



**Retirement Security  
Act**

*SB 141*

Discussion Topic  
*Contribution Rate of Existing  
Employees*

**March 29<sup>th</sup>, 2005**



**Alaska State Legislature**  
*Senate Finance Committee*

**Updated as of: March 30, 2005**



# Discussion

## *Contribution Rate for Existing Employees*





## Contribution Rate Setting Process

- Each year, the actuary computes the **Normal Cost Rate** for the next contribution year
- The **Normal Cost Rate** is simply *the percent of payroll required to pay for the benefits expected to be earned by all members during the coming contribution year*
- The process runs two fiscal years in advance – for example, the FY 07 Normal Cost Rate was estimated this month by the state’s actuary

	<u>FY 07 Normal Costs</u>	
	<b>PERS</b>	<b>TRS</b>
Medical cost component	8.86%	8.75%
<u>Pension component</u>	<u>11.27%</u>	<u>13.69%</u>
<b>Normal Cost Rate</b>	<b>20.13%</b>	<b>22.44%</b>





## Contribution Rate Setting Process

- If our economic, demographic, and financial projections were always correct – the annually reviewed **Normal Cost Rate** would fully fund the retirement system
- Unfortunately, those projections can never be 100% accurate
- If too much was contributed, the system is overfunded; if too little, it is underfunded
- The actuary amortizes the unfunded amount over 25 years and computes a **Past Service Rate**
- The **Past Service Rate** is *the additional percent of payroll required to begin paying off the unfunded liability*





# Contribution Rate Setting Process

- Once the **Normal Cost Rate** and the **Past Service Rate** are known, the employer’s total contribution rate is calculated as follows:

<b>FY 07 Contribution Rates</b>			
		<b>PERS</b>	<b>TRS</b>
	<b>Normal Cost Rate</b>	<b>20.13%</b>	<b>22.44%</b>
<i>Less</i>	<b>Employee Contribution*</b>	<b>(6.81)%</b>	<b>(8.68)%</b>
<i>Equals</i>	<b>Employer Normal Cost</b>	<b>13.32%</b>	<b>13.76%</b>
<i>Plus</i>	<b>Past Service Rate</b>	<b>14.87%</b>	<b>28.02%</b>
<i>Total</i>	<b>Employer Contribution</b>	<b>28.19%</b>	<b>41.78%</b>

\* Employee Contribution Rate shown is the average rate for all members of the systems. Actual rates vary by employee class and are 6.75%, 7.5% or 9.6% for PERS and 8.65% or 9.65% for TRS





# Weaknesses of the Process

- The Employee Contribution rate is set in statute, so *any increase in the Normal Cost Rate is borne entirely by the employer*

		FY 07 Contribution Rates	
		PERS	TRS
	<b>Normal Cost Rate</b>	20.13%	22.44%
<i>Less</i>	<b>Employee Contribution*</b>	<b>(6.81)%</b>	<b>(8.68)%</b>
<i>Equals</i>	<b>Employer Normal Cost</b>	13.32%	13.76%
<i>Plus</i>	<b>Past Service Rate</b>	14.87%	28.02%
<i>Total</i>	<b>Employer Contribution</b>	<b>28.19%</b>	<b>41.78%</b>

- These are the actuary's recommended rates....currently, *the PERS and TRS boards may adopt different rates*
- When the boards adopt lower rates, our unfunded liability increases

\* Employee Contribution Rate shown is the average rate for all members of the systems. Actual rates vary by employee class and are 6.75%, 7.5% or 9.6% for PERS and 8.65% or 9.65% for TRS





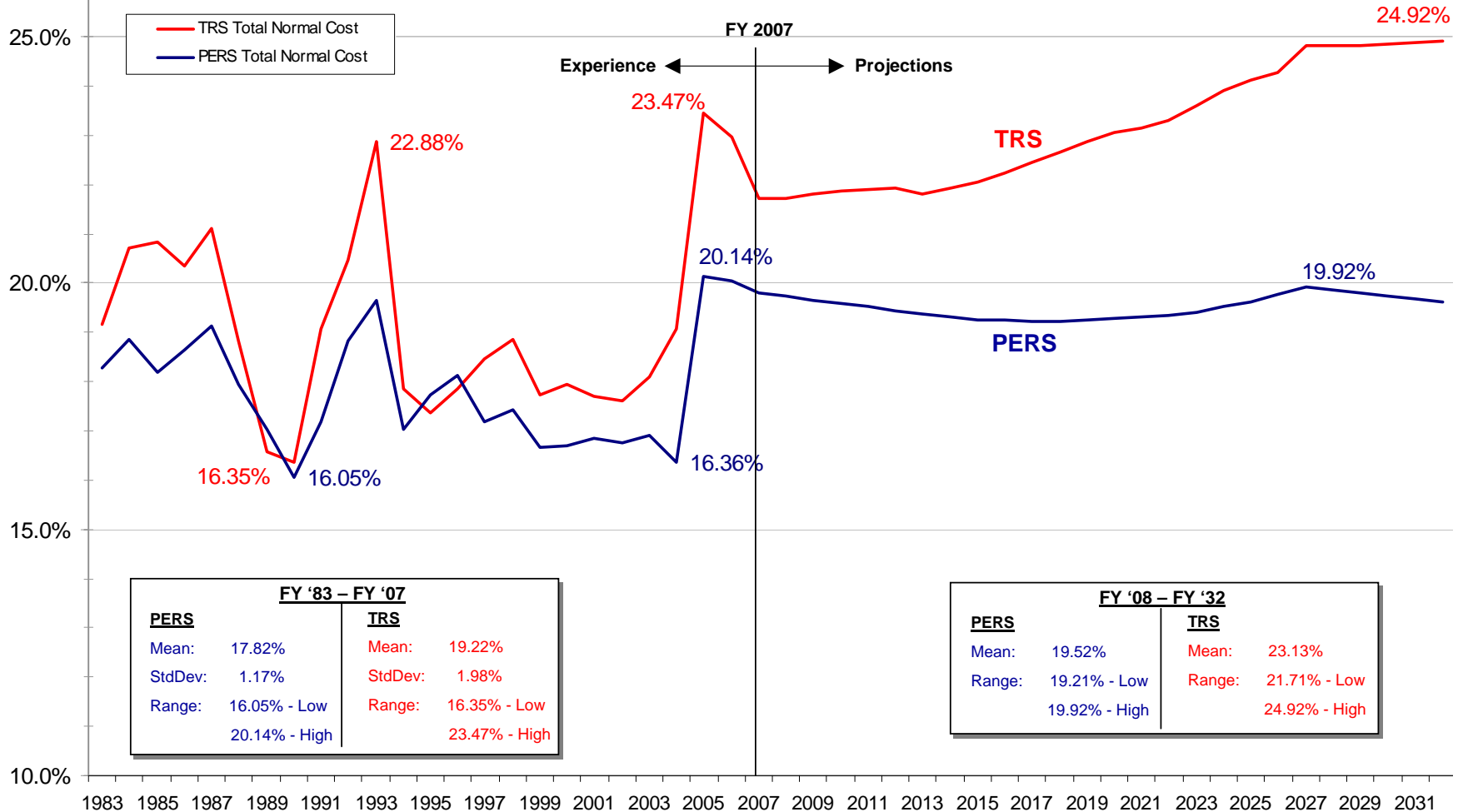
## SB 141 Addresses these Weaknesses

1. Sets the employee's contribution to the greater of:
  - Current statutory rate or
  - $\frac{1}{2}$  of the Normal Cost Rate
  - With the additional provision that the increase may not exceed 0.50% annually (*Current SB 141 language sets the maximum annual increase at 5.0%, but we are now proposing that be reduced to 0.50%*)
  
2. Requires the new Alaska Retirement Management Board (ARMB) to adopt a contribution rate that is no less than the actuarially computed Employer Normal Cost Rate





# Historical & Projected Total Normal Cost Rate



FY '83 – FY '07			
PERS		TRS	
Mean:	17.82%	Mean:	19.22%
StdDev:	1.17%	StdDev:	1.98%
Range:	16.05% - Low	Range:	16.35% - Low
	20.14% - High		23.47% - High

FY '08 – FY '32			
PERS		TRS	
Mean:	19.52%	Mean:	23.13%
Range:	19.21% - Low	Range:	21.71% - Low
	19.92% - High		24.92% - High







## Employers are Paying the Majority of the Normal Cost

### FY 07 Normal Cost Rates

	PERS	Share	TRS	Share
<b>Total Normal Cost</b>	20.13%	100%	22.44%	100%
<b>Employee Cost*</b>	6.81%	<b>33.8%</b>	8.68%	<b>38.7%</b>
<b>Employer Cost</b>	13.32%	<b>66.2%</b>	13.76%	<b>61.3%</b>

Currently, increases in the Normal Cost are borne entirely by the employer

\* Employee Contribution Rate shown is the average rate for all members of the systems. Actual rates vary by employee class and are 6.75%, 7.5% or 9.6% for PERS and 8.65% or 9.65% for TRS





**Employee Contribution Rates Haven't Increased  
Since 1987 in PERS and 1991 in TRS**

**Statutory Changes in Employee Contribution Rates**

<b>PERS</b>	<b>Before 1/1/87</b>	<b>Since 1/1/87</b>	<b>Since 7/1/99</b>	<b>FY 07 Average</b>
<b>Police/Fire</b>	<b>5.00%</b>	<b>7.50%</b>	<b>7.50%</b>	<b>6.81%</b>
<b>All Others</b>	<b>4.25%</b>	<b>6.75%</b>	<b>6.75%</b>	
<b>School Districts*</b>			<b>9.60%</b>	
<b>TRS</b>		<b>Before 1/1/91</b>	<b>Since 1/1/91</b>	<b>FY 07 Average</b>
<b>Most Members</b>		<b>7.00%</b>	<b>8.00%</b>	<b>8.68%</b>
<b>Supplemental Plan**</b>		<b>8.65%</b>	<b>9.65%</b>	

\* Beginning in 7/1/99, school district PERS members can elect the higher 9.6% contribution rate and receive a full year of service credit for 9 months vs. contributing 6.75% for 12 months

\*\* TRS Members who joined the system before 7/1/82 and elected to participate in the supplemental contributions provision are required to contribute an additional 1% of their salaries





## Constitution of the State of Alaska

Article XII – Section 7

**Retirement Systems.** *Membership in employee retirement systems of the State or its political subdivisions shall constitute a contractual relationship. Accrued benefits of these systems shall not be diminished or impaired.*

**Normal Cost Rate** is *the cost of benefits expected to be earned during the coming contribution year*

- We contend that employee contributions applied towards the **Normal Cost Rate** are not part of the accrued benefit to which members are entitled
- An accrued benefit is one that has already been earned – not one that has yet to be earned
- Benefit rights accrue as they are earned – year to year
- Employee contributions cannot be changed retroactively to pay for past benefits (Past Service Costs or any unfunded liability), but they can be changed prospectively to pay for future benefits





# SB 141 – Retirement Security Act

## Discussion: Contribution Rate of Existing Employees

### PERS Employee Normal Rate Projections

PERS - Average All Employees									
Rate for FY	Total Normal Cost	Projections at Current Rate			Projections at SB 141 Rate				
		Employee Normal Cost Rate	Employee Share of Total Normal Cost	Employer Share of Total Normal Cost	50% of Total Normal Cost	SB 141 Employee Rate	Resulting Employee Share	Increase Over Previous FY	
2006	20.05%	6.81%	34.0%	66.0%	10.03%	7.33%	36.6%	0.50%	
2007	19.80%	6.81%	34.4%	65.6%	9.90%	7.83%	39.5%	0.50%	
2008	19.73%	6.81%	34.5%	65.5%	9.87%	8.33%	42.2%	0.50%	
2009	19.66%	6.81%	34.6%	65.4%	9.83%	8.83%	44.9%	0.50%	
2010	19.58%	6.81%	34.8%	65.2%	9.79%	9.33%	47.7%	0.50%	
2011	19.52%	6.81%	34.9%	65.1%	9.76%	9.76%	50.0%	0.43%	
2012	19.44%	6.81%	35.0%	65.0%	9.72%	9.72%	50.0%	-0.04%	
2013	19.38%	6.81%	35.1%	64.9%	9.69%	9.69%	50.0%	-0.03%	
2014	19.31%	6.81%	35.3%	64.7%	9.66%	9.66%	50.0%	-0.04%	
2015	19.25%	6.81%	35.4%	64.6%	9.63%	9.63%	50.0%	-0.03%	
2016	19.26%	6.81%	35.4%	64.6%	9.63%	9.63%	50.0%	0.00%	
2017	19.23%	6.81%	35.4%	64.6%	9.62%	9.62%	50.0%	-0.01%	
2018	19.21%	6.81%	35.5%	64.5%	9.61%	9.61%	50.0%	-0.01%	
2019	19.24%	6.81%	35.4%	64.6%	9.62%	9.62%	50.0%	0.01%	
2020	19.27%	6.81%	35.3%	64.7%	9.64%	9.64%	50.0%	0.02%	
2021	19.31%	6.81%	35.3%	64.7%	9.66%	9.66%	50.0%	0.02%	
2022	19.36%	6.81%	35.2%	64.8%	9.68%	9.68%	50.0%	0.03%	
2023	19.42%	6.81%	35.1%	64.9%	9.71%	9.71%	50.0%	0.03%	
2024	19.52%	6.81%	34.9%	65.1%	9.76%	9.76%	50.0%	0.05%	
2025	19.63%	6.81%	34.7%	65.3%	9.82%	9.82%	50.0%	0.05%	
2026	19.76%	6.81%	34.5%	65.5%	9.88%	9.88%	50.0%	0.06%	
2027	19.92%	6.81%	34.2%	65.8%	9.96%	9.96%	50.0%	0.08%	
2028	19.86%	6.81%	34.3%	65.7%	9.93%	9.93%	50.0%	-0.03%	
2029	19.79%	6.81%	34.4%	65.6%	9.90%	9.90%	50.0%	-0.04%	
2030	19.73%	6.81%	34.5%	65.5%	9.87%	9.87%	50.0%	-0.03%	
2031	19.68%	6.81%	34.6%	65.4%	9.84%	9.84%	50.0%	-0.03%	
2032	19.63%	6.81%	34.7%	65.3%	9.82%	9.82%	50.0%	-0.03%	

SB 141 Proposes to split the Total Normal Cost 50/50 between Employer and Employee

However, the Employee Rate could never increase by more than 0.50% a year

Based on current Mercer projections, it would take 6 years to reach the 50/50 shared rate

If Normal Costs drop in the future, employer and employee rates would drop accordingly





Effect of Employee Contribution Rate Increases on Average PERS Employee

PERS 2004	Annual Earnings	Normal Cost	50% Normal Cost	Current Rate @	SB 141 Proposed Pre-Tax Payroll Deductions (every 2 weeks)							Cumulative Increase
					FY 06	FY 07	FY 08	FY 09	FY 10	FY 11	FY 12	
					20.13%	10.07%	6.75%	7.25%	7.75%	8.25%	8.75%	
Monthly Earnings	2-Week Pay											
ASEA GG 1-A Range 5-A	\$ 20,436.00	\$ 1,703.00	\$ 851.50	\$ 57.48	\$ 61.73	\$ 65.99	\$ 70.25	\$ 74.51	\$ 78.76	\$ 83.02	\$ 85.70	
				Yr to Yr Increase	\$ 4.26	\$ 4.26	\$ 4.26	\$ 4.26	\$ 4.26	\$ 4.26	\$ 2.68	\$ 28.23
ASEA GG 1-A Range 10-A	\$ 27,168.00	\$ 2,264.00	\$ 1,132.00	\$ 76.41	\$ 82.07	\$ 87.73	\$ 93.39	\$ 99.05	\$ 104.71	\$ 110.37	\$ 113.94	
				Yr to Yr Increase	\$ 5.66	\$ 5.66	\$ 5.66	\$ 5.66	\$ 5.66	\$ 5.66	\$ 3.57	\$ 37.53
ASEA GG 1-A Range 15-A	\$ 37,260.00	\$ 3,105.00	\$ 1,552.50	\$ 104.79	\$ 112.56	\$ 120.32	\$ 128.08	\$ 135.84	\$ 143.61	\$ 151.37	\$ 156.26	
				Yr to Yr Increase	\$ 7.76	\$ 7.76	\$ 7.76	\$ 7.76	\$ 7.76	\$ 7.76	\$ 4.89	\$ 51.47
ASEA GG 1-A Range 17-A	\$ 42,852.00	\$ 3,571.00	\$ 1,785.50	\$ 120.52	\$ 129.45	\$ 138.38	\$ 147.30	\$ 156.23	\$ 165.16	\$ 174.09	\$ 179.71	
				Yr to Yr Increase	\$ 8.93	\$ 8.93	\$ 8.93	\$ 8.93	\$ 8.93	\$ 8.93	\$ 5.62	\$ 59.19
Average PERS Members	\$ 43,823.00	\$ 3,651.92	\$ 1,825.96	\$ 123.25	\$ 132.38	\$ 141.51	\$ 150.64	\$ 159.77	\$ 168.90	\$ 178.03	\$ 183.78	
				Yr to Yr Increase	\$ 9.13	\$ 9.13	\$ 9.13	\$ 9.13	\$ 9.13	\$ 9.13	\$ 5.75	\$ 60.53
ASEA GG 1-A Range 27-A	\$ 79,320.00	\$ 6,610.00	\$ 3,305.00	\$ 223.09	\$ 239.61	\$ 256.14	\$ 272.66	\$ 289.19	\$ 305.71	\$ 322.24	\$ 332.65	
				Yr to Yr Increase	\$ 16.53	\$ 16.53	\$ 16.53	\$ 16.53	\$ 16.53	\$ 16.53	\$ 10.41	\$ 109.56

Estimate is based on FY 07 Total Normal Cost for PERS “Other” and assumed to be fixed for FY 07 to FY 12





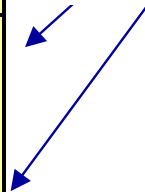
# SB 141 – Retirement Security Act

## Discussion: Contribution Rate of Existing Employees

### TRS Employee Normal Rate Projections

TRS - Average Rate								
Rate for FY	Total Normal Cost	Projections at Current Rate			Projections at SB 141 Rate			
		Employee Normal Cost Rate	Employee Share of Total Normal Cost	Employer Share of Total Normal Cost	50% of Total Normal Cost	SB 141 Employee Rate	Resulting Employee Share	Increase Over Previous FY
2006	22.97%	8.69%	37.8%	14.28%	11.49%	9.21%	40.1%	0.50%
2007	21.71%	8.69%	40.0%	13.02%	10.86%	9.71%	44.7%	0.50%
2008	21.72%	8.69%	40.0%	13.03%	10.86%	10.21%	47.0%	0.50%
2009	21.81%	8.69%	39.8%	13.12%	10.91%	10.71%	49.1%	0.50%
2010	21.87%	8.69%	39.7%	13.18%	10.94%	10.94%	50.0%	0.22%
2011	21.90%	8.69%	39.7%	13.21%	10.95%	10.95%	50.0%	0.01%
2012	21.93%	8.69%	39.6%	13.24%	10.97%	10.97%	50.0%	0.01%
2013	21.81%	8.69%	39.8%	13.12%	10.91%	10.91%	50.0%	-0.06%
2014	21.94%	8.69%	39.6%	13.25%	10.97%	10.97%	50.0%	0.07%
2015	22.06%	8.69%	39.4%	13.37%	11.03%	11.03%	50.0%	0.06%
2016	22.24%	8.69%	39.1%	13.55%	11.12%	11.12%	50.0%	0.09%
2017	22.44%	8.69%	38.7%	13.75%	11.22%	11.22%	50.0%	0.10%
2018	22.66%	8.69%	38.3%	13.97%	11.33%	11.33%	50.0%	0.11%
2019	22.88%	8.69%	38.0%	14.19%	11.44%	11.44%	50.0%	0.11%
2020	23.05%	8.69%	37.7%	14.36%	11.53%	11.53%	50.0%	0.09%
2021	23.16%	8.69%	37.5%	14.47%	11.58%	11.58%	50.0%	0.05%
2022	23.30%	8.69%	37.3%	14.61%	11.65%	11.65%	50.0%	0.07%
2023	23.60%	8.69%	36.8%	14.91%	11.80%	11.80%	50.0%	0.15%
2024	23.92%	8.69%	36.3%	15.23%	11.96%	11.96%	50.0%	0.16%
2025	24.11%	8.69%	36.0%	15.42%	12.06%	12.06%	50.0%	0.10%
2026	24.27%	8.69%	35.8%	15.58%	12.14%	12.14%	50.0%	0.08%
2027	24.81%	8.69%	35.0%	16.12%	12.41%	12.41%	50.0%	0.27%
2028	24.81%	8.69%	35.0%	16.12%	12.41%	12.41%	50.0%	0.00%
2029	24.82%	8.69%	35.0%	16.13%	12.41%	12.41%	50.0%	0.01%
2030	24.85%	8.69%	35.0%	16.16%	12.43%	12.43%	50.0%	0.01%
2031	24.88%	8.69%	34.9%	16.19%	12.44%	12.44%	50.0%	0.01%
2032	24.92%	8.69%	34.9%	16.23%	12.46%	12.46%	50.0%	0.02%

Based on current Mercer projections, it would take 5 years to reach the 50/50 shared rate in TRS





**Effect of Employee Contribution Rate Increases on Average TRS Employee**

TRS 2004	Annual Earnings	Normal Cost 22.97%	50% Normal Cost 11.49%	Current Rate @ 8.69%	SB 141 Proposed Pre-Tax Payroll Deductions (every 2 weeks)						Cumulative Increase 2.80%
					FY 06	FY 07	FY 08	FY 09	FY 10	FY 11	
					Monthly Earnings	2-Week Pay					
ASD Teacher BA Step 1	\$ 35,284.00	\$ 2,940.33	\$ 1,470.17	\$ 127.76	\$ 135.11	\$ 142.46	\$ 149.81	\$ 157.16	\$ 164.51	\$ 168.85	
				Yr to Yr Increase	\$ 7.35	\$ 7.35	\$ 7.35	\$ 7.35	\$ 7.35	\$ 4.34	\$ 41.09
ASD Teacher BA+18 Step 4	\$ 40,251.00	\$ 3,354.25	\$ 1,677.13	\$ 145.74	\$ 154.13	\$ 162.51	\$ 170.90	\$ 179.28	\$ 187.67	\$ 192.62	
				Yr to Yr Increase	\$ 8.39	\$ 8.39	\$ 8.39	\$ 8.39	\$ 8.39	\$ 4.95	\$ 46.88
ASD Teacher BA+36 Step 9	\$ 47,274.00	\$ 3,939.50	\$ 1,969.75	\$ 171.17	\$ 181.02	\$ 190.87	\$ 200.72	\$ 210.57	\$ 220.42	\$ 226.23	
				Yr to Yr Increase	\$ 9.85	\$ 9.85	\$ 9.85	\$ 9.85	\$ 9.85	\$ 5.81	\$ 55.05
Average TRS Member	\$ 53,948.00	\$ 4,495.67	\$ 2,247.83	\$ 195.34	\$ 206.58	\$ 217.82	\$ 229.05	\$ 240.29	\$ 251.53	\$ 258.16	
				Yr to Yr Increase	\$ 11.24	\$ 11.24	\$ 11.24	\$ 11.24	\$ 11.24	\$ 6.63	\$ 62.83
ASD Teacher BA +72 Step19	\$ 61,319.00	\$ 5,109.92	\$ 2,554.96	\$ 222.03	\$ 234.80	\$ 247.58	\$ 260.35	\$ 273.13	\$ 285.90	\$ 293.44	
				Yr to Yr Increase	\$ 12.77	\$ 12.77	\$ 12.77	\$ 12.77	\$ 12.77	\$ 7.54	\$ 71.41
Rg 4 - Mid Level Principal (216 Days - Step D)	\$ 80,893.00	\$ 6,741.08	\$ 3,370.54	\$ 292.90	\$ 309.75	\$ 326.61	\$ 343.46	\$ 360.31	\$ 377.16	\$ 387.11	
				Yr to Yr Increase	\$ 16.85	\$ 16.85	\$ 16.85	\$ 16.85	\$ 16.85	\$ 9.94	\$ 94.21

Estimate is based on FY 07 Total Normal Cost for TRS and assumed to be fixed for FY 07 to FY 11. Salaries are based on the 2004-05 Anchorage School District salary schedule





Board Adopted Employer Contribution Rates – FY '90 thru FY '07

Mercer Data Year	Board Adopt Year	Rate for FY	PERS						TRS					
			PERS Funding Ratio	Employer Normal Rate	Past Service Rate	Actuarial Computed Rate	Board Adopted Rate	Diff Computed Rate	TRS Funding Ratio	Employer Normal Rate	Past Service Rate	Actuarial Computed Rate	Board Adopted Rate	Diff Computed Rate
1987	1988	1990	100.0%	9.23%	0.07%	9.30%	9.30%	0.00%	101.0%	9.14%	-0.95%	8.19%	11.64%	3.45%
1988	1989	1991	93.0%	10.37%	1.63%	12.00%	12.00%	0.00%	98.8%	11.86%	0.41%	12.27%	10.54%	-1.73%
1989	1990	1992	91.6%	12.00%	2.20%	14.20%	14.20%	0.00%	95.0%	13.26%	1.90%	15.16%	11.87%	-3.29%
1990	1991	1993	97.2%	12.83%	0.75%	13.58%	13.58%	0.00%	87.7%	14.07%	5.58%	19.65%	12.00%	-7.65%
1991	1992	1994	88.1%	10.18%	3.54%	13.72%	13.72%	0.00%	85.7%	9.05%	6.54%	15.59%	12.00%	-3.59%
1992	1993	1995	91.2%	10.90%	2.80%	13.70%	13.70%	0.00%	89.7%	8.57%	4.79%	13.36%	12.00%	-1.36%
1993	1994	1996	95.4%	11.29%	1.53%	12.82%	12.82%	0.00%	93.1%	9.06%	3.42%	12.48%	12.00%	-0.48%
1994	1995	1997	94.8%	10.36%	1.78%	12.14%	12.14%	0.00%	89.6%	9.70%	5.26%	14.96%	12.00%	-2.96%
1995	1996	1998	96.5%	<b>10.61%</b>	1.29%	11.90%	<b>8.00%</b>	-3.90%	90.9%	10.10%	4.84%	14.94%	12.00%	-2.94%
1996	1997	1999	105.8%	<b>9.85%</b>	-2.11%	7.74%	<b>7.74%</b>	0.00%	97.2%	8.97%	1.55%	10.52%	12.00%	1.48%
1997	1998	2000	106.3%	<b>9.89%</b>	-2.53%	7.36%	<b>7.74%</b>	0.38%	94.0%	9.21%	3.79%	13.00%	12.00%	-1.00%
1998	1999	2001	105.9%	<b>8.67%</b>	-1.64%	7.03%	<b>7.40%</b>	0.37%	97.7%	8.99%	1.56%	10.55%	12.00%	1.45%
1999	2000	2002	105.5%	<b>8.07%</b>	-1.51%	6.56%	<b>6.75%</b>	0.19%	102.5%	8.88%	-1.79%	7.09%	11.00%	3.91%
2000	2001	2003	101.1%	5.43%	0.69%	6.12%	6.75%	0.63%	99.6%	9.40%	-1.11%	8.29%	11.00%	2.71%
2001	2002	2004	100.9%	5.42%	1.35%	6.77%	6.77%	0.00%	95.0%	10.33%	4.11%	14.44%	12.00%	-2.44%
2002	2003	2005	75.2%	<b>13.31%</b>	11.60%	24.91%	<b>11.77%</b>	-13.14%	68.2%	14.76%	20.81%	35.57%	16.00%	-19.57%
2003	2004	2006	72.8%	13.24%	12.39%	25.63%	16.77%	-8.86%	64.3%	14.28%	24.57%	38.85%	21.00%	-17.85%
2004	2005	<b>2007</b>	<b>70.2%</b>	13.32%	14.87%	<b>28.19%</b>	TBD	TBD	<b>62.8%</b>	13.76%	28.02%	<b>41.78%</b>	TBD	TBD

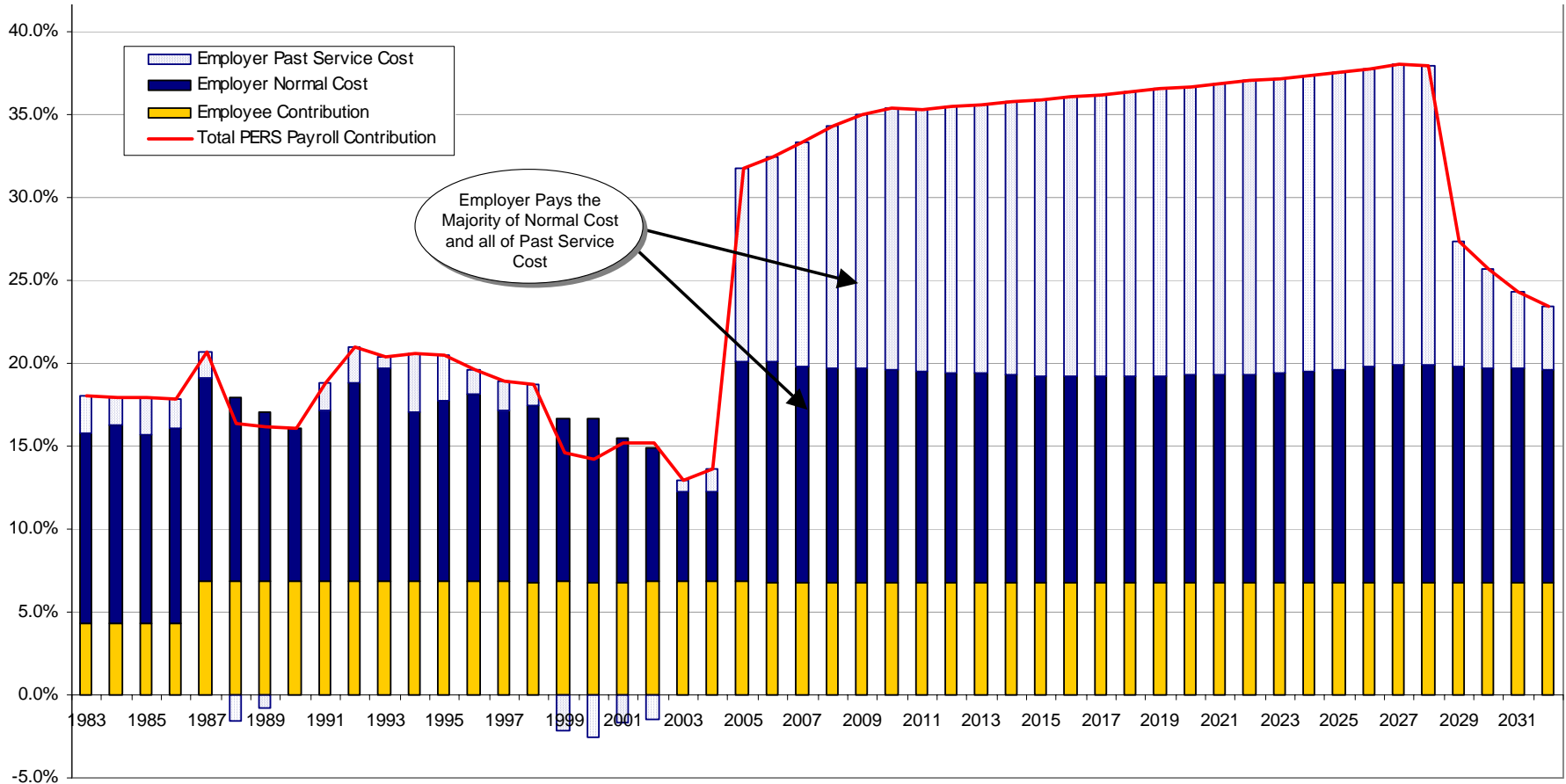
- Currently, the PERS/TRS boards set the annual Employer Contribution Rate
- When the boards adopt a rate below the Employer Normal Cost Rate, the unfunded liability may increase
- SB 141 requires the Board to adopt an Employer Contribution Rate no-less-than the Employer Normal Cost Rate







PERS Payroll Contribution Trend & Forecast





TRS Payroll Contribution Trend & Forecast

