier 2 members (baseline)
    - Payroll cap is equal to the greater of pay 365 days prior to the effective date and SSTWB for Tier 1 members.





			utory Contr		o <b>n</b>			( <b>\$</b> i	in Millions)					
			and Employ SMP and debt s		<b>e</b> )		Unfun	ded	Accrued Lia	abili	ity		Funded Ratio	
Year	В	aseline	Impact	(	Change	I	Baseline		Impact		Change	Baseline	Impact	Change
2013	\$	1,399	\$ 1,399	\$	-	\$	20,230	\$	14,945	\$	(5,285)	41.2%	48.7%	7.5%
2014	\$	1,504	\$ 1,504	\$	-	\$	20,338	\$	14,405	\$	(5,933)	43.0%	51.7%	8.7%
2015	\$	1,577	\$ 971	\$	(606)	\$	20,542	\$	14,517	\$	(6,025)	44.4%	52.4%	8.0%
2016	\$	1,587	\$ 991	\$	(596)	\$	21,130	\$	15,005	\$	(6,126)	44.6%	51.8%	7.2%
2017	\$	1,613	\$ 1,034	\$	(579)	\$	21,495	\$	15,252	\$	(6,244)	45.3%	51.9%	6.6%
2018	\$	1,671	\$ 1,066	\$	(605)	\$	21,819	\$	15,483	\$	(6,336)	46.0%	52.0%	6.0%
2019	\$	1,713	\$ 1,100	\$	(612)	\$	22,116	\$	15,697	\$	(6,419)	46.7%	52.1%	5.4%
2020	\$	1,756	\$ 1,332	\$	(424)	\$	22,383	\$	15,687	\$	(6,696)	47.4%	52.8%	5.4%
2025	\$	1,980	\$ 1,462	\$	(518)	\$	23,164	\$	15,193	\$	(7,971)	50.4%	56.7%	6.2%
2030	\$	2,221	\$ 1,611	\$	(610)	\$	22,719	\$	13,670	\$	(9,049)	54.3%	62.5%	8.3%
2035	\$	2,521	\$ 1,768	\$	(753)	\$	20,369	\$	10,612	\$	(9,757)	60.4%	72.1%	11.7%
2040	\$	2,818	\$ 1,889	\$	(929)	\$	15,016	\$	5,432	\$	(9,584)	71.3%	86.5%	15.2%
2041	\$	2,883	\$ 1,895	\$	(989)	\$	13,479	\$	4,106	\$	(9,373)	74.3%	90.0%	15.6%
2042	\$	2,951	\$ 1,884	\$	(1,068)	\$	11,756	\$	2,694	\$	(9,062)	77.7%	93.5%	15.8%
2043	\$	3,021	\$ 1,838	\$	(1,183)	\$	9,835	\$	1,225	\$	(8,610)	81.4%	97.1%	15.7%
2044	\$	3,092	\$ 1,690	\$	(1,402)	\$	7,699	\$	(198)	\$	(7,897)	85.5%	100.5%	15.0%
2045	\$	3,164	\$ 224	\$	(2,941)	\$	5,331	\$	(205)	\$	(5,536)	90.0%	100.5%	10.5%
Total Cont. Through 2045	\$	73,457	\$ 49,484	\$	(23,973)									
Present Value of Total Cont.	\$	22,523	\$ 16,233	\$	(6,290)									



									(\$ i	n Millions)								
		Tota	al N	et Normal	Cost			Portion	ı to .	Amortize the	e UA	<b>AL</b>		(St	ate	and Empl	oyer)	
Year	В	aseline		Impact	C	hange	I	Baseline		Impact		Change	I	Baseline		Impact	(	Change
2013	\$	416	\$	416	\$	-	\$	983	\$	983	\$	-	\$	1,399	\$	1,399	\$	-
2014	\$	409	\$	182	\$	(227)	\$	1,095	\$	1,322	\$	227	\$	1,504	\$	1,504	\$	-
2015	\$	401	\$	150	\$	(250)	\$	1,177	\$	820	\$	(356)	\$	1,577	\$	971	\$	(606)
2016	\$	392	\$	149	\$	(244)	\$	1,194	\$	842	\$	(352)	\$	1,587	\$	991	\$	(596)
2017	\$	383	\$	147	\$	(237)	\$	1,230	\$	888	\$	(342)	\$	1,613	\$	1,034	\$	(579)
2018	\$	375	\$	145	\$	(230)	\$	1,296	\$	921	\$	(375)	\$	1,671	\$	1,066	\$	(605)
2019	\$	367	\$	144	\$	(223)	\$	1,345	\$	956	\$	(390)	\$	1,713	\$	1,100	\$	(612)
2020	\$	360	\$	144	\$	(216)	\$	1,396	\$	1,188	\$	(208)	\$	1,756	\$	1,332	\$	(424)
2025	\$	332	\$	148	\$	(185)	\$	1,647	\$	1,314	\$	(333)	\$	1,980	\$	1,462	\$	(518)
2030	\$	316	\$	159	\$	(157)	\$	1,905	\$	1,452	\$	(453)	\$	2,221	\$	1,611	\$	(610)
2035	\$	302	\$	177	\$	(125)	\$	2,219	\$	1,591	\$	(627)	\$	2,521	\$	1,768	\$	(753)
2040	\$	296	\$	199	\$	(97)	\$	2,521	\$	1,689	\$	(832)	\$	2,818	\$	1,889	\$	(929)
2041	\$	299	\$	204	\$	(95)	\$	2,585	\$	1,690	\$	(894)	\$	2,883	\$	1,895	\$	(989)
2042	\$	304	\$	209	\$	(95)	\$	2,647	\$	1,675	\$	(972)	\$	2,951	\$	1,884	\$	(1,068)
2043	\$	312	\$	214	\$	(98)	\$	2,709	\$	1,624	\$	(1,085)	\$	3,021	\$	1,838	\$	(1,183)
2044	\$	321	\$	219	\$	(102)	\$	2,772	\$	1,471	\$	(1,301)	\$	3,092	\$	1,690	\$	(1,402)
2045	\$	331	\$	224	\$	(107)	\$	2,834	\$	-	\$	(2,834)	\$	3,164	\$	224	\$	(2,941)
Total Through 2045	\$	11,013	\$	5,841	\$	(5,171)	\$	62,445	\$	43,643	\$	(18,801)	\$	73,457	\$	49,484	\$	(23,973)
Present Value of Total	\$	4,211	\$	2,107	\$	(2,104)	\$	18,312	\$	14,126	\$	(4,186)	\$	22,523	\$	16,233	\$	(6,290)





									(\$ i	n Millions)									
		Actua	arial	Value of A	ssets	;		Actua	rial	Accrued Lia	abili	ty	Unfunded Accrued Liability						
Year	В	aseline		Impact	(	Change	В	aseline		Impact		Change	В	aseline		Impact	(	Change	
2013	\$	14,200	\$	14,210	\$	10	\$	34,430	\$	29,154	\$	(5,276)	\$	20,230	\$	14,945	\$	(5,285)	
2014	\$	15,346	\$	15,427	\$	82	\$	35,684	\$	29,833	\$	(5,851)	\$	20,338	\$	14,405	\$	(5,933)	
2015	\$	16,380	\$	15,972	\$	(408)	\$	36,921	\$	30,489	\$	(6,432)	\$	20,542	\$	14,517	\$	(6,025)	
2016	\$	16,999	\$	16,110	\$	(890)	\$	38,130	\$	31,114	\$	(7,015)	\$	21,130	\$	15,005	\$	(6,126)	
2017	\$	17,806	\$	16,454	\$	(1,352)	\$	39,302	\$	31,706	\$	(7,596)	\$	21,495	\$	15,252	\$	(6,244)	
2018	\$	18,608	\$	16,774	\$	(1,834)	\$	40,427	\$	32,257	\$	(8,170)	\$	21,819	\$	15,483	\$	(6,336)	
2019	\$	19,386	\$	17,071	\$	(2,315)	\$	41,502	\$	32,768	\$	(8,734)	\$	22,116	\$	15,697	\$	(6,419)	
2020	\$	20,137	\$	17,550	\$	(2,587)	\$	42,519	\$	33,237	\$	(9,283)	\$	22,383	\$	15,687	\$	(6,696)	
2025	\$	23,565	\$	19,858	\$	(3,707)	\$	46,729	\$	35,052	\$	(11,677)	\$	23,164	\$	15,193	\$	(7,971)	
2030	\$	26,949	\$	22,808	\$	(4,141)	\$	49,668	\$	36,478	\$	(13,191)	\$	22,719	\$	13,670	\$	(9,049)	
2035	\$	31,101	\$	27,451	\$	(3,651)	\$	51,470	\$	38,063	\$	(13,407)	\$	20,369	\$	10,612	\$	(9,757)	
2040	\$	37,366	\$	34,930	\$	(2,436)	\$	52,382	\$	40,361	\$	(12,021)	\$	15,016	\$	5,432	\$	(9,584)	
2041	\$	39,037	\$	36,815	\$	(2,222)	\$	52,516	\$	40,921	\$	(11,595)	\$	13,479	\$	4,106	\$	(9,373)	
2042	\$	40,907	\$	38,832	\$	(2,075)	\$	52,663	\$	41,526	\$	(11,137)	\$	11,756	\$	2,694	\$	(9,062)	
2043	\$	43,004	\$	40,963	\$	(2,041)	\$	52,838	\$	42,188	\$	(10,651)	\$	9,835	\$	1,225	\$	(8,610)	
2044	\$	45,353	\$	43,093	\$	(2,260)	\$	53,052	\$	42,895	\$	(10,157)	\$	7,699	\$	(198)	\$	(7,897)	
2045	\$	47,981	\$	43,846	\$	(4,135)	\$	53,312	\$	43,641	\$	(9,671)	\$	5,331	\$	(205)	\$	(5,536)	





								(\$ in	Millions)							
		Tr. 4-1 C4		aseline	4•		TC-4-1 C		Impact	4•_		T-4-1 C4-		Change	_4•	
			atut	ory Contrib	uuo			atut	ory Contrib	utio			atut	ory Contrib	uuoi	
Year	Defi	ned Benefit		SMP		Total	 ined Benefit		SMP		Total	 fined Benefit		SMP		Total
2013	\$	1,399	\$	44	\$	1,443	\$ 1,399	\$	44	\$	1,443	\$ -	\$	-	\$	-
2014	\$	1,504	\$	48	\$	1,552	\$ 1,504	\$	48	\$	1,552	\$ -	\$	-	\$	-
2015	\$	1,577	\$	49	\$	1,626	\$ 971	\$	49	\$	1,020	\$ (606)	\$	-	\$	(606)
2016	\$	1,587	\$	50	\$	1,637	\$ 991	\$	50	\$	1,041	\$ (596)	\$	-	\$	(596)
2017	\$	1,613	\$	52	\$	1,665	\$ 1,034	\$	52	\$	1,086	\$ (579)	\$	-	\$	(579)
2018	\$	1,671	\$	54	\$	1,725	\$ 1,066	\$	54	\$	1,120	\$ (605)	\$	-	\$	(605)
2019	\$	1,713	\$	56	\$	1,769	\$ 1,100	\$	56	\$	1,156	\$ (613)	\$	-	\$	(613)
2020	\$	1,756	\$	58	\$	1,814	\$ 1,332	\$	58	\$	1,390	\$ (424)	\$	-	\$	(424)
2025	\$	1,980	\$	68	\$	2,048	\$ 1,462	\$	68	\$	1,530	\$ (518)	\$	-	\$	(518)
2030	\$	2,221	\$	78	\$	2,299	\$ 1,611	\$	78	\$	1,689	\$ (610)	\$	-	\$	(610)
2035	\$	2,521	\$	90	\$	2,611	\$ 1,768	\$	90	\$	1,858	\$ (753)	\$	-	\$	(753)
2040	\$	2,818	\$	107	\$	2,924	\$ 1,889	\$	105	\$	1,994	\$ (929)	\$	(2)	\$	(930)
2041	\$	2,883	\$	110	\$	2,994	\$ 1,895	\$	109	\$	2,004	\$ (988)	\$	(1)	\$	(990)
2042	\$	2,951	\$	114	\$	3,065	\$ 1,884	\$	113	\$	1,997	\$ (1,067)	\$	(1)	\$	(1,068)
2043	\$	3,021	\$	118	\$	3,139	\$ 1,838	\$	117	\$	1,956	\$ (1,183)	\$	(1)	\$	(1,183)
2044	\$	3,092	\$	123	\$	3,215	\$ 1,690	\$	122	\$	1,812	\$ (1,402)	\$	(1)	\$	(1,403)
2045	\$	3,164	\$	127	\$	3,292	\$ 224	\$	127	\$	351	\$ (2,940)	\$	-	\$	(2,941)
Total Cont. Through 2045	\$	73,457	\$	2,621	\$	76,078	\$ 49,484	\$	2,605	\$	52,089	\$ (23,973)	\$	(16)	\$	(23,989)
Present Value of Total Cont.	\$	22,523	\$	767	\$	23,289	\$ 16,233	\$	764	\$	16,997	\$ (6,290)	\$	(3)	\$	(6,292)





						(\$ in Millions)								
Change in State Statutory Contributions (including SMP)														
				, and the second		nit Pay, Retirement Age	1010		Ρa	ension Stabilization		Fotal Savings to the State from		
Year		Baseline	30	yr ARC Funding		OLA, Employee Cont.		Change in ERI	1 (	Fund		SB1		
2013	\$	1,443	\$	-	\$	-	\$		\$		\$	-		
2014	\$	1,552	\$	(0)		(0)			\$		\$	(0)		
2015	\$	1,626	\$	(18)		(487)		(101)			\$	(606)		
2016	\$	1,637	\$	(2)	\$	(491)		(103)			\$	(596)		
2017	\$	1,665	\$	22	\$	(495)	\$	(105)			\$	(579)		
2018	\$	1,725	\$	2	\$	(499)	\$	(108)	\$	-	\$	(605)		
2019	\$	1,769	\$	2	\$	(504)	\$	(110)	\$	_	\$	(612)		
2020	\$	1,814	\$	2	\$	(508)	\$	(113)	\$	196	\$	(424)		
2025	\$	2,048	\$	31	\$	(541)	\$	(128)	\$	121	\$	(518)		
2030	\$	2,299	\$	107	\$	(587)	\$	(147)	\$	16	\$	(610)		
2035	\$	2,611	\$	191	\$	(640)	\$	(168)	\$	(136)	\$	(754)		
2040	\$	2,924	\$	355	\$	(702)	\$	(194)	\$	(389)	\$	(931)		
2041	\$	2,994	\$	393	\$	(716)	\$	(200)	\$	(466)	\$	(990)		
2042	\$	3,065	\$	432	\$	(731)	\$	(206)	\$	(564)	\$	(1,069)		
2043	\$	3,139	\$	470	\$	(743)	\$	(212)	\$	(699)	\$	(1,184)		
2044	\$	3,215	\$	496	\$	(740)	\$	(218)	\$	(941)	\$	(1,403)		
2045	\$	3,292	\$	(2,834)	\$	(105)	\$	(2)	\$	-	\$	(2,941)		
Total Cont. Through 2045	\$	76,078	\$	1,610	\$	(17,967)	\$	(4,498)	\$	(3,133)	\$	(23,989)		
Present Value of Total Cont.	\$	23,289	\$	442	\$	(5,462)	\$	(1,290)	\$	18	\$	(6,292)		





- Plan design changes apply to all Tier 1 members. Changes to Tier 1 benefits apply to all years of service. This is not an endorsement for or against changing benefits for current members. This is also not a comment on the contractual or constitutional implications of changing benefits for current members. It is for illustrative purposes only.
- All calculations are based on the June 30, 2012 actuarial valuation results including the provisions of SURS and actuarial assumptions in effect on June 30, 2012.
- CPI is assumed to increase at 2.75%.
- ERI is assumed to be 7.75% under the baseline and 4.00% prospectively under SB 1, HA #1.
- All present value calculations are as of June 30, 2012.
- Previous asset gains and losses are phased-in to each projection.

  No future gains or losses are assumed
- All contributions are determined as a percent of capped payroll.
- 15% of new hires are assumed to participate in the Self Managed Plan (SMP).
- No additional administrative expenses were assumed in this analysis.





### Disclosures

- Circular 230 Notice: Pursuant to regulations issued by the IRS, to the extent this presentation concerns tax matters, it is not intended or written to be used, and cannot be used, for the purpose of (i) avoiding tax-related penalties under the Internal Revenue Code or (ii) marketing or recommending to another party any tax-related matter addressed within. Each taxpayer should seek advice based on the individual's circumstances from an independent tax advisor.
- This presentation shall not be construed to provide tax advice, legal advice or investment advice.
- The actuaries submitting this presentation (Leslie Thompson, Amy Williams and Lance Weiss) are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.
- The results summarized in this report involve actuarial calculations that require assumptions about future events. The major actuarial assumptions used in this analysis were provided by and are the responsibility of SURS. We are unable to judge the reasonableness of some of these assumptions without performing a substantial amount of additional work beyond the scope of the assignment.





### Disclosures

- 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; and changes in plan provisions or applicable law.
- Additional information regarding actuarial assumptions and methods, and important additional disclosures are provided in the full actuarial valuation report of SURS as of June 30, 2012.
- If you need additional information to make an informed decision about the contents of this presentation, or if anything appears to be missing or incomplete, please contact us before relying on this presentation.





## Cliff Notes (\$ in Millions)

	<b>Description</b> No Changes	Total Contributions through 2045* \$76,078	(Savings)/Cost compared to Baseline	(Savings)/Cost compared to Baseline (PV)	Comments and Observations  Total Contribution is made by the State and there are no benefit changes
1 *Includes	SB1 Scenario 1	\$52,089	(\$23,989)	(\$6,292)	The total State Contribution decreases as a result of the funding policy changes and benefit changes including an increase in employee contributions for Tier 1 members, COLA changes affecting actives, inactives and retirees, and the timing of additional contributions from the Pension Stabilization Fund.

