

# What Is Normal Cost?

The annual cost of providing retirement benefits for services performed by today's members is called the normal cost. This is a shared responsibility between the member and employer, demonstrating the employer's commitment to the member and the member's commitment toward funding his or her own retirement.

Ideally, all benefits are funded through the normal cost. However, when benefits are increased retroactively as they were for PERS in 1999 (see A Modern Day Parable: A Mortgage Analogy on pages 2 and 3 of this publication) or there are actuarial losses (as what PERS has experienced since 1998 due to growth in the number of retirees, improved mortality, market losses from the dot com bust, and the Great Recession), employer contributions must either be increased or be redirected from funding the normal cost to funding these unfunded benefit costs, which are called unfunded accrued liability costs.

A pension plan may have an unfunded liability but must have a plan in place to pay off that unfunded liability over time. PERS has such a plan in place.

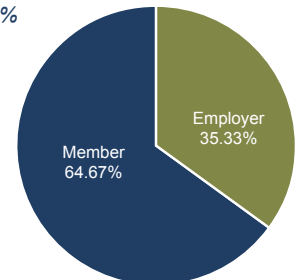
The charts at right show that the normal cost decreased from 11.21 percent in 1993 to 11.07 percent in 2013; however, with the increase in the employee contribution rate from 7.25 to 9 percent, in addition to the increase in the unfunded liabilities, the percentage of the normal cost paid by today's public employees has increased since 1993 from 64.67 to 81.30 percent.

While unfunded liabilities cannot totally be avoided and do not affect the normal cost, policies should be in place to mitigate accruing unfunded liabilities that will affect the employer's ability to adequately fund the benefits (e.g., retroactive benefits for which no contributions were paid).

## Normal Cost Distribution

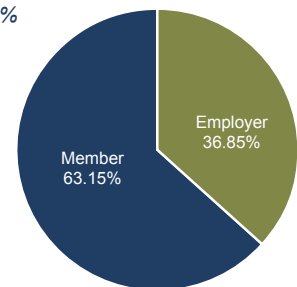
**1993**

11.21%



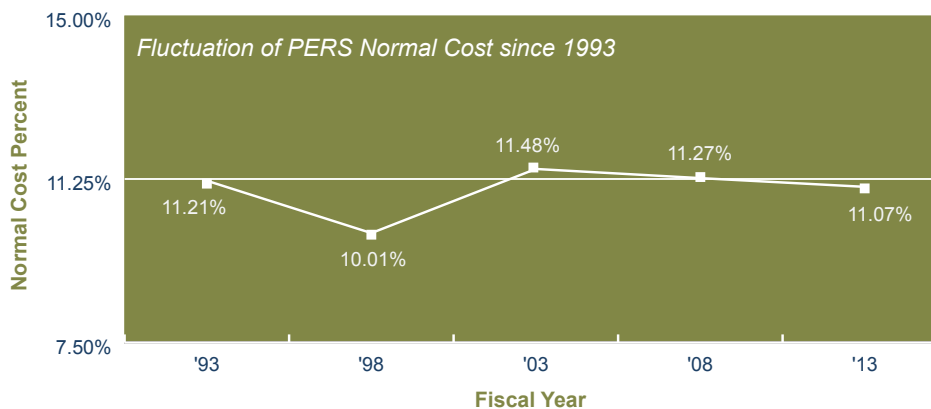
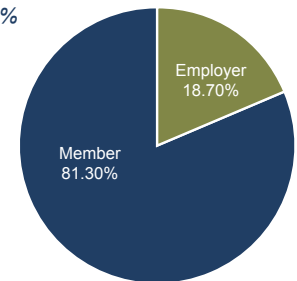
**2003**

11.48%



**2013**

11.07%



Percentages of PERS Normal Cost since 1993

	1993	1998	2003	2008	2013
<b>Member</b>	7.25	7.25	7.25	7.25	9.00
<b>Employer</b>	3.96	2.76	4.23	4.02	2.07

## Distribution of Today's Contributions

All member contributions—9.00 percent of covered earnings—are allocated for normal cost. Employer contributions are divided between normal cost—2.07 percent of covered earnings—and unfunded accrued liability—13.68 percent of covered earnings.

# Buying Benefits on Credit

Or Just Increasing the Unfunded Accrued Liability (UAL)

## PEER Report Caution

The Mississippi Joint Committee on Performance Evaluation and Expenditure Review (PEER) issued a report January 5, 1998, to the Mississippi Legislature cautioning against increasing benefits for members and retirees of the Public Employees' Retirement System of Mississippi (PERS) without an offsetting increase in contribution rates.

Below is the conclusion from the report, "An Evaluation of Statements of the Board of the Public Employees' Retirement System Regarding the Actuarial Status of the System."

*"We believe that overemphasis of the amortization period of the UAAL [Unfunded Actuarial Accrued Liability] has produced a climate in which extension of the amortization period is viewed by some as currency which may be used to purchase additional benefits in a painless manner. It is almost analogous to buying benefits on credit. As anyone knows, too much credit can be a dangerous thing....To maintain the integrity of the system, we recommend that any benefit increases be purchased wholly or partly by increases in contribution rates..."*

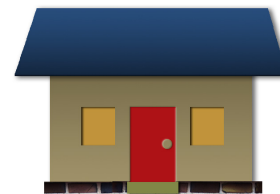
Changes in benefits, including retroactive benefit increases, were passed by the Mississippi Legislature in 1999 and were phased in from July 1, 1999, to July 1, 2002, without increasing contribution rates. The initial cost of these changes was estimated at more than 10 percent of payroll or by increasing the unfunded accrued liability (UAL) period by almost 40 years. Instead of increasing contribution rates and in recognition of the fact that the UAL period could not be extended by that many years, the benefit increases were phased in as the plan's UAL period reached 20 years on an actuarial basis, thus purchasing benefits on credit.

## A Modern Day Parable: A Mortgage Analogy

An illustration of the effects of the benefit increases is reflected below using the analogy of a basic home mortgage (i.e., normal cost) and an adjustable rate line of credit home equity loan (i.e., unfunded accrued liabilities). Accrued liabilities are amounts due to today's retirees, as well as amounts owed as future annual benefit payments to current working members.

### Before Benefit Changes

The house below represents the liability for the benefits due to retirees and members before changes were made in 1999. The stack of money represents the actuarial value of assets at the time.



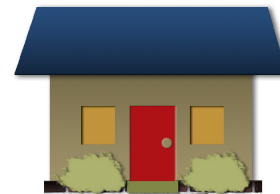
**Mortgage:** 9.8 years  
**Funded Ratio on Actuarial Basis:** 85%  
**Funded Ratio on Market Value Basis:** 103%  
**30-Year Benefit Formula:** 56.88%



Represents actuarial value of assets before 1999

### First Year of Benefit Changes

In 1999, using a home equity loan, needed foundation repairs were made and landscaping was added to the house. The UAL period increased to 15.5 years, and assets equaled 83 percent of what was needed to pay the liabilities (mortgage plus home equity loan). Paying it all off was just going to take a few more years.



**Mortgage:** 15.5 years  
**Funded Ratio on Actuarial Basis:** 83%  
**Funded Ratio on Market Value Basis:** 95%  
**30-Year Benefit Formula:** 58.13%



Represents actuarial value of assets in 1999

### Second Year of Benefit Changes

In 2000, the market was still booming and some credit was left on the home equity loan, so an addition was constructed. The UAL period increased to 17.4 years, and assets still equaled 83 percent of what was needed to pay the liabilities. Paying off the mortgage was just going to take a little longer.



**Mortgage:** 17.4 years  
**Funded Ratio on Actuarial Basis:** 83%  
**Funded Ratio on Market Value Basis:** 90%  
**30-Year Benefit Formula:** 60%



*Represents actuarial value of assets in 2000*

### Fourth Year of Benefit Changes

In 2002, the market was not as great; but, in anticipation of a market rebound and because of available credit on the home equity loan, a swimming pool was installed. The UAL period increased to 22.5 years, and assets now equaled 68 percent of what was needed to pay the liabilities. Paying off the mortgage was just going to take longer.



**Mortgage:** 22.5 years  
**Funded Ratio on Actuarial Basis:** 83%  
**Funded Ratio on Market Value Basis:** 68%  
**30-Year Benefit Formula:** 62.5%



*Represents actuarial value of assets in 2002*

### Third Year of Benefit Changes

In 2001, the investment return was 8.4 percent and the 10-year return was 12.7 percent as of June 30, 2000. The house was increasing in value and the future appeared rosy, so the home equity loan was, again, used; this time to add a garage. The UAL period decreased to 12.6 years as a result of market gains on an actuarial basis, and assets equaled 88 percent of what was needed to pay the liabilities. Life was good.



**Mortgage:** 12.6 years  
**Funded Ratio on Actuarial Basis:** 88%  
**Funded Ratio on Market Value Basis:** 81%  
**30-Year Benefit Formula:** 60.63%



*Represents actuarial value of assets in 2001*

### Years Later

Fast forward to 2011. The house is not worth as much as when everything seemed rosy. Our investment portfolio suffered losses in the dot com bust and then more losses in the Great Recession. The basic mortgage amount has not increased, and, in fact, because some of the cost for the basic mortgage shifted to the kids (current members), the payment decreased. However, the cost of the home equity loan has risen steadily since 2005 and will now take 30 years to pay the liabilities at a higher rate. Even if the house is sold, it would only cover the basic mortgage; the home equity loan would still be due.



**Mortgage:** 30 years  
**Funded Ratio on Actuarial Basis:** 62.2%  
**Funded Ratio on Market Value Basis:** 62.4%



*Represents actuarial value of assets in 2011*

### Moral of this Modern Day Parable

Buying benefits on credit can be dangerous.

# PERS Facts

## System Asset Allocation

Established in 1952, PERS is a defined benefit plan that—since first investing in equity securities in 1980—anticipates fluctuating markets so that investment losses in the short term will not negatively affect the long-term security of retirement benefits. PERS investments are well-diversified in a strategic asset allocation mix that includes U.S. and foreign stocks, fixed income bonds, real estate, and cash. This mix helps moderate the effect that any segment of the market may have on the performance of the total fund and can help offset some of the potential losses in the portfolio during times of negative volatility like the market crash of 1987, the Enron and WorldCom debacles, and today as the strained economic times that began in 2008 cast lingering effects on the economy. Even after market downturns, PERS still has sufficient assets to pay benefits long into the future. Asset values have rebounded since the market low in 2009, and changes to benefits for future members have been made to help ensure the long-term sustainability of the plan.

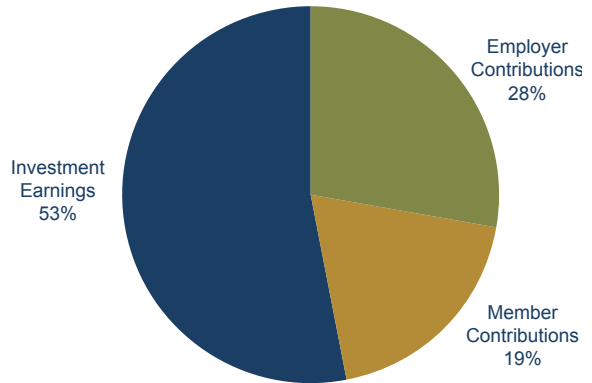
## System Current Assets

PERS' annual return for FY 2013 was 13.4 percent and total net assets as of the end of the fiscal year (June 30,

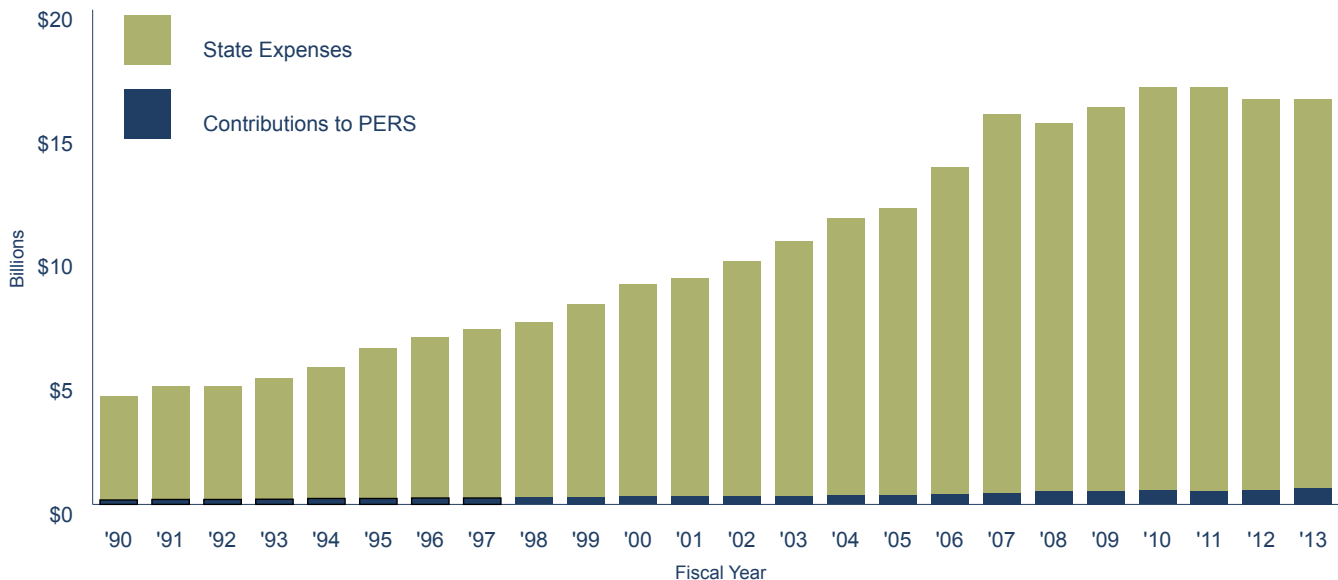
2013) were \$22.2 billion, up 2.0 billion from June 30, 2012. Investment returns that exceed 8 percent, the System's assumed rate of investment return, reduce projected future contribution increases.

## PERS Funding Not Shouldered by Taxpayers

Over a 30-year period, employer (taxpayer) contributions to PERS make up 28 percent of revenues. Earnings from investments comprise the majority of fund revenues. Unlike most plans in the private sector, public employees are required to contribute to their pension plans. PERS is not a pay-as-you-go retirement plan, but a trust to which members and their employers contribute during the members' careers. The chart below summarizes the sources of revenue for the 30-year period ending June 30, 2013.



## Percent of State Employer Contributions to State Expenses



Fiscal Year	'90	'91	'92	'93	'94	'95	'96	'97	'98	'99	'00	'01	'02	'03	'04	'05	'06	'07	'08	'09	'10	'11	'12	'13
<b>State Expenses</b> (\$ in billions)	4.2	4.6	4.6	4.9	5.3	6.1	6.5	6.8	7.1	7.8	8.6	8.8	9.5	10.3	11.2	11.6	13.2	15.3	14.9	15.5	16.3	16.3	15.8	15.7
<b>% of Expenses</b>	4.35	4.44	4.35	4.29	4.48	3.97	4.01	3.78	3.94	3.65	3.73	3.69	3.49	3.25	3.17	3.27	3.25	3.10	3.54	3.55	3.44	3.37	3.69	4.27