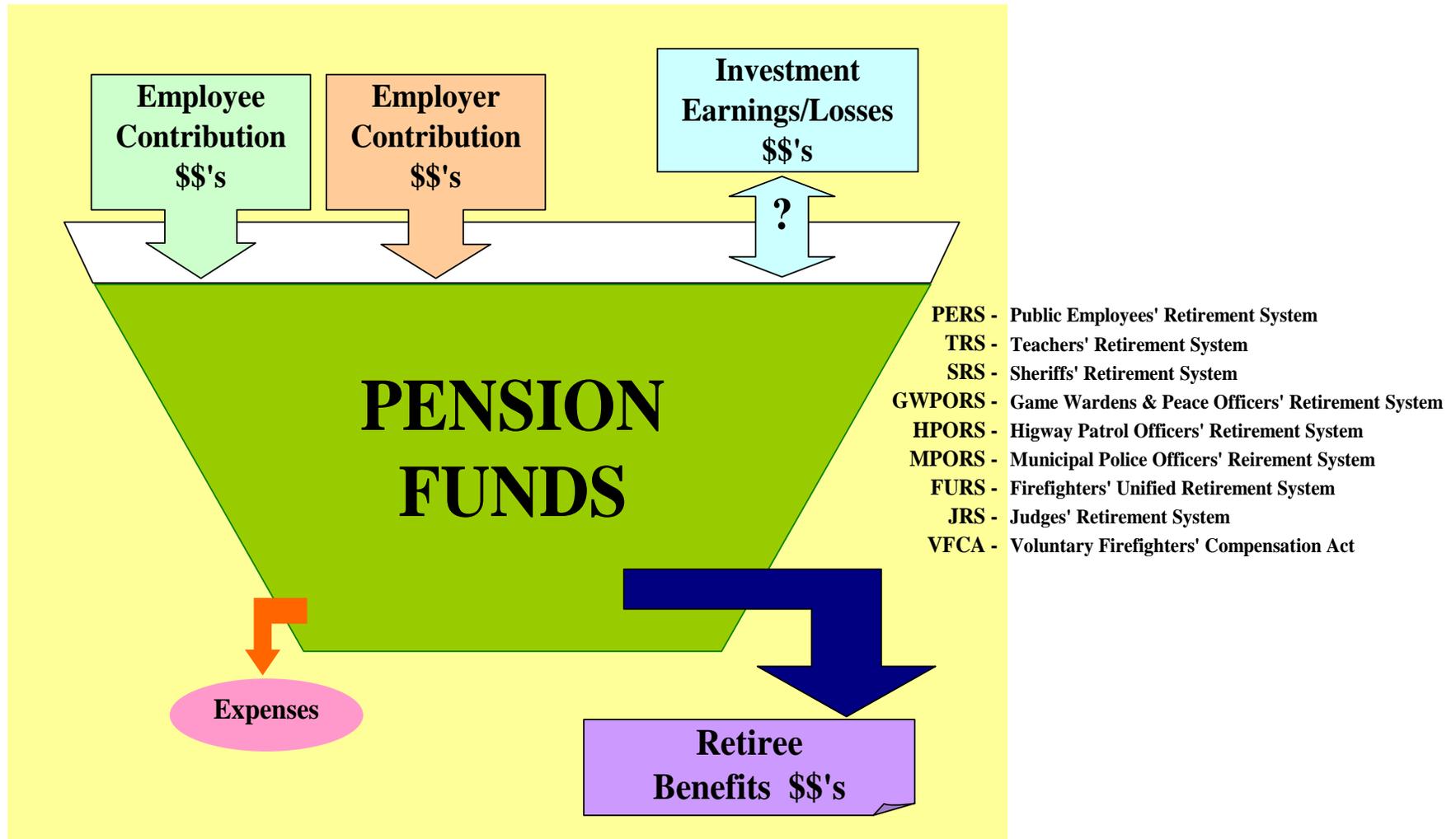


Pension Funds Unfunded Liabilities

Legislative Training Day
Jon Moe, LFD Staff
March 3, 2010

Pension System Schematic



Actuarial Valuation

Pension Plan Unfunded Actuarial Liability									
2009 Actuarial Valuations									
(Dollars in Millions)									
	TRS	PERS-DB	SRS	GWPORS	HPORS	MPORS	FURS	JRS	VFCA
2009 Valuation (as of 6/30/2009)									
Actuarial Accrued Liability (AAL)	\$4,173.8	\$4,792.8	\$223.9	\$92.2	\$137.8	\$345.3	\$306.2	\$41.8	\$33.5
Actuarial Value of Assets (AVA)	<u>2,762.2</u>	<u>4,002.2</u>	<u>200.7</u>	<u>81.2</u>	<u>99.6</u>	<u>214.3</u>	<u>209.8</u>	<u>61.9</u>	<u>27.2</u>
Unfunded Actuarial Liability/(Surplus)	<u>\$1,411.6</u>	<u>\$790.6</u>	<u>\$23.2</u>	<u>\$11.0</u>	<u>\$38.2</u>	<u>\$131.0</u>	<u>\$96.4</u>	<u>-\$20.1</u>	<u>\$6.3</u>
Funded Ratio (AVA/AAL)	66.2%	83.5%	89.6%	88.1%	72.3%	62.1%	68.5%	147.9%	81.2%
Years to Amortize Unfunded Liability	Does not amortize	Does not amortize	Does not amortize	Does not amortize	21.5 yrs	22.1 yrs	12.7 yrs	0 years	6.9 yrs
Net Statutory Funding Rate (EE & ER)	17.110%	14.030%	19.360%	19.560%	45.380%	52.780%	57.660%	32.810%	n/a
Normal Cost Rate	10.690%	12.160%	19.410%	18.530%	22.350%	26.820%	26.340%	25.900%	
Available for Amortization	6.420%	1.870%	-0.050%	1.030%	23.030%	25.960%	31.320%	6.910%	
Projected 30-yr Level Funding Rate	21.220%	16.420%	21.890%	20.250%	41.120%	48.330%	43.690%	-0.450%	
Projected Shortfall	4.110%	2.350%	2.530%	0.690%	-4.260%	-4.450%	-13.970%	-33.260%	
Market Value of Assets	\$2,301.8	\$2,998.6	\$151.5	\$61.9	\$74.6	\$162.1	\$159.3	\$46.6	\$20.4
Ratio of Actuarial Value to Market Value	120.0%	133.5%	132.5%	131.2%	133.5%	132.2%	131.7%	132.8%	133.2%
Change in Market Value from 2008	-23.10%	-22.16%	-19.76%	-15.44%	-22.53%	-19.15%	-18.22%	-20.75%	-21.40%

Pension Plan Unfunded Actuarial Liability
2009 Actuarial Valuations
(Dollars in Millions)

	TRS	PERS-DB	SRS	GWPORS	HPORS	MPORS	FUR
2009 Valuation (as of 6/30/2009)							
Actuarial Accrued Liability (AAL)	\$4,173.8	\$4,792.8	\$223.9	\$92.2	\$137.8	\$345.3	\$3
Actuarial Value of Assets (AVA)	<u>2,762.2</u>	<u>4,002.2</u>	<u>200.7</u>	<u>81.2</u>	<u>99.6</u>	<u>214.3</u>	<u>2</u>
Unfunded Actuarial Liability/(Surplus)	<u>\$1,411.6</u>	<u>\$790.6</u>	<u>\$23.2</u>	<u>\$11.0</u>	<u>\$38.2</u>	<u>\$131.0</u>	<u>\$</u>
Funded Ratio (AVA/AAL)	66.2%	83.5%	89.6%	88.1%	72.3%	62.1%	68
Years to Amortize Unfunded Liability	Does not amortize	Does not amortize	Does not amortize	Does not amortize	21.5 yrs	22.1 yrs	12.7 y
Net Statutory Funding Rate (EE & ER)	17.110%	14.030%	19.360%	19.560%	45.380%	52.780%	57.6
Normal Cost Rate	10.690%	12.160%	19.410%	18.530%	22.350%	26.820%	26.3
Available for Amortization	6.420%	1.870%	-0.050%	1.030%	23.030%	25.960%	31.3
Projected 30-yr Level Funding Rate	21.220%	16.420%	21.890%	20.250%	41.120%	48.330%	43.6
Projected Shortfall	4.110%	2.350%	2.530%	0.690%	-4.260%	-4.450%	-13.9
Market Value of Assets	\$2,301.8	\$2,998.6	\$151.5	\$61.9	\$74.6	\$162.1	\$1
Ratio of Actuarial Value to Market Value	120.0%	133.5%	132.5%	131.2%	133.5%	132.2%	131
Change in Market Value from 2008	-23.10%	-22.16%	-19.76%	-15.44%	-22.53%	-19.15%	-18.

Can We Invest Out of This Problem?

- Valuations assume 8% investment earnings for PERS and 7.75% for TRS
- From FY 1995 thru FY 2008, annualized returns exceeded actuarial assumptions
- Add FY 2009 to that period and the returns drop to 6.2%
- To get back on track:
 - **In 5 years – 15.8%**
 - **In 10 years – 11.8%**
 - **In 15 years – 10.5%**

Annual Required Contribution (ARC)

- Actuaries calculate the ARC as part of the actuarial valuation
- It is a rate that is needed to make the pensions sound – satisfy the 30-year amortization requirement
- Example:
 - TRS employer rate currently 9.96%
 - ARC rate for FY 2013 is 16.6%
 - The increased rate is 6.6% (about 40% more than current)
- That would be 6.6% of salaries

ARC

Pension Plan Unfunded Liabilities - Annual Required Contribution (ARC) Additional Percent of Salary Needed to Make Pensions Sound

Fiscal Year	TRS	PERS	SRS	GWPORS	HPORS
	Rate Shortage				
2010	0.2%	3.8%	4.0%	1.4%	n/a
2011	0.2%	5.8%	6.0%	2.4%	1.9%
2012	4.1%	7.2%	7.4%	3.0%	4.4%
2013	6.6%	7.4%	7.5%	3.0%	4.2%
2014	9.0%	7.5%	7.7%	3.0%	3.9%
2015	10.5%	7.7%	7.9%	3.0%	3.6%

Who Pays Employer Contributions?

- State Government
 - General fund
 - State special revenue funds
 - Federal funds
 - Proprietary funds

Crowds out other services or offset by tax or fee increases

Who Pays Employer Contributions?

- Cities & Counties
 - Many fund sources
 - Limitation in 15-10-420, MCA

Crowds out
other services

Who Pays Employer Contributions?

- Schools
 - Permissive tax
 - State

Property tax increases
and increased state
general fund for GTB

Cost of ARC

Potential Pension Cost Increases FY 2012 - FY 2015 (Dollars in Millions)

	FY 2012	FY 2013	FY 2014	FY 2015
State Costs				
General Fund	\$31	\$37	\$44	\$49
Other Funds	44	50	55	60
Local Schools	28	42	57	67
Local Government	<u>35</u>	<u>37</u>	<u>39</u>	<u>42</u>
	<u>\$138</u>	<u>\$166</u>	<u>\$195</u>	<u>\$219</u>

Potential Proposals

- Increased age and service requirements
- Reduce post-retirement increases (GABA)
- Reduced benefits
- Increased employee contributions
- Disincentives for early retirement