

Public Employee Retirement System (PERS) Teachers Retirement System (TRS)

FALL 2013 UPDATE

Deputy Commissioner Mike Barnhill
Department of Administration





PERS / TRS Basic Facts Organization





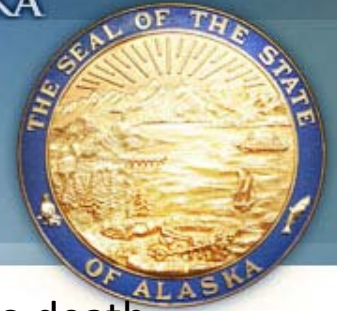
PERS / TRS Basic Facts

Membership

MEMBERSHIP STATISTICS AS OF JUNE 30, 2013

	PERS					TRS				JRS	NG	SBS	DCP
	DB		DC		TOTAL	DB		DC		TOTAL			
	Tier I	Tier II	Tier III	Tier IV		Tier I	Tier II	Tier III	Tier IV				
Active Members	3,313	5,864	12,299	14,795	36,271	1,197	5,661	3,735	10,593	72	n/a	28,245	7,642
Terminated Members	2,417	5,274	11,337	6,495	25,523	542	2,615	1,276	4,433	4	n/a	13,415	2,568
Retirees & Beneficiaries	22,941	5,142	1,608	4	29,695	10,290	1,098	-	11,388	110	657	n/a	n/a
Managed Accounts	n/a	n/a	n/a	6,748	6,748	n/a	n/a	1,783	1,783	n/a	n/a	900	834
Retirements - 4th QTR FY13	259	164	109	n/a	532	22	16	n/a	38	-	42	n/a	n/a
Full Disbursements - 4th QTR FY13	38	26	117	350	531	7	24	39	70	0	n/a	639	154
Partial Disbursements - 4th QTR FY13	n/a	n/a	n/a	28	28	n/a	n/a	4	4	n/a	n/a	433	447

Source: Div. Retirement & Benefits



PERS / TRS Basic Facts

Defined Benefits

Defined Benefit Pension: fixed benefit amount from date of retirement to death

Contributions + Investment Earnings = Benefits + Expenses

IF

All actuarial assumptions are accurate

Actuarial Assumptions:

Inflation, Investment Return, Mortality, Date of Retirement, Cost of Healthcare, Payroll Growth, Disability, Spouse Age, Dependent Children, COLA, Plan Expenses, Turnover

Inaccurate Projections Lead to Unfunded Liability

Employer Takes the Risk



PERS / TRS Basic Facts Contributions – Employee

$$C + I = B + E$$

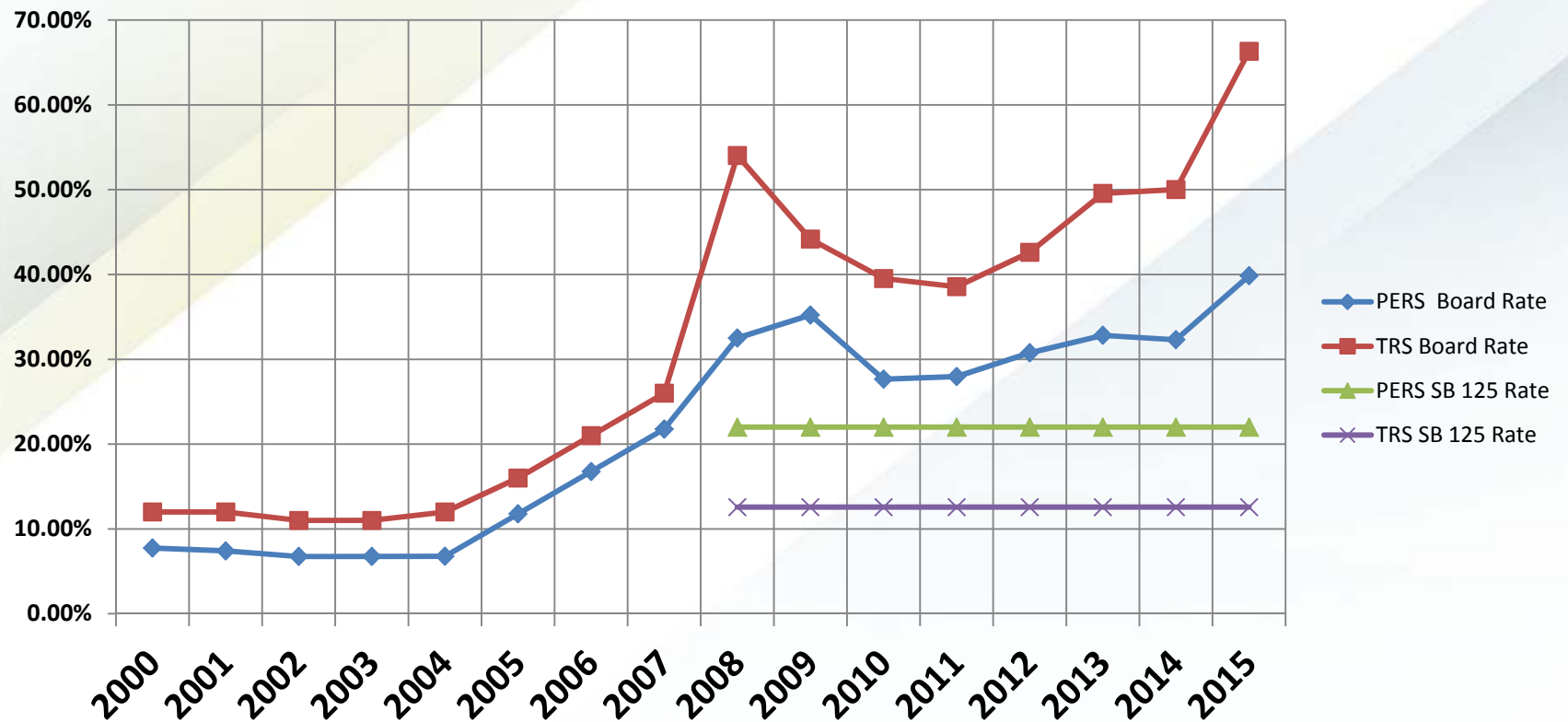
PERS Other Employee Contribution Rate:	6.75%
PERS Police / Fire Employee Contribution Rate:	7.5%
TRS Employee Contribution Rate:	8.65%

PERS / TRS Basic Facts

Contributions – Employer



$$C + I = B + E$$





PERS / TRS Basic Facts

Investment Returns

$$C + I = B + E$$

ARM Board Annualized Returns Through FY 2013

Annualized Returns	PERS	TRS	Average
29 year	9.07%	9.43%	9.26%
25 Year	8.12%	8.13%	8.12%
20 year	7.27%	7.30%	7.29%
15 Year	5.43%	5.47%	5.45%
10 Year	6.94%	6.99%	6.97%
5 Year	3.92%	3.98%	3.95%
3 Year	11.05%	11.15%	11.10%
1 Year	12.50%	12.59%	12.55%



PERS / TRS Basic Facts Benefits

$$C + I = \mathbf{B} + E$$

DB Benefit Amount:

Sum of Multipliers x Avg. High 3 (Tier 1-2) or Avg. High 5 (Tier 3)

PERS Multipliers: 2% first 10 yrs; 2.25% second 10 yrs; 2.5% thereafter

TRS Multipliers: 2% first 20 years; 2.5% thereafter

Example: 30 years PERS service:

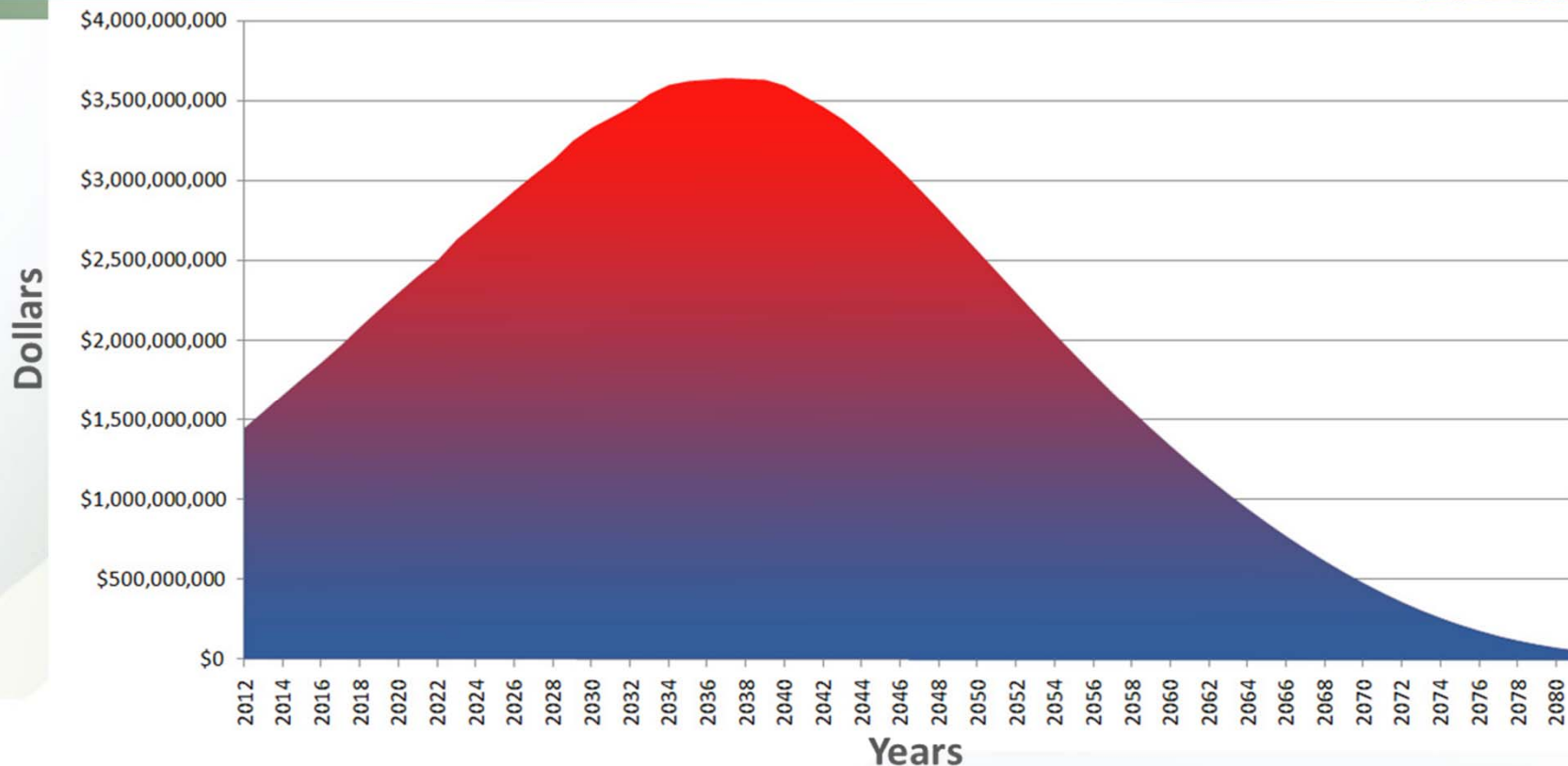
$$(2\% \times 10) + (2.25\% \times 10) + (2.5\% \times 10) \times \$85,000 =$$

$$67.5\% \times \$85,000 = \$57,375$$

Note: State of Alaska employees also participate in the supplemental annuity plan (SBS)



PERS / TRS Basic Facts Benefits



Pay **\$140 billion** in benefits payments over next 70 years

Current PERS/TRS account balance: **\$16.8 billion**

Unfunded Liability: approx **\$11.9 billion**



PERS / TRS Basic Facts Expenses

$$C + I = B + \mathbf{E}$$

PERS FY 2012 Expenses

Investment	\$23.3mm
Administrative	<u>\$14.9mm</u>
	\$38.2mm

TRS FY 2012 Expenses

Investment	\$ 9.9mm
Administrative	<u>\$ 6.1mm</u>
	\$16.0mm



PERS / TRS

Events That Led to $C + I \neq B + E$

- 2002 – Milliman actuarial audit; dotcom collapse
- 2003 – FY 2002 valuations released with revised assumptions.
\$4.1B unfunded liability
- 2005 – SB 141 enacted: DB plans closed; DC plans created; PERB/TRB/ASPIB sunset; ARM Board created
- 2007 – ARM Board files suit against Mercer for actuarial negligence;
SB 123 enacted: PERS cost share
- 2008 – SB 125 enacted: employer contribution rates capped; state assistance begins; Great Recession begins
- 2009 – PERS / TRS investment loss: (20.5%)
- 2010 – Mercer litigation settled for \$500mm (net \$403mm); other states begin to cut DB benefits, change plans;
- 2012 – ARMB adopts level dollar amortization; \$11.9B unfunded liability
- 2013 – 12.5% investment gain; recession over?

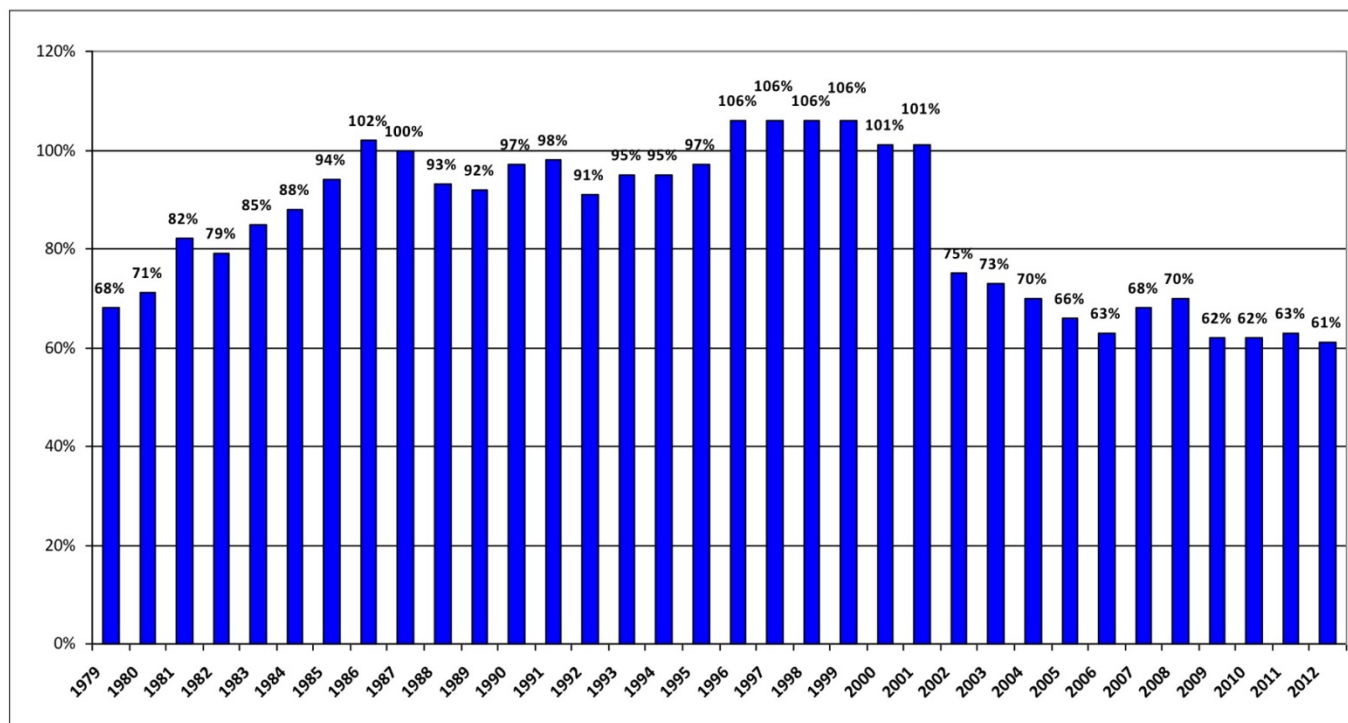


PERS / TRS

Funding Ratio History – PERS

(Based on Valuation Assets)

$$C + I \neq B + E$$



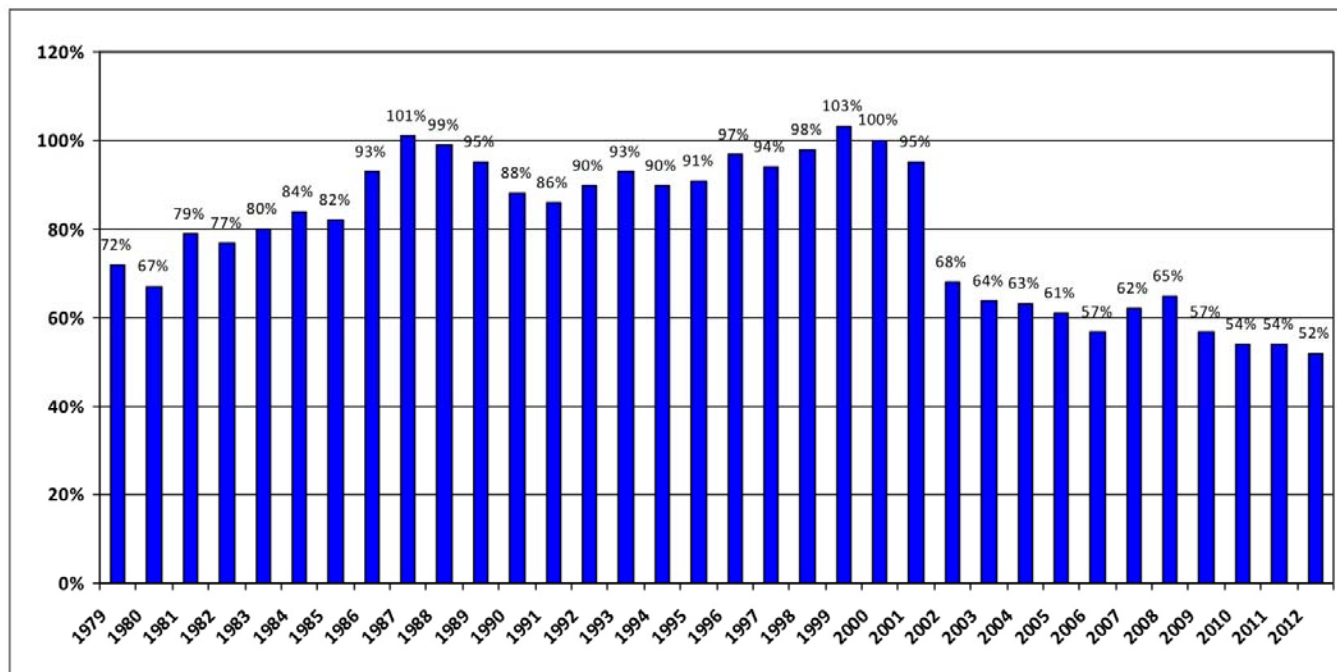


PERS / TRS

Funding Ratio History – TRS

(Based on Valuation Assets)

$$C + I \neq B + E$$





PERS / TRS

Health Cost Trends

Time Period	Monthly Premium Per Retiree For Health Coverage	Annual Percentage Change	Average Compound Annual Increase Since FY78
2/1/77-1/31/78	\$ 57.64	66%	--
2/1/78-1/31/79	69.10	20%	20%
2/1/79-1/31/80	64.70	-6%	6%
2/1/80-1/31/81	96.34	49%	19%
2/1/81-1/31/82	96.34	0%	14%
2/1/82-1/31/83	115.61	20%	15%
2/1/83-1/31/84	156.07	35%	18%
2/1/84-1/31/85	191.85	23%	19%
2/1/85-1/31/86	168.25	-12%	14%
2/1/86-1/31/87	165.00	-2%	12%
2/1/87-1/31/88	140.25	-15%	9%
2/1/88-1/31/89	211.22	51%	13%
2/1/89-1/31/90	252.83	20%	13%
2/1/90-1/31/91	243.98	-4%	12%
2/1/91-1/31/92	243.98	0%	11%
2/1/92-1/31/93	226.90	-7%	10%
2/1/93-1/31/94	309.72	37%	11%
2/1/94-1/31/95	336.05	9%	11%
2/1/95-1/31/96	350.50	4%	11%
2/1/96-1/31/97	350.50	0%	10%
2/1/97-1/31/98	368.00	5%	10%
2/1/98-12/31/98	368.00	0%	9%
1/1/99-12/31/99	442.00	20%	10%
1/1/00-12/31/00	530.00	20%	10%
1/1/01-12/31/01	610.00	15%	10%
1/1/02-12/31/02	668.00	10%	10%
1/1/03-12/31/03	720.00	8%	10%
1/1/04-12/31/04	806.00	12%	10%
1/1/05-12/31/05	850.00	5%	10%
1/1/06-12/31/06	876.00	3%	10%
1/1/07-12/31/07	876.00	0%	10%
1/1/08-12/31/08	876.00	0%	9%
1/1/09-12/31/09	937.00	7%	9%
1/1/10-12/31/10	1,068.00	14%	9%
1/1/11-12/31/11	1,176.00	10%	9%
1/1/12-12/31/12	1,200.00	2%	9%
1/1/13-12/31/13	1,223.00	2%	9%

Source: Buck Consultants



PERS / TRS Balance Sheet

PERS DB:

Assets (actuarial value, 6/30/12)	\$11,832,030,000
Accrued Liabilities (6/30/12)	<u>19,292,361,000</u>
Unfunded Liability	(\$ 7,460,331,000)
Funding Ratio	61.3%

TRS DB:

Assets (actuarial value, 6/30/12)	\$4,869,154,000
Accrued Liabilities (6/30/12)	<u>9,346,444,000</u>
Unfunded Liability	(\$4,477,290,000)
Funding Ratio	52.1%

Total DB:

Assets (actuarial value, 6/30/12)	\$16,701,184,000
Accrued Liabilities (6/30/12)	<u>28,638,805,000</u>
Unfunded Liability	(\$11,937,621,000)
Funding Ratio	58.3%

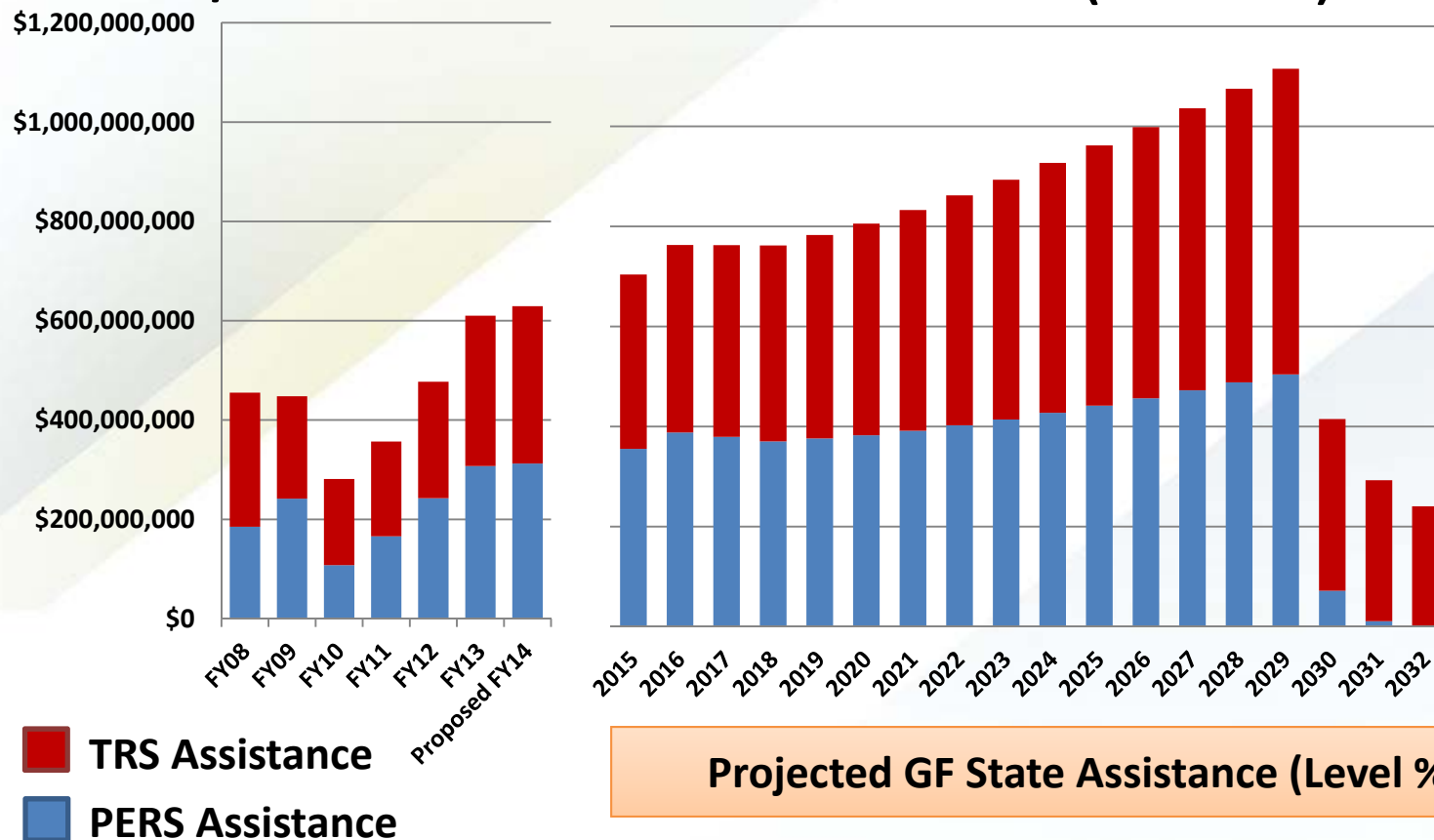
Note: Treasury reports PERS/TRS DB assets of \$19.04B as of September 30, 2013.

Source: Buck Consultants



PERS/TRS Approaches to Unfunded Liability

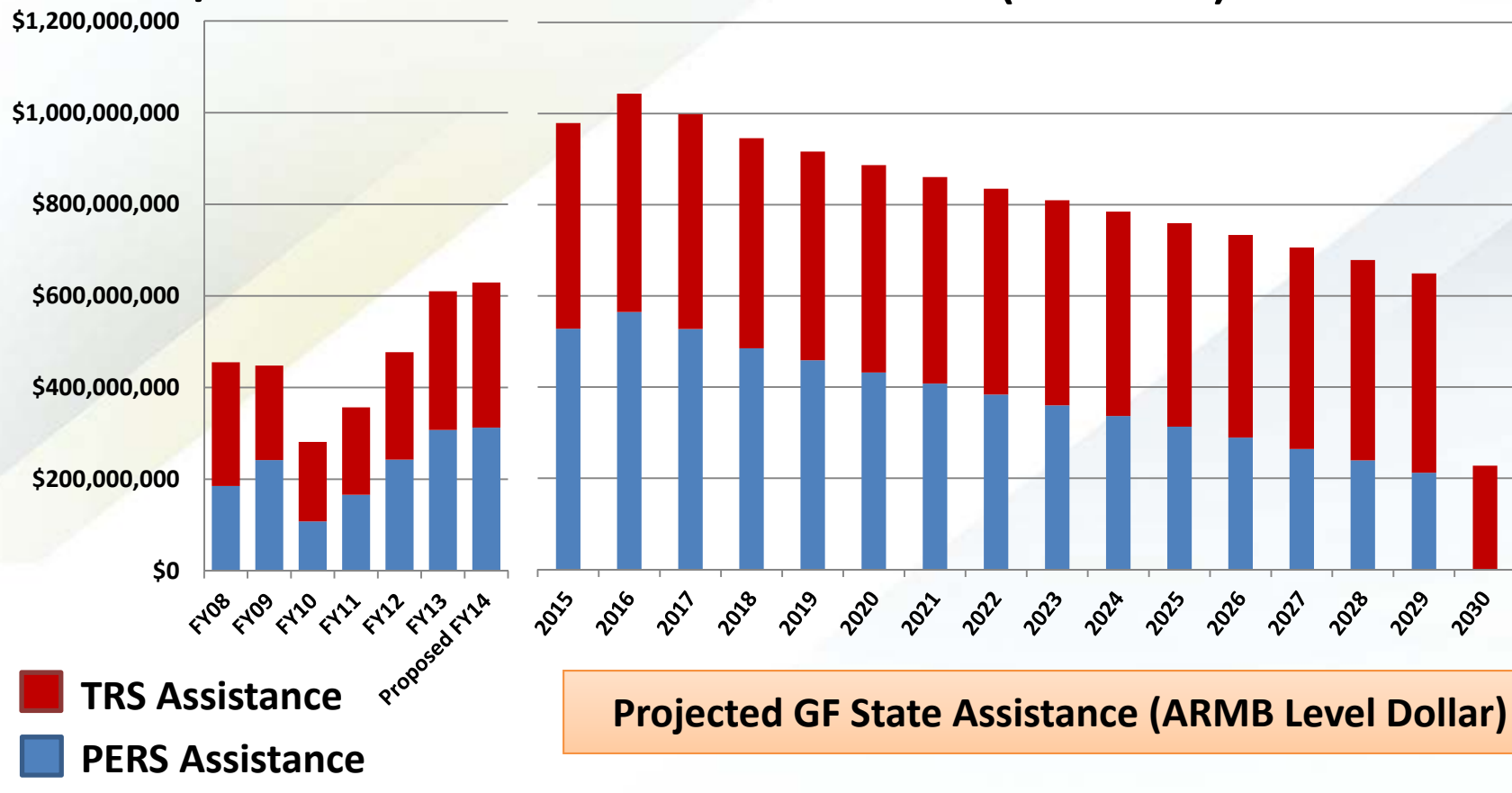
PERS/TRS GF State Assistance (SB125)





PERS/TRS Approaches to Unfunded Liability

PERS/TRS GF State Assistance (SB125)





PERS/TRS

Approaches to Unfunded Liability

Contributions

- Amortization Method (ARM Board)
- Amortization Term
- Reserve Account (SB 187)
- Cash Infusion (SB 187)
- Contribution Rates

Investment Return

- Asset Allocation

Benefits

(options limited by diminishment clause)

- Reduce Healthcare Costs
- Permit Plan Opt Outs
- COLA and Alive Audits

Expenses

- Optimize plan mgmt.