

FIGHTING INFLATION:
HOW DOES YOUR COLA COMPARE?

A COMPILATION OF COST OF LIVING ADJUSTMENTS
FROM STATE TEACHER RETIREMENT SYSTEMS

FOURTH EDITION

Prepared by Workplace Economics, Inc.
December 2004

for

NRTA: *AARP's Educator Community*

TABLE OF CONTENTS

Introduction

Purpose of the Compilation	i
Description of the Compilation.....	ii
Issues Covered in the Compilation	ii
Developments Since the 2002 Compilation.....	vi

Part I – Tables and Charts

Table 1: COLA Structure and Funding.....	1
Data Summary and Charts	3

Part II – State COLAs

Alabama	7
Alaska	8
Arizona.....	10
Arkansas.....	12
California	13
Colorado.....	14
Connecticut	15
Delaware	16
District of Columbia	17
Florida.....	18
Georgia.....	19
Hawaii.....	20
Idaho	21
Illinois	22
Indiana.....	23
Iowa.....	25
Kansas	28
Kentucky	29
Louisiana.....	30
Maine	31
Maryland.....	32
Massachusetts	35
Michigan	36
Minnesota.....	38
Mississippi	39
Missouri	40
Montana	41

Nebraska	42
Nevada	43
New Hampshire	44
New Jersey	45
New Mexico.....	46
New York.....	47
North Carolina	48
North Dakota.....	49
Ohio.....	50
Oklahoma.....	51
Oregon.....	52
Pennsylvania	53
Rhode Island	55
South Carolina	56
South Dakota.....	57
Tennessee.....	58
Texas.....	59
Utah.....	60
Vermont	61
Virginia	62
Washington	63
West Virginia.....	65
Wisconsin.....	66
Wyoming.....	68

Part III – A Closing Note On Inflation Protection Effectiveness: COLA Yield

COLA Yield: The Impact of Formulas, Frequency of Adjustment and Eligibility Time Lags	70
--	----

INTRODUCTION

This is the fourth edition of a compilation of cost of living adjustments (COLAs) in the 50 states and the District of Columbia focusing on state retirement plans that provide benefits to retired educators. The first three editions were published in 1997, 2000, and 2002. NRTA: *AARP's Educator Community* (formerly called The National Retired Teachers Association and a division of AARP) and the NRTA Pension Round Table initiated this report to provide information to NRTA members and others interested in public employee retirement issues. This edition updates and augments information presented in the first, second editions and third, documenting the numerous changes that have occurred since this report was last published.

Founded in 1947 by Dr. Ethel Percy Andrus, NRTA is a nationwide network of 50 state and 2,700 city and local retired educators associations. Total membership in the NRTA network exceeds 1.2 million. Members of this network are dedicated to continuous educational opportunities, advocacy and service as the means of safeguarding the economic security, work opportunities and future well-being of all generations. In 1995, the NRTA established the Pension Round Table as a resource to its members to study and provide information on public employment issues and trends. The members of the Pension Round Table are nominated by state retired educator associations and have extensive experience in the pension field.

PURPOSE OF THE COMPILATION

Inflation can severely erode the purchasing power of retiree pensions. Even during periods of relatively moderate inflation, increases in consumer prices can seriously reduce the purchasing value of retirement income. During the 10 years between 1994 and 2004, inflation was relatively modest, averaging just under 2.5 percent per year. However, the compounded effect of this inflation on fixed incomes over this period was to reduce purchasing power by over 21 percent. In other words, it takes about \$127.63 in 2004 to buy the same goods and services that could have been purchased with \$100.00 in 1994. Over the past 20 years, the effect has been even greater. Because inflation was higher, on average, during the 1980s than in the 1990s, it now takes about \$181.94 to purchase the same items today that could have been purchased with \$100.00 in 1984—a reduction in purchasing power of over 45 percent.¹

The purpose of this compilation is to present information on the manner in which state retirement systems provide retired educators with adjustments to retirement income designed to offset the effects of inflation. All states and the District of Columbia provide retired educators with some form of COLA, but the structure, timing and method of funding such increases varies from state to state, and in some cases also varies within the

¹ As measured by the Consumer Price Index for All Urban Consumers (CPI-U) reported by the U.S. Bureau of Labor Statistics, July to July of each respective period examined.

states or retirement systems. This report provides a detailed compilation of the pertinent features of COLAs on a state-by-state basis.

DESCRIPTION OF THE COMPILATION

This compilation is presented in three parts. Part I provides summary tables of the more detailed information presented in Part II. The tables offer the reader a quick glance at the nature and method of calculation of the COLA in each state and the source of funding. Part II provides detailed information describing the COLAs in each state. This includes:

- Type of COLA (automatic, ad hoc or other)
- Eligibility requirements
- How the COLA is calculated
- Whether the COLA benefit is compounded or simple
- Whether the COLA benefit depends on age or other factors
- How the COLA is funded
- Special features, if any

It should be noted that this report provides information regarding COLAs applicable to retirement benefits only, and not to disability or survivor benefits. In many states, however, the COLA benefits for disabled persons and surviving beneficiaries are similar to those provided to retirees.

ISSUES COVERED IN THE COMPILATION

Type of COLA

The compilation identifies two prevalent types of COLA payment mechanisms: *automatic* and *ad hoc*. Under an automatic COLA, the legislature authorizes a COLA payment at specified future intervals whenever a given set of circumstances occurs. The circumstances typically relate to an increase in the cost of living, although other factors (such as investment returns) may be considered as well. The distinguishing feature of an automatic COLA is that the legislature need not approve each COLA payment. An ad hoc COLA, however, requires legislative approval each time it is paid. This means that proponents of an ad hoc COLA compete with other interests in securing the money to pay for it, and they may not always succeed in making their case. Consequently, the timing and amount of ad hoc COLAs are less predictable than automatic ones.

Most states adopt either an automatic or ad hoc COLA structure. As of 2004, a review of the 51 retirement systems in this study showed that 37 offered automatic COLAs and 11 provided ad hoc COLAs. However, some of these retirement systems provide an ad hoc COLA in addition to an automatic COLA from time to time. Kentucky, for example,

usually provides both an automatic and ad hoc COLA. Other states take a different approach. In Alaska, retirees residing in-state may receive a special COLA in addition to the plan's automatic adjustment, and some retirees may receive either an automatic or ad hoc COLA. In Iowa, those retiring before July 1, 1990, receive an automatic COLA, while the adjustment for more recent retirees depends upon favorable experience in the dividend reserve account. In Massachusetts, COLA adjustments are determined by a formula, but require legislative approval before they are paid. On the other hand, Wisconsin's hybrid pension plan features annual dividend adjustments based on investment performance.

How is the benefit calculated?

The determination of the COLA adjustment ranges from the simple application of a specified percentage increase to the use of complicated formulas. The formulas are often based on some measure of increases in consumer prices, but may also consider factors relating to the fund's investment experience. Either automatic or ad hoc COLAs may be based on specified flat dollar amount or flat percentage increases or they may be determined by more complicated formulas or other considerations.

Eighteen states use some version of the Consumer Price Index (CPI) to account for consumer price inflation. In seven other retirement systems, the amount of the adjustment may be based upon the change in the CPI or may be adjusted by some other factor (such as investment returns or a minimum fixed percentage). The CPI-based formulas do not always increase retirement incomes by the amount of inflation, but rather may limit the amount of the increase by imposing maximums or adjusting for only a portion of the price change. The result is that the COLA may not fully offset the erosion of income experienced by the retiree.

Furthermore, the states use a variety of different versions of the CPI to measure inflation. The CPI is a statistic calculated monthly by the U.S. Bureau of Labor Statistics, the statistical and research arm of the U.S. Department of Labor. The CPI measures inflation by tracking the price changes for a fixed "market basket" of items typically purchased by consumers. There are several different versions of the CPI, and some are measured and published at the national, regional and local levels. Many of the state retirement systems use the CPI-U, where the "U" designates "all urban consumers," in the calculation of the COLA payment. This is the most commonly reported inflation statistic, and is estimated to cover about 87 percent of the population. Other states use the CPI-W, where the "W" designates "urban wage earners and clerical workers."² This is the measure most commonly used to adjust wages of active employees, and is also used to calculate the COLA payment for Social Security recipients. Other states use a local version of the

² The CPI-U is designed to capture the spending habits of all consumers, including retirees, while the CPI-W focuses on working consumers; multiple variations exist for each index. While market baskets are similar, certain items may receive different weights to reflect different consumption patterns. The U.S. Bureau of Labor Statistics regularly adjusts the composition and statistical basis for each version of the CPI.

CPI.³ Oregon PERS, for example, uses the CPI for the Portland area. In general, these various measures of inflation follow the same pattern of increase or decrease, but may produce different outcomes at any particular time, the effects of which are compounded over time.

By comparison, the Social Security COLA is equal to the percentage increase in the CPI-W from the third quarter of one year to the third quarter of the next year. The December, 2003 COLA (paid in January 2004) was 2.1 percent. This payment reflects the full amount of the increase in the CPI-W during the relevant time period. (However, the slight time lag in payment means that even this COLA does not fully adjust for the erosion of income due to inflation.) While 1983 legislation potentially limits the COLA payment if Social Security trust funds are below 20 percent of annual expenditures, this occurrence has never taken place.⁴

Unlike private sector employees, not all retired educators participate in Social Security. As of 2004, states in which teachers do not participate in Social Security but are covered only by their retirement systems are: Alaska, California, Colorado, Connecticut, Illinois, Kentucky, Louisiana, Maine, Massachusetts, Missouri, Nevada, Ohio and Texas. (Rhode Island and Georgia have some districts that do not participate.)

Is the benefit compounded or simple?

Another consideration is whether the COLA calculation is *compounded* or *simple*. When the calculation is compounded, prior COLA adjustments are taken into account when calculating each subsequent year's increase. For example, suppose a retiree receiving a monthly pension of \$1,000.00 receives a 3 percent COLA increase. The new monthly payment would then be \$1,030.00. Suppose the next year's COLA increase is again 3 percent. If the COLA is compounded, the new payment would be calculated by multiplying 3 percent times \$1,030.00, bringing the new payment to \$1,060.90 per month.

If the calculation is simple rather than compounded, then each year's COLA payment is calculated based on the original pension amount, without taking prior increases into account. Using the same example of a retiree with an initial monthly pension of \$1,000.00, each year's 3 percent increase would always be calculated as 3 percent of the initial \$1,000.00, yielding an additional \$30.00 each year. After the first increase, the monthly payment would be \$1,030.00, the same as if the COLA were compounded. But in the second year, the new payment would be \$1,060.00, or \$0.90 less than in the case of compounding. While the differences seem minor in the early years after retirement, the

³ Because of the smaller sample size, versions of the CPI published for local metropolitan areas exhibit greater volatility due to sampling and measurement error than the regional or national statistics and may therefore lead to greater variation when used in COLA formulas.

⁴ The Social Security Administration estimates the combined trust fund assets as of the beginning of 2001 were 306 percent of expenditures.

impact grows the longer the period of retirement, and the differences can be substantial during periods of rapid inflation.

Forty-two retirement systems compound COLA increases, while eight use the simple method. Mississippi uses a combination of both methods.

Does the amount of the COLA depend on age or some other factor?

In 18 retirement systems, the amount of the payment additionally varies by age or some other factor, such as date of hire, date of retirement, years of service credit, group membership or investment returns. In the remaining 33 retirement systems, additional factors such as age do not influence the payment.

How is the COLA funded?

The states use a variety of methods to fund COLA payments. Individual states may use a combination of several methods, and the funding method used may vary from year to year. Occasional ad hoc or other special adjustments implemented from time to time in some states may be funded in a different way than regularly scheduled COLA increases.

In general, the types of funding methods include:

- Employer contributions, specially earmarked for COLA funding, are used in 6 states.
- Employee contributions, specifically designated for COLA funding, are used in 2 states.
- Both employee and employer contributions fund the COLA in two states.
- Thirty states fund the COLA from existing trust fund money or by adding the cost of the COLA to existing system liability, making this the most prevalent funding method.
- Investment earnings that are explicitly defined as “surplus” or “excess” fund the COLA in 7 states.
- Four states and the District of Columbia require a legislative appropriation to fund the COLA.

Special features

This section reports on special features or variations in COLA adjustments that exist in addition to, or, in some cases, in place of, the basic features of the COLA mechanism in a number of states. This includes information on “catch-up” provisions, “purchasing power protection,” gainsharing, special supplemental payments or additional ad hoc

COLAs. These special features provide additional income to retired educators, but generally apply only in certain cases or to certain groups (such as to those that have been retired the longest).

DEVELOPMENTS SINCE THE 2002 COMPILATION

In the face of financial concerns, only a modest number of legislative changes to the COLAs covering state educators have occurred in the two years since the last compilation was published. For example, some states with ad hoc COLAs -- Delaware, Indiana, New Hampshire, North Carolina, and Oklahoma -- passed legislation to award an ad hoc COLA. Kansas, although not passing an increase in its ad hoc COLA during this period, did pass legislation to make retirees who started receiving a monthly benefit prior to July 2, 1987 eligible to receive an additional annual retirement payment up to a maximum of one month's benefit or "13th check". Until 2003, this payment was conditional based on the Kansas retirement system's investment returns. However, beginning in 2003 this payment became guaranteed and funded with increased employer contributions.

Wisconsin, which provides for investment gainsharing rather than an ad hoc or automatic COLA adjustment made a change in the way some distributions take place. Surpluses in the fixed annuity reserve now are distributed if the distribution will result in at least a 0.5% increase in the amount of annuities in force, on recommendation of the actuary. Previously, there was no distribution of such surpluses unless the distribution resulted in at least a 2.0% increase in the amount of annuities in force. As a result of this change, retirees received a 1.4% dividend (increase) in the fixed annuity portion of their May 1, 2004 retirement checks. (Each year, annuitants receive a "dividend" adjustment based on the actual investment return applicable to the annuity reserve held in the Fixed Retirement Investment Trust and the Variable Retirement Investment Trust. No change was made to the mechanism for making distributions from the variable annuity reserve.)

At the same time, legislation in three of those jurisdictions covered by automatic COLAs produced *structural* changes to the form of automatic COLA provided. Some of the *structural* changes that have occurred in automatic COLAs since the last compilation include:

Colorado Changed the COLA adjustment for new hires. Previously the COLA adjustment for all retirees was a flat percentage of 3-1/2% percent. For members hired before July 1, 2005, the increase in benefits is 3-1/2%, compounded annually. For members hired on or after July 1, 2005, the increase in benefits is also compounded annually, but is the lesser of 3% or the actual change in the U.S. Urban Wage Earners and Clerical Workers Consumer Price Index (CPI-W) during the preceding calendar year.

- Washington Legislation enacted in 2004 established a \$1,000 minimum monthly benefit for TRS Plan 1 members who have at least twenty-five years of service and who have been retired at least twenty years. Members meeting eligibility had their benefit payment, before applicable reductions, increased to \$1,000 effective with their July 2004 payment. The new minimum amount would remain in effect until the original benefit calculation plus annual cost of living increases exceeds \$1,000.
- Wyoming Legislation clarified cost-of-living adjustment language in the state statutes to provide the Board of the retirement system the ability to determine what amount of COLA is affordable and award that percentage even if it is less than the maximum COLA amount (3%). The previous language could have been construed to create a situation where if the maximum COLA amount was not affordable, then no increase could be given to retirees.

METHODOLOGY

This compilation covers 50 statewide retirement systems that serve educators and the District of Columbia Teachers' Retirement and Annuity Fund. The data and information for this report were collected and compiled as of September, 2004.

ACKNOWLEDGMENTS

We would like to acknowledge the many people who assisted in the completion of this report. They include: Annette S. Norsman, Ph.D., Director, NRTA and Nancy Aronson, Senior Legislative Representative for NRTA Issues; the Pension Round Table members: William Brinkley, Edward (Tom) Curran, R. Ernest Dear, Jane Elmer, Joseph Endry, Paul R. Fair, Tommy G. Fulton, Jay Kaplan, Carl D. Lancaster Jr., Judith C. Marcus, Dave Mills, Barbara Rich, Mary C. Scott, Sidney A. Seegers, Kenneth Stephenson, Lee Williamson, Carole Wright and the NRTA staff.

PART I

TABLES AND CHARTS

TABLE 1: COLA STRUCTURE AND FUNDING

States	Type of COLA	BENEFIT CALCULATION		Amount Varies by:	Funding
		Formula	Type of Calculation		
Alabama	Ad hoc	%	Compound		Employer
Alaska ¹	Auto	CPI or %	Compound	Age	Existing Liability/Trust Fund
Arizona	Auto	%/ \$	Compound	Yrs of service	Existing Liability/Trust Fund
Arkansas	Auto	%	Simple		Existing Liability/Trust Fund
California	Auto	%	Simple		Existing Liability/Trust Fund
Colorado	Auto	% ²	Compound		Existing Liability/Trust Fund
Connecticut	Auto	CPI or %	Compound	Asset earnings	Excess Earnings ³
Delaware	Ad hoc	%	Compound		Employer
Dist. of Columbia	Auto	CPI	Compound	Date of hire	Appropriation
Florida	Auto	%	Compound		Existing Liability/Trust Fund
Georgia	Auto	CPI	Compound		Existing Liability/Trust Fund
Hawaii	Auto	%	Simple		Existing Liability/Trust Fund
Idaho	Auto	CPI	Compound		Existing Liability/Trust Fund
Illinois	Auto	%	Compound	Age	Employee
Indiana	Ad hoc	%	Compound	Date of retirement	Appropriation
Iowa ⁴	Other	%	Simple		Existing Liability/Trust Fund
Kansas	Ad hoc	% or \$	Compound	Yrs service, retirement date	Existing Liability/Trust Fund
Kentucky	Auto + Ad hoc	%	Compound		Appropriation
Louisiana	Auto	CPI	Compound	Investment returns	Excess Earnings
Maine	Auto	CPI	Compound		Employer + Employee
Maryland ⁵	Auto	CPI	Compound		Existing Liability/Trust Fund
Massachusetts	Other	CPI or %	Compound		Existing Trust/Excess Earnings
Michigan ⁶	Auto	%	Simple		Employee
Minnesota	Auto	CPI + %	Compound		Existing Liability/Trust Fund
Mississippi	Auto	%	Combination	Age	Existing Liability/Trust Fund
Missouri	Auto	CPI	Compound		Existing Liability/Trust Fund
Montana	Auto	%	Compound		Existing Liability/Trust Fund
Nebraska	Auto	CPI or %	Compound		Existing Liability/Trust Fund/Appropriation
Nevada	Auto	CPI or %	Compound	Date of retirement	Existing Liability/Trust Fund
New Hampshire	Ad hoc	CPI	Compound		Excess Earnings
New Jersey	Auto	CPI	Simple		Existing Liability/Trust Fund
New Mexico	Auto	CPI	Compound		Existing Liability/Trust Fund
New York	Auto	CPI	Compound		Employer
North Carolina	Ad hoc	%	Compound		Existing Liability/Trust Fund
North Dakota	Ad hoc	\$	Compound	Yrs service, retirement date	Excess Earnings
Ohio	Auto	%	Simple		Existing Liability/Trust Fund
Oklahoma	Ad hoc	%	Compound	Yrs of service, benefit amount	Existing Liability/Trust Fund
Oregon	Auto	CPI	Compound		Employer
Pennsylvania	Ad hoc	%	Compound	Date of retirement	Employer
Rhode Island	Auto	%	Compound		Existing Liability/Trust Fund
South Carolina	Auto	CPI	Compound		Existing Liability/Trust Fund
South Dakota	Auto	%	Compound		Existing Liability/Trust Fund
Tennessee	Auto	CPI	Compound		Existing Liability/Trust Fund
Texas	Ad hoc	%	Compound	Date of retirement	Excess Earnings
Utah	Auto	CPI	Simple		Employer
Vermont	Auto	CPI	Compound	Date of membership	Existing Liability/Trust Fund
Virginia	Auto	CPI	Compound		Employer
Washington ⁷	Auto	CPI/%/other	Compound	Varies by plan	Employer and/or employee
West Virginia	Ad hoc	%	Compound	Age	Existing Liability/Trust Fund
Wisconsin	Other	%	Compound	Investment returns	Excess Earnings
Wyoming	Auto	CPI	Compound		Existing Liability/Trust Fund

Notes to TABLE 1: COLA Structure and Funding

Information in the table applies to primary and/or most recent COLA instrument for each state system. Information on occasional ad hoc adjustments, special features and variations can be found in the detailed descriptions in Part II.

¹ Alaska has more than one type of COLA. Information in table applies to post retirement pension adjustment for TRS retirees. See Part II for details.

² Colorado: For members hired before July 1, 2005, the increase in benefits is 3-1/2%, compounded annually. For members hired on or after July 1, 2005, the increase in benefits is also compounded annually, but is the lesser of 3% or the actual change in the U.S. Urban Wage Earners and Clerical Workers Consumer Price Index (CPI-W) during the preceding calendar year.

³ Connecticut: For those retiring before 9/1/92, COLA is funded as part of existing liabilities.

⁴ Iowa: Information in table applies to those retired on or after 7/1/90.

⁵ Maryland: Information in table applies to TPS. See Part II for detail on TRS COLA.

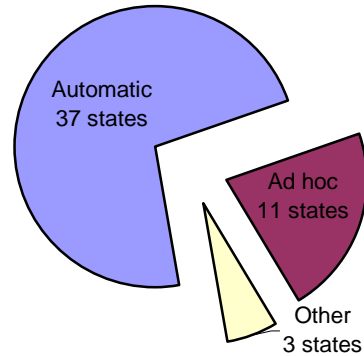
⁶ Michigan: Information in table applies to MIP. See Part II for detail on basic plan.

⁷ Washington: Varies by plan. See Part II for detail.

Data Summary

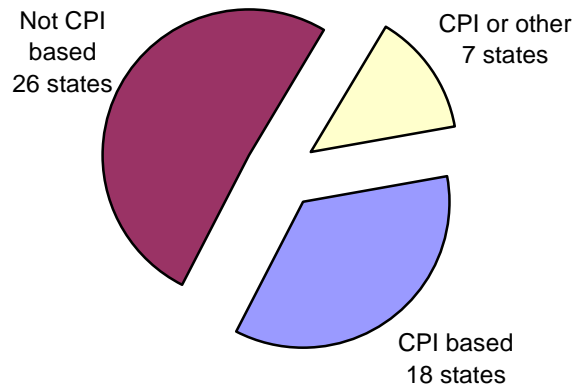
Automatic COLAs are now featured in 37 states. Eleven states provide ad hoc COLAs and three states use other methods. (A number of states offer ad hoc COLAs from time to time in addition to the automatic COLA.)

Type of COLA



Eighteen states use some version of the CPI to calculate the COLA increase, although in many instances a maximum or other limitation may apply. Seven states use either the CPI or some other method (such as a fixed percentage increase). The COLA increase is not directly tied to the CPI in 26 states, where retired educators typically receive a percentage increase that is either a fixed amount or may vary based on earnings or other factors.

Benefit Calculation

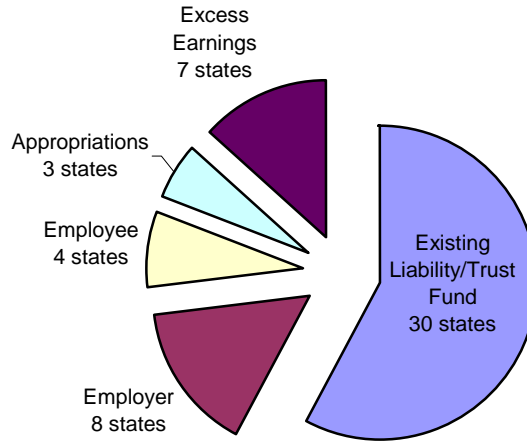


Most states (42) compound increases when making COLA calculations. Eight states use simple compounding, while one state—Mississippi—utilizes a different method.

In addition, in 18 states the amount of the COLA further depends on age or some other factor, such as date of hire, date of retirement, years of service credited at retirement, plan membership or investment earnings.

In most states (30), the COLA is funded as part of the existing liability of the retirement system. Employer contributions fund the COLA in eight states, and employee contributions fund the payment in four states. (Both employer and employee contributions fund the COLA in Maine and under one plan in Washington.) The COLA is financed from surplus or excess investment earnings in seven states, and two states plus the District of Columbia rely on legislative appropriations to fund the retiree COLAs. Massachusetts utilizes a combination of these funding methods.

Sources of Funding



PART II

STATE COLAS

Alabama

TEACHERS RETIREMENT SYSTEM OF ALABAMA (TRS)

Alabama uses the term "cost of living increase" to describe its COLA.

- **Type of Benefit:** Alabama retirees receive ad hoc cost of living increases. The last cost of living increase was granted in 2002. Previous increases were made in 2000, 1998, 1996, 1994, 1993, 1990, 1988, 1985, 1982, 1980, 1978, 1975, 1973, 1971, and 1969.
- **Who Is Eligible for COLA?** Retirees who retired on or before October 1, 2001 and who were receiving or entitled to receive a monthly allowance, were eligible for the latest cost of living increase. The COLA was effective October 1, 2002.
- **How Is the Benefit Calculated?** The latest cost of living was calculated as 3% of the retiree's current gross benefit, but in no case less than \$15 per month.
- **Is the COLA Compounded or Simple?** The cost of living increase is compounded, which means that previous cost of living increases are counted when a new increase is being calculated.
- **Does the Amount of the COLA Depend on Age or Some Other Factor?** The amount of the retiree's cost of living increase does not depend on age or other factor.
- **How Is the COLA Funded?** Employers fund the cost of living increase. To do so, each employer pays a percentage of its payroll. This percentage is determined annually by the Board of Control of the TRS.

For further information, see Act No. 2002-393, 2002 Alabama Session Laws.

Alaska

ALASKA TEACHERS' RETIREMENT SYSTEM (TRS)

Alaska uses the term "post retirement pension adjustment" (PRPA) to describe benefit increases for TRS retirees. It also provides a special payment to retirees who live in Alaska called a cost-of-living allowance (COLA). Certain retirees are also entitled to an ad hoc PRPA instead of the PRPA. The COLA and the ad hoc benefit are described in "Special Features" at the end of this section.

■ **Type of Benefit:**

Alaska retirees receive automatic post retirement pension adjustments, and, as noted above, some are entitled to additional benefits.

■ **Who Is Eligible for COLA?**

Retirees who are age 60 or older who received benefits in the preceding calendar year and retirees who have been retired at least eight years are eligible for the post retirement pension adjustment.

■ **How Is the Benefit Calculated?**

The post retirement pension adjustment is calculated as follows:

(1) Retirees who were at least 65 years old on July 1 receive the *lesser of*

9%, or
75% of the increase in the cost of living in the preceding calendar year.

(2) Retirees who were between 60 and 65 years old on July 1, and retirees who were less than 60 on July 1 but had been retired for at least eight years, receive the *lesser of*

6%, or
50% of the increase in the cost of living in the preceding calendar year.

The cost of living in the preceding calendar year is determined by Consumer Price Index for urban wage earners and clerical workers (CPI-W) in Anchorage, Alaska.

If a retiree was not receiving benefits for the entire preceding calendar year, he/she receives a prorated post retirement pension adjustment.

■ **Is the COLA Compounded or Simple?**

The post retirement pension adjustment is compounded, which means that previous post retirement pension adjustments are counted when a new post retirement pension adjustment is being calculated. By contrast, the special cost-of-living allowance, described below, is simple.

■ **Does the Amount of the COLA Depend on Age or Some Other Factor?**

The amount of the post retirement pension adjustment depends on a retiree's age. Older retirees receive a larger post retirement pension adjustment.

■ **How Is the COLA Funded?**

The cost of the benefit increase is added to the existing liabilities of the retirement system

■ **Special Features:**

COLA for Alaska Residents

Retirees:

- (1) first hired after July 1, 1990, who live in Alaska and are at least 65 years old, or
- (2) hired before July 1, 1990 and their survivors, who live in Alaska, irrespective of age, or
- (3) who are disabled and who live in Alaska

are eligible for a cost-of-living allowance in addition to his/her basic retirement benefit.

The amount of the allowance is 10% of the original benefit. The allowance is simple, i.e., not compounded like the post retirement pension adjustment, previously described.

Ad Hoc Post Retirement Pension Adjustment

In addition to the foregoing, members who were first hired in TRS-covered service before July 1, 1990, are entitled to receive ad hoc PRPAs up to a maximum of 4% of the CPI-W increases. Ad hoc PRPAs are only granted if the financial condition of the TRS fund permits. The ad hoc adjustment is not prefunded. When an ad hoc PRPA is granted, benefit recipients who are eligible for both the ad hoc PRPA and the automatic PRPA will receive whichever PRPA is larger. Retirees who are pre-July 1, 1990 hires and are younger than age 60, or who have not been retired for at least eight years, are not entitled to the regular PRPA, but will receive the ad hoc provision in the years in which it is paid. Based on the financial condition of the TRS retirement fund, no ad hoc PRPA was granted in 2004.

For further information, see Alaska Statutes § 14.25.142 and § 14.25.143 (2003).

Arizona

ARIZONA STATE RETIREMENT SYSTEM (ASRS)

Arizona uses the term "Permanent Benefit Increase" (PBI) to describe its COLAs.

■ **Type of Benefit:**

Arizona retirees receive automatic benefit increases. The PBI increase is paid July 1st of each year, provided ASRS investment returns exceed the actuarial assumed rate of return on ASRS investments.

■ **Who Is Eligible for COLA?**

All retirees who were receiving benefits on or before July 31 of the previous calendar year are eligible for the benefit increase.

■ **How Is the Benefit Calculated?**

The benefit increase is a percentage of the total liability for benefits to retired members. The percentage is the difference between the actual actuarial rate of investment return and the actuarial assumed return (8%). The increase is capped at 4% of the total benefits paid to retired members. Though the total amount available for the PBI is determined as a percentage of retired member benefits, the amount available is then converted to a dollar amount per year of service credit in order to reward length of service. The amount actually payable to a member is the dollar factor times a member's accrued service credit at retirement and is a permanent increase to the member's benefit.

The amount available for the PBI is calculated as follows:

- (1) Determine any excess investment earnings account balance available.
- (2) Determine the total excess investment earnings on the accounts for eligible retirees as follows:
 - (a) The excess investment earnings of eligible retirees are equal to the actuarial present value of benefits for all retirees during the fiscal year ending June 30 of the year prior to the year for which an increase is being granted, multiplied by
 - (b) the positive difference, if any, between the yield rate on the actuarial value of ASRS assets for the fiscal year that ended June 30 of the year prior to the year for which an increase is being granted and 8%. If the yield is less than or equal to 8%, the excess investment earnings are deemed to be zero.
- (3) Add the amounts determined in (1) and (2).
- (4) Determine the actuarial present value of a 1 % benefit increase for retirees as of June 30 of the year prior to the year for which an increase is being granted.
- (5) Divide the amount determined in (3) above by the amount determined in (4) above. If the quotient is equal to or greater than four, the benefit increase is 4%. If the quotient is one or more, but less than four, the benefit increase is that percent rounded to the nearest tenth of a percent. If the quotient is less than one, there is no benefit increase.

The PBI increase is based on a retiree's years of credited service and is calculated as follows:

- (6) Multiply the percentage determined (5) above by the actuarial present value of benefits for retired members as of June 30 of the year prior to the year for which an increase is being granted.
- (7) Determine the actuarial present value of a one dollar per year of credited service annual increase in the base benefit as of June 30 of the year prior to the year for which an increase is being granted, received by all eligible retirees.
- (8) Divide the amount determined in (6) above by the amount determined in (7) above.
- (9) Multiply the amount derived in (8) above by the number of years of credited service for each eligible retiree.

Any unused excess investment earnings on accounts associated with eligible retirees are applied to benefit increases in subsequent years.

■ **Is the COLA Compounded or Simple?**

Benefit increases are compounded, which means that previous benefit increases are counted when a new increase is being calculated.

■ **Does the Amount of the COLA Depend on Age or Some Other Factor?**

The amount of a retiree's benefit increase depends on a retiree's years of service credit. The more years of service credit a retiree earned, the greater a retiree's benefit increase.

■ **How Is the COLA Funded?**

The cost of the benefit increase is added to the existing liabilities of the retirement system.

■ **Special Features:**

“Enhanced PBI”

In addition to the regular PBI, the retirement system may provide an additional PBI to retired members. This is an enhancement to the original PBI to assist those retirees who have been retired for a long period of time. The enhancement provides that interest at a rate of 8% be paid on the funds held in reserve for the PBI; the interest accrued to the reserve is used to fund an enhanced PBI that shares the accumulated interest among eligible retirees based on the number of years a member has been retired. A member who has at least 10 years of service would be eligible for a share for each five years of his/her retirement, with the maximum amount being paid after a member has been retired for 30 years. A member must be retired at least five years by July 1st to begin receiving this benefit.

For further information, see Arizona Revised Statutes Annotated § 38-767 (2003-4).

Arkansas

ARKANSAS TEACHER RETIREMENT SYSTEM (TRS)

Arkansas uses the term "redetermination" to describe its COLA.

■ **Type of Benefit:**

Arkansas retirees receive automatic redeterminations.

■ **Who Is Eligible for COLA?**

Retirees are eligible for the redetermination on the July 1 which is at least twelve months after retirement.

■ **How Is the Benefit Calculated?**

A retiree's benefit is redetermined every year. A retiree receives 3% of his/her base amount for each full year of retirement. The base amount includes the amount of the original monthly benefit, plus any one-time increase or increases that may be granted by legislation.

In no event shall the redetermined amount be less than the base amount.

■ **Is the COLA Compounded or Simple?**

The redetermination is simple, which means that previous redeterminations are not counted when a new redetermination is being calculated.

■ **Does the Amount of the COLA Depend on Age or Some Other Factor?**

The redetermined amount does not depend on age or any other factor.

■ **How Is the COLA Funded?**

The cost of the benefit increase is added to the existing liabilities of the retirement system. Legislation passed in 2003 clarified that this 3% cost-of-living adjustment, unlike other benefit improvements or supplements (see below), was not subject to limitation by the unpaid actuarial accrued liability of the fund.

■ **Special Features:**

Additional Supplement

The Board of Trustees of ATRS is authorized to pay not less than \$50 per month and as much as \$200 per month to supplement the retirement benefits of retired members with more than five years of service credit, provided the actuarial condition of the fund permits such supplement. This supplement (currently \$75 per month), although part of the redetermination provisions of the statute, is not a COLA but rather a means of subsidizing retiree healthcare insurance.

For further information, see Arkansas Code Annotated §24-7-713 (2003).

California

CALIFORNIA STATE TEACHERS' RETIREMENT SYSTEM (CALSTRS)

California uses the term "benefit improvement factor" to describe its COLA.

- **Type of Benefit:** California retirees receive an automatic annual benefit improvement factor of 2% that is applied to all continuing allowances. The legislature reserves the right to adjust the improvement factor up or down as economic conditions dictate.
- **Who Is Eligible for COLA?** Retirees who have been retired for at least one year are eligible for the improvement factor.
- **How Is the Benefit Calculated?** Eligible retirees receive a 2% increase for each year commencing on September 1, following the first anniversary of the effective retirement date.
- **Is the COLA Compounded or Simple?** The improvement factor is simple, which means that previous improvement factors are not counted when a new improvement factor is being calculated.
- **Does the Amount of the COLA Depend on Age or Some Other Factor?** The improvement factor does not depend on age or any other factor.
- **How Is the COLA Funded?** The cost of the benefit increase is added to the existing liabilities of the retirement system.
- **Special Features:**
 - "Purchasing Power Guarantee"***
 - If the purchasing power of a retiree's original allowance is less than 80% of the originally granted benefit, a retiree may be eligible for a quarterly payment from the Supplemental Benefit Maintenance Account. Payments are made to the extent that funds are available. The Supplemental Benefit Maintenance Account receives funds from school lands revenues and appropriations from the legislature (currently, this continuous appropriation is set at 2.5% of creditable compensation for the fiscal year ending in the immediately preceding calendar year).
 - For further information, see California Education Code §§ 22140, 22141, 22951.5, 22954, 22954.1, 22955, 22955.5, 24400, 24402, 24411, 24412, 24413, 24414, 24415, 24416 and 24417 (2004).*

Colorado

PUBLIC EMPLOYEES' RETIREMENT ASSOCIATION OF COLORADO (PERA)

Colorado uses the term "increase in benefits" to describe its COLA.

- **Type of Benefit:** Colorado retirees receive automatic increases in benefits.
- **Who Is Eligible for COLA?** Retirees who have been retired at least one year receive the full annual COLA. Retirees retired less than one year, but within the year preceding March 1 payment date, receive a prorated COLA.
- **How Is the Benefit Calculated?** A retiree receives an increase in benefits on March 1 of each year. For members hired before July 1, 2005, the increase in benefits is 3-1/2%, compounded annually, multiplied by the number of years since March 1, 2000 that a retiree has been retired. For members hired on or after July 1, 2005, the increase in benefits is also compounded annually, but is the lesser of 3% or the actual change in the U.S. Urban Wage Earners and Clerical Workers Consumer Price Index (CPI-W) during the preceding calendar year.
- **Is the COLA Compounded or Simple?** Increases in benefits are compounded. Thus, previous increases in benefits are counted when a new increase in benefits is being calculated.
- **Does the Amount of the COLA Depend on Age or Some Other Factor?** The amount of the COLA does not depend on age or any other factor.
- **How Is the COLA Funded?** The increase in benefits is funded by PERA trust funds.

For further information, see Colorado Revised Statutes Annotated §§ 24-51-1001, 24-51-1002, and 24-51-1003 (2003) and Senate Bill 132 of 2004, amending Colorado Revised Statutes § 24-51-1002.

Connecticut

CONNECTICUT STATE TEACHERS' RETIREMENT SYSTEM (TRS)

Connecticut uses the term "cost of living allowance" (COLA).

- **Type of Benefit:** Connecticut retirees receive automatic COLAs.
- **Who Is Eligible for COLA?** A retiree is eligible for the COLA the first day of January or July after he/she has been retired for nine months.
- **How Is the Benefit Calculated?**

A retiree who retired prior to September 1, 1992, is eligible for a COLA of 5%. However, if the change in Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) for the preceding twelve month period ending on the last day of the preceding November or May is less than 5%, the COLA will be adjusted to equal the change in the CPI. If the change in the CPI is less than 3%, the COLA will be 3%. (The adjustment effective July, 2004 was 3%).

A retiree who retired on or after September 1, 1992 receives a COLA equal to the COLA granted by the Social Security Administration for the applicable year, up to a maximum of 6%. However, if the total return on TRS assets is less than 8-1/2%, the COLA will not exceed 1-1/2%. Moreover, if there are insufficient funds available in the system's "cost-of-living adjustment reserve account" to fund the amount of the COLA, it may be reduced. (The adjustment effective July, 2004 was 1.5%).
- **Is the COLA Compounded or Simple?** The COLA is compounded, which means that previous COLAs are counted when a new COLA is being calculated.
- **Does the Amount of the COLA Depend on Age or Some Other Factor?** The amount of the COLA does not depend on age, but for retirees who retired after September 1, 1992, does depend on the earnings generated by TRS assets.
- **How Is the COLA Funded?**

For retirees who retired on or after September 1, 1992, the COLA is funded by investment earnings. Earnings from investments that exceed 11-1/2% are credited to the cost-of-living adjustment reserve account. The account is reduced each year by the actuarial value of any COLA awarded. Each May 1, TRS actuaries determine how much of the excess earnings account balance is available for a COLA. No COLA is paid if the actuaries determine there are no funds available in the cost-of-living adjustment reserve account.

For retirees who retired before September 1, 1992, the COLA is funded as part of the existing liabilities of the retirement system

For further information, see Connecticut General Statutes Annotated § 10-183g(j)-(o) (2003) and Public Act No. 03-232.

Delaware

DELAWARE PUBLIC EMPLOYEES' RETIREMENT SYSTEM (DPERS)

Delaware uses the term "post-retirement increase" to describe its COLA.

- **Type of Benefit:** Delaware retirees receive ad hoc post-retirement increases.
- **Who Is Eligible for COLA?** Individuals who retired on or before May 31, 2004 were eligible for the post-retirement increase. The latest post-retirement increase was effective July 1, 2004 and provided for a benefit adjustment of 2%.
- **How Is the Benefit Calculated?** Individuals retired before May 31, 2004 received a 2% increase funded from the Post-Retirement Fund.
- **Is the COLA Compounded or Simple?** The post-retirement increase is compounded, which means that previous post-retirement increases are counted when a new postretirement increase is being calculated.
- **Does the Amount of the COLA Depend on Age or Some Other Factor?** The amount of the post-retirement increase does not depend on age or any other factor.
- **How Is the COLA Funded?** The most recent post-retirement increase was funded by actuarially determined employer contributions to the separate Post-Retirement Fund. The DPERS Board manages the Post-Retirement Fund and invests its assets. When the legislature grants a post-retirement increase, money is transferred from the Post-Retirement Fund on a monthly basis, based on a five-year actuarial funding schedule, to the pension fund from which the additional benefits are disbursed.

For further information, see Senate Bill 356 of 2004, amending Delaware Code Annotated Tit. 29§ 5532.

District of Columbia

DISTRICT OF COLUMBIA TEACHERS' RETIREMENT AND ANNUITY FUND (DCTRAF)

The District of Columbia uses the term "cost of living adjustment" (COLA).

- **Type of Benefit:** DCTRAF retirees receive automatic COLAs.
- **Who Is Eligible for COLA?** All retirees are eligible for the COLA.
- **How Is the Benefit Calculated?** The COLA is calculated by determining the percentage change in the CPI (all-items, U.S. city average) for the preceding year. This is determined by subtracting the CPI published in December of the preceding year from the CPI published in December of the second preceding year. If the CPI increases, retirees will receive a COLA equal to the percentage change in the CPI. Note: The COLAs of DCTRAF members hired after October 29, 1996 are capped at 3% per year.
- **Is the COLA Compounded or Simple?** The COLA is compounded, which means that previous COLAs are counted when a new COLA is being calculated.
- **Does the Amount of the COLA Depend on Age or Some Other Factor?** The amount of the COLA depends on date of hire.
- **How Is the COLA Funded?** The federal government funds the COLA received by individuals retired on or before June 30, 1997. Both the federal government and the District of Columbia finance the COLA for post-June 30, 1997 retirees.

For further information, see District of Columbia Code Annotated § 38-2021.21 (2004).

Florida

FLORIDA RETIREMENT SYSTEM (FRS)

Florida uses the term "cost of living adjustment" (COLA).

- **Type of Benefit:** Florida retirees receive automatic COLAs.
- **Who Is Eligible for COLA?** All retirees are eligible for the COLA.
- **How Is the Benefit Calculated?** A retiree receives a COLA on each July 1. The COLA is 3%.
- **Is the COLA Compounded or Simple?** The COLA is compounded, which means that previous COLAs are counted when a new COLA is being calculated.
- **Does the Amount of the COLA Depend on Age or Some Other Factor?** The amount of the COLA does not depend on age or any other factor.
- **How Is the COLA Funded?** The COLA is part of the normal cost benefit funding and the monies are appropriated annually from the Florida Retirement System Trust Fund.
- **Special Features:**
 - "Catch Up Provision"**

The last "catch up provision" passed was in 1996 for a select group of older retirees who retired prior to July 1, 1976, had 25 or more years of service, were ineligible for Social Security, and received less than \$1,000.00 per month. A supplemental COLA was granted to these select retirees which increased their benefit by 1% for each complete year that elapsed between the member's date of retirement and July 1, 1996. However, the supplemental COLA was limited to such amount as would bring the total amount of the monthly benefit to a maximum of \$1,000 per month.

For further information, see Florida Statutes Annotated, §121.101 (Supp. 2004).

Georgia

TEACHERS RETIREMENT SYSTEM OF GEORGIA (TRSG)

Georgia uses the term "postretirement benefit adjustment" to describe its COLA.

- **Type of Benefit:** The statute authorizes the board of trustees to grant COLAs. TRSG retirees receive cost of living increases at the board's discretion under this authority. The board has been providing COLAs every 6 months.
- **Who Is Eligible for COLA?** All normal retirees receive the COLA, except that for the first year after retirement special COLA rules apply. If a member retires early with less than 30 years of creditable service and is under age 60, he/she will become eligible for the COLA after reaching age 60 or after he/she would have attained 30 years of service, whichever is earlier.
- **How Is the Benefit Calculated?** The COLA is calculated based on the change in consumer price index (CPI), with a maximum payment of 1.5% of the TRS retirement benefit. These benefit adjustments are made on January 1st and July 1st of each year.
- **Is the COLA Compounded or Simple?** The COLA is compounded, which means that previous COLAs are counted when a new COLA is being calculated.
- **Does the Amount of the COLA Depend on Age or Some Other Factor?** In the case of normal retirement, the amount of COLA does not depend on age or other factor.
- **How Is the COLA Funded?** The COLA is funded as part of the existing liabilities of the retirement system.
- **Special Features:**

Ad Hoc Increases

An additional, one-time, 0.5% cost-of-living adjustment (COLA) was granted to eligible TRSGA retirees on July 1, 2002. Therefore, the July 1, 2002 COLA for eligible TRSGA retirees was 2%. The January 1, 2003 COLA returned to the standard 1.5%, giving TRSGA retirees a total 3.5% COLA for fiscal year 2003.

An ad hoc COLA was granted to all retirees on July 1, 1999 that ranged from 3% to 10% depending on the retiree's date of retirement.

For further information, see Official Code of Georgia Annotated § 47-3-126 (2003).

Hawaii

EMPLOYEES' RETIREMENT SYSTEM OF HAWAII (ERS)

Hawaii uses the term "post retirement allowance" to describe its automatic COLA.

- **Type of Benefit:** ERS retirees receive an automatic COLA.

- **Who Is Eligible for COLA?** Anyone who has achieved retirement status at the end of the calendar year (December 31) is eligible for the allowance that is payable the following July 1.

- **How Is the Benefit Calculated?** The allowance is 2.5% of the retirement benefit as originally computed and paid.

- **Is the COLA Compounded or Simple?** The allowance is simple, which means that previous allowances are not counted when a new allowance is being calculated.

- **Does the Amount of the COLA Depend on Age or Some Other Factor?** The amount of the COLA does not depend on age or any other factor.

- **How Is the COLA Funded?** The COLA is funded as part of the existing liabilities of the retirement system.

- **Special Features:**
 - Ad Hoc Increase*
 - For fiscal year 2002-2003, retirees aged 70 years or older with 20 or more years of service as of July 30, 2002 were granted one-time, lump-sum pension bonus of \$200.

For further information, see Hawaii Revised Statutes Annotated § 88-90 and § 88-11 (2003).

Idaho

PUBLIC EMPLOYEE RETIREMENT SYSTEM OF IDAHO (PERSI)

Idaho uses the term "post retirement allowance adjustment" to describe its COLA.

- **Type of Benefit:** Idaho retirees receive automatic post retirement allowance adjustments.
- **Who Is Eligible for COLA?** All retirees are eligible for the post retirement allowance adjustment.
- **How Is the Benefit Calculated?** The post retirement allowance adjustment, effective March 1 of each year, is based on the change in the Consumer Price Index (CPI). If the CPI change from August of the previous year to August of the second previous year is 1% or more, a mandatory 1% adjustment is made. An additional discretionary adjustment of up to 5% each year may be authorized by the PERSI Board to reflect changes in the CPI greater than 1%, if it finds that PERSI's actuarial assets are no less in value than its actuarial liabilities, including those created by the additional increase. The total adjustment cannot exceed the change in the CPI, or 6%, whichever is less. (A COLA of 2.2% was implemented March 1, 2004.)
- **Is the COLA Compounded or Simple?** The post retirement allowance adjustment is compounded, which means that previous post retirement allowance adjustments are counted when a new post retirement allowance adjustment is being calculated.
- **Does the Amount of the COLA Depend on Age or Some Other Factor?** The amount of the post retirement allowance adjustment does not depend on age or any other factor.
- **How Is the COLA Funded?** The COLA is funded as part of the existing liabilities of the retirement system.
- **Special Features:**
 - "Purchasing Power Protection"***

The board is authorized to award post retirement allowance adjustments for prior years in which the actual amount of the adjustment was less than the change in the CPI for those years.
 - "Gainsharing"***

At the close of each fiscal year, the board determines whether the fund has experienced extraordinary gains. Extraordinary gains are defined as the excess, if any, of plan assets over the plan's accrued actuarially determined liabilities plus a sum necessary to absorb one standard deviation market event without increasing contribution rates (currently, assets in excess of a 113% funded ratio are considered extraordinary gains). Extraordinary gains can be allocated to retirees, to active members, and to employers in such proportion as determined by the board. Retirees receive their allocation in the form of a one-time payment ("13th check") made in addition to their regular monthly benefit payments. No gainsharing distribution has made since 2001.

For further information, see Idaho Code § 59-1309 and § 59-1355 (2004)

Illinois

TEACHERS' RETIREMENT SYSTEM OF ILLINOIS (TRSI)

Illinois uses the term "annual increase in annuity" to describe its COLA.

■ **Type of Benefit:**

TRSI retirees receive automatic cost of living increases.

■ **Who Is Eligible for COLA?**

A retiree is eligible for an increase in their gross retirement annuity if he/she has made contributions equivalent to one year of creditable service and retired after August 1969. A retiree is entitled to this COLA increase on whichever day is later:

(1) January 1 following the first anniversary of retirement; or

(2) January 1 of the year after he/she reaches age 61.

■ **How Is the Benefit Calculated?**

The COLA is 3% a year and is paid each January 1. The first increase is calculated to cover the entire time the retiree has been retired. Example: if a member retires at age 55, the January following age 61, he/she would get up to a 21 % increase.

■ **Is the COLA Compounded or Simple?**

Since January 1, 1990, the increases are calculated as a percentage of the total amount of the annuity (i.e., the original annuity plus the previous years' COLAs). Thus, the COLA is compounded. Before 1990, they were not compounded.

■ **Does the Amount of the COLA Depend on Age or Some Other Factor?**

Yes, retirees must be at least age 61 to receive a COLA.

■ **How Is the COLA Funded?**

TRSI members contribute 1/2% of salary toward the cost of the COLA.

For further information, see Illinois Compiled Statutes, Illinois Pension Code, 40 ILCS 5/16-133.1 and 5/16-152 (2004).

Indiana

INDIANA STATE TEACHERS' RETIREMENT FUND (ISTRF)

Indiana uses the term "post retirement increase" to describe its COLA.

- **Type of Benefit:** ISTRF retirees receive ad hoc cost of living increases, which are paid on the pension portion of the monthly benefit provided by employer contributions. The COLA is not paid on the annuity portion of the monthly benefit provided by employee contributions. The last ad hoc cost of living increase was granted in 2004.
- **Who Is Eligible for COLA?** The ad hoc cost of living increase approved by the legislature in 2004 was provided to individuals who retired or were disabled prior to July 2, 2002. The increase was applied to benefits payable after December 31, 2004.
- **How Is the Benefit Calculated?** The increase applied to benefits payable after December 31, 2004 was calculated as follows: the pension portion (plus postretirement increase to the pension portion) provided by employer contributions of the monthly benefit payable was increased by: (1) one percent for those who retired after July 1, 1996 but before July 2, 2002; (2) two percent for those who retired after July 1, 1978 but before July 2, 1996; and (3) three percent for those who retired before July 2, 1978.
- **Is the COLA Compounded or Simple?** The COLA is compounded, which means that the previous COLAs are counted when a new COLA is being calculated.
- **Does the Amount of the COLA Depend on Age or Some Other Factor?** The amount of the ad hoc cost of living increase approved by the legislature in 2004 varied by the date of the member's retirement.
- **How Is the COLA Funded?** *2004 Ad Hoc COLA.* The legislature paid for the ad hoc COLA enacted in 2004 from appropriated funds.
- **Special Features:**

"13th Check." The "13th check," described in the Special Features section below, is paid from surplus earnings on the retired teacher annuity reserve account.

"Purchasing Power Guarantee." The "purchasing power guarantee," described in the Special Features section below, was funded by a legislative appropriation.

" 13th Check"

The legislature approved a "13th check" for 2001 and 2002. A "13th check" is a one-time additional payment. The 2001 "13th check" applied to retirees who had achieved retirement status as of July 2, 2000 and were eligible to receive a monthly benefit on October 1, 2001; this group received the "13th check" on November 1, 2001. The 2002 "13th check" applied to retirees who had achieved retirement status as of July 2, 2001 and were eligible to receive a monthly benefit on October 1, 2002; this group will received a "13th check" on November 1, 2002. No 13th check has been granted since 2002.

The "13th check" does not cause an increase in the pension portion of the monthly benefit. The amount of the payment for the "13th check" depends on the amount of money available determined under a two-part formula. The purpose of the first part of the formula is to calculate the total amount of money available to fund a "13th check" to all eligible retirees.⁵ The purpose of the second part of the formula is to calculate the amount to be received by each eligible retiree.⁶ The formula includes the number of years an individual has been in retirement. Thus, the more years of retirement, the higher an individual's "13th check" will be (up to a maximum amount). In effect, the "13th check" provides a catch-up provision by paying a larger amount to those retired the longest.

"Purchasing Power Guarantee"

The legislature added a "purchasing power guarantee" in 1999 that applied both in 1999 and 2000. The guarantee was added to any other increase for which retirees are eligible. The pension portion of the benefit was increased by an amount necessary to ensure that the purchasing power (as determined by the ISTRF board, based on changes in the consumer price index and postretirement increases to the pension portion) of an ISTRF member's pension portion is at least equal to 50% of the purchasing power of his/her pension portion at the time he/she retired, as determined on July 1, 1999. The 1999 guarantee applied to benefits payable after June 30, 1999 to retirees achieving retirement status before July 2, 1960. A guarantee was also authorized for 2000 for benefits payable after June 30, 2000 to retirees retired before July 2, 1975. The guarantee increased the benefit to ensure a minimum of 57.4% purchasing power at the time the member retired, as determined on July 1, 2000.

For further information, see Indiana Code § 5-10.2-5(2004).

⁵ The formula is calculated as follows: (1) Determine the difference between the balance of the ISTRF's retired teacher annuity reserve account as of June 30 of the year prior to receipt of the benefit and the computed liability of the annuity portion of the normal allowance for the retired members as of June 30 of the year prior to receipt of the benefit; and (2) multiply this amount by 10%. The resulting amount of money is available for distribution.

⁶ The calculation for each retiree follows:

Step 1: Add the total number of years of creditable service in ISTRF of all retired members eligible for the distribution and the total number of years that all retired members who are eligible for the distribution have been retired.

Step 2: Add the eligible retiree's total number of years of creditable service in ISTRF and the total number of years since the eligible retiree retired.

Step 3: Divide the result of Step 2 by the result of Step 1.

Step 4: Multiply the result of Step 3 by the total amount of money available for distribution (see footnote 1).

Step 5: Pay each retiree the greater of \$50 or the result of Step 4.

IOWA PUBLIC EMPLOYEES' RETIREMENT SYSTEM (IPERS)

For members retired before July 1, 1990, there is an automatic COLA ("Dividend") based on the CPI up to 3%. For members retired on or after July 1, 1990, a "Favorable Experience Dividend" (FED) is paid up to a maximum of 3%, if sufficient funds are available. The summary below will discuss "dividends" for pre-July 1, 1990, retirees first, then the FED for individuals who retired thereafter.

Dividends for Pre-July 1, 1990 Retirees

- **Type of Benefit:** Pre-July 1, 1990 retirees receive dividends on an automatic basis effective 1997. Previously, they were paid on an ad hoc basis.

- **Who Is Eligible for COLA?** A retiree who retired on or before June 30, 1990, is eligible for the dividend.

- **How Is the Benefit Calculated?** IPERS annually calculates the amount of increase to be applied to all dividends. IPERS calculates the dividend by multiplying the total of the retiree's monthly benefit payments and the dividend payable to the retiree in the previous calendar year by a percentage. The percentage is determined as follows and the lowest amount is used:
 - (1) 100% of the consumer price index (CPI) for the twelve-month period ending June 30 of the year the dividend is to be paid; or
 - (2) the percentage amount that the fund can absorb without requiring an increase in the employer and employee contributions to the fund, as certified by the actuary in the annual actuarial valuation of the system as of June 30 of the year in which the dividend is to be paid; or
 - (3) 3%.

- **Is the COLA Compounded or Simple?** The dividends are compounded, which means that previous dividends are counted when a new dividend is being calculated.

- **Does the Amount of the COLA Depend on Age or Some Other Factor?** The amount of the COLA does not depend on age or some other factor, although eligibility is determined by date of retirement.

- **How Is the COLA Funded?** The funding costs are added to the liabilities of the retirement system; however, if the percentage amount the fund can absorb results in a requirement that employer and employee contributions be increased, then no new dividend is granted. For example, because the actuary indicated that contribution increases would be necessary, no dividend increase was paid in November, 2002 or November, 2003. Instead, exactly the same dividend payment was received as in November, 2001, which was the last year a dividend increase was paid.

Favorable Experience Dividend (FED) for Post-July 1, 1990 Retirees

- **Type of Benefit:** Post-July 1, 1990 retirees eligible for the FED receive a benefit adjustment that is targeted to return 100% of the CPI change to a maximum of 3%, but this adjustment depends on balances available in the favorable experience dividend reserve account. Notwithstanding the contingency, the intent of the funding design is to accumulate a reserve sufficient to pay for the cost of an adjustment even in those years when overall actuarial experience may not be favorable. The originating legislation established both a separate reserve fund reserved for future FED payments and a mechanism by which this reserve fund was to be regularly replenished. On January 31, 2004 IPERS declared a 1.07% favorable dividend experience.
- **Who Is Eligible for COLA?** Commencing January 1, 1999, all members who retired on or after July 1, 1990, and who have been retired for at least one year as of the date the dividend is payable, are eligible to receive a FED payable on the last business day in January of each year. They are not guaranteed to receive a FED each year, although it is intended that the design of a reserve fund sufficient to pay up to the maximum FED over as much as a ten year future period will make annual distributions likely.
- **How Is the Benefit Calculated?** The FED is calculated by multiplying the total of the monthly benefit payments of the retiree for the previous calendar year by the number of complete years the member has been retired and by the applicable percentage. The applicable percentage is the percentage, not to exceed 3%, that the Department of Personnel, of which IPERS is part, determines will be applied in calculating the FED. This is contingent upon the department determination that the reserve account is sufficiently funded to make a distribution. In making its determination, the department must consider, but not be limited to, the amounts credited to the reserve account, the distributions from the reserve account made in previous years, the likelihood of future credits to and distributions from the reserve account, and the distributions paid to the pre-July 1, 1990 retirees.
- **Is the COLA Compounded or Simple?** It is simple, which means that previous benefit adjustments are not counted when a new benefit adjustment is being calculated. (This contrasts with the COLA for pre-July 1, 1990 retirees that is compounded.)
- **Does the Amount of the COLA Depend on Age or Some Other Factor?** The amount of the FED does not depend on age or some other factor, although eligibility is determined by date of retirement
- **How Is the COLA Funded?** A FED "reserve account" is established within the IPERS retirement fund for the purpose of providing a FED. Monies are credited to the reserve account as follows:
 - On or before January 15, 1999, an amount was credited to the reserve account that the system's actuary determines is sufficient to pay the maximum FED for each of the next following five years, based on reasonable actuarial assumptions.
 - Beginning with the annual actuarial valuation of the system as of June 30, 1999, and for each annual actuarial valuation of the system thereafter, there is credited to the reserve account on each

applicable January 15 following an actuarial valuation an amount that represents that portion of the favorable actuarial experience, if any, which the system's actuary determines as the amount to be credited to the reserve account pursuant to rules adopted by the department.

- The portion of the favorable actuarial experience, if any, that is not initially credited to the reserve account, but which, if applied to the retirement fund, would result in the actuarial valuation of assets exceeding the actuarial accrued liability of the system, based on the most recent annual actuarial valuation of the system, must be credited to the reserve account.

"Favorable actuarial experience" means the differences, if positive, between the anticipated and actual experience of the system's actuarial assets and liabilities as measured by the system's actuary in the most recent annual actuarial valuation of the system pursuant to rules adopted by the department.

For further information, see Iowa Code § 97B.49F(1) & (2) (2003) and Merged Supplement.

Kansas

KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM (KPERS)

Kansas uses the term "postretirement benefit increase" or "postretirement benefit adjustment" to describe its COLA.

- **Type of Benefit:** Kansas retirees receive ad hoc postretirement benefit increases. The latest postretirement benefit increase in the traditional form of a COLA was granted in 1998. An additional minimum payment adjustment occurred in 2001.
- **Who Is Eligible for COLA?** All retirees who retired before July 1, 1997 were eligible for the 1998 postretirement benefit increase. School system retirees who retired prior to January 1, 1971 with at least 20 years of service were eligible for the 2001 minimum payment adjustment.
- **How Is the Benefit Calculated?** In 1998, all eligible retirees received an increase of 3% for payments after June 30, 1998. In 2001, eligible school retirement system members received an increase in their monthly benefit payments sufficient to provide for a minimum benefit payment of \$500.
- **Is the COLA Compounded or Simple?** The postretirement benefit increase of 1998 was compounded, which means that previous postretirement benefit increases were counted when a new postretirement benefit increase was calculated.
- **Does the Amount of the COLA Depend on Age or Some Other Factor?** The amount of the 1998 postretirement benefit increase did not depend on a retiree's years of service and years of retirement.
- **How Is the COLA Funded?** Funding for the postretirement benefit increases are fund as part of the liabilities of the retirement system.
- **Special Features:** *"13th Check"*

Retirees who started receiving a monthly benefit prior to July 2, 1987 are eligible to receive an additional annual retirement payment up to a maximum of one month's benefit or "13th check". Until 2003, this payment was conditional based on KPERS investment returns. However, beginning in 2003 this payment became guaranteed and funded with increased employer contributions.

For further information, see Kansas Statutes Annotated §§ 74-4950i, 74 - 4950j, 74-49,109 et seq. (Supp. 2003) and Senate Bill 520 of 2004 .

Kentucky

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY (TRS)

Kentucky uses the term "increase" to describe its COLA.

- **Type of Benefit:** Kentucky retirees receive 1.5% automatic increase and additional ad hoc increases. (See "Special Feature" below for information about the ad hoc COLA.)
- **Who Is Eligible for COLA?** A retiree who has been retired at least 10 months is eligible for the increase.
- **How Is the Benefit Calculated?** The amount of the increase is 1.5% for the automatic increase. The ad hoc COLA varies from year to year.
- **Is the COLA Compounded or Simple?** The increase is compounded, which means that previous increases are counted when a new increase is being calculated.
- **Does the Amount of the COLA Depend on Age or Some Other Factor?** The amount of the increase does not depend on age or any other factor.
- **How Is the COLA Funded?** The automatic increase is funded by annual appropriations from the state on an actuarial amortized basis over the lifetime of the retirees. The cost of the ad hoc increase, described in the next section, was provided through a biennium budget appropriation.
- **Special Feature:**
Ad Hoc COLA

The monthly allowance of each TRS member retired for at least one year was increased by an amount not to exceed 1.4% of the monthly allowance in effect the previous month, effective July 1, 2002 and by 1.5% effective July 1, 2003. The exact percentage amount of the increases was determined by the amount of money provided by the legislature in its biennium budget appropriation. The retirement system requested funding for a 0.8% ad hoc increase to be effective July 1, 2004 and an ad hoc increase of 0.7% to be effective July 1, 2005. Although both the House of Representatives' and the Senate's version of the state budget included these ad hoc COLAs for retirees for the fiscal years 2004-5 and 2005-6, the two chambers failed to agree on a budget during the 2004 regular legislative session. Therefore, the state is operating under the Governor's spending plan ("Public Services Continuation Plan") until a budget is legislatively approved and the Governor's spending plan does not include funding for the ad hoc COLAs.

For further information, see Kentucky Revised Statutes §§ 161.553 and 161.620 (2004).

Louisiana

TEACHERS' RETIREMENT SYSTEM OF LOUISIANA (TRSL)

Louisiana uses the term "cost-of-living increase" to describe its COLA.

- **Type of Benefit:** Louisiana retirees receive an annual cost-of-living increase whenever the balance in the employee "experience account" is sufficient to fully fund such benefit on an actuarial basis. The benefit amount depends on the change in the CPI *and* the extent to which retirement system investments returns meet or exceed a target rate of 8.25%. On July 1, 2002 retirees received a COLA of 1.6%. No COLA was paid from the experience accounts in 2003 or 2004.
- **Who Is Eligible for COLA?** All retirees are eligible if they have attained at least 55 years and have received a benefit for at least one year. (Disability retirees receive the annual COLA without regard to age.) The increase is paid on July 1.
- **How Is the Benefit Calculated?** The amount of the increase, if any, is equal to:
 - (1) the change in the consumer price index, U.S. city average for all urban consumers (CPI-U), for the calendar year immediately preceding the increase, not to exceed 3% in years when TSRL's return on investments equals or exceeds 8.25%; or
 - (2) the change in the consumer price index, U.S. city average for all urban consumers (CPI-U), for the calendar year immediately preceding the increase, not to exceed 2% in years when TSRL's return on investments fails to reach 8.25%.The COLA is limited to the first \$70,000 of annual benefit.
- **Is the COLA Compounded or Simple?** The increase is compounded, which means that previous increases are counted when a new increase is being calculated.
- **Does the Amount of the COLA Depend on Age or Some Other Factor?** The amount of the increase depends on TSRL's investment returns.
- **How Is the COLA Funded?** The cost-of-living increase is funded by the employee experience account and is paid only when money is available in the experience account. The experience account works as follows: TRSL has an actuarially projected rate of return on its investments of 8.25%. If the actuarially *realized* (that is, the actual) rate of return in any fiscal year is greater than that amount, one-half of the excess is deposited into the experience account. For example, if the rate of return in a given year is 10.25%, then 1 % will be deposited. If the rate of return is less than 8.25%, one-half of the deficit is withdrawn from the experience account. The legislature included a mechanism that would assure automatic COLAs each year if sufficient money is generated in the experience account. Specifically, if the funds in the experience account grow to the point that they will be adequate to pay for all COLAs to current and future retirees, they will be folded into the TRSL account from which regular retirement payments are made.

For further information, see Louisiana Revised Statutes § 111: 883.1 (2004).

Maine

MAINE STATE RETIREMENT SYSTEM (MSRS)

Maine uses the term "cost of living adjustment" (COLA) .

■ **Type of Benefit:**

Maine retirees receive automatic COLAs.

■ **Who Is Eligible for COLA?**

A retiree receives the COLA if he/she has been retired at least twelve months prior to the date the COLA is payable. A retiree who has less than 10 years of service credit on July 1, 1993 will not receive the COLA until at least 12 months after reaching retirement age.

■ **How Is the Benefit Calculated?**

The COLA is equal to the average percentage change in the Consumer Price Index (CPI) for the preceding year. The COLA is limited to 4% of the CPI's increase or decrease.

When the CPI increase exceeds 4%, retirees will receive a 4% COLA, but may receive more. Specifically, the Board may submit a supplemental budget request to the governor for the additional funds required to grant a COLA that reflects the actual increase in the CPI. If approved, retirees will receive the additional percentage change in the CPI in the month following the appropriation.

Notwithstanding the foregoing, a retiree's benefit may not be less than the greater of the amount he/she was receiving on:

- (1) his/her effective date of retirement, or
- (2) July 1, 1997.

■ **Is the COLA Compounded or Simple?**

The COLA is compounded, which means that previous COLAs are counted when a new COLA is being calculated.

■ **Does the Amount of the COLA Depend on Age or Some Other Factor?**

The amount of the COLA does not depend on age or any other factor.

■ **How Is the COLA Funded?**

It is funded by employer and employee contributions, and the employer contribution rate is set for each biennial budget according to the actuarial valuations.

For further information, see Maine Revised , Statutes, Title 5, Chapter 423, §17806 (2003).

Maryland

MARYLAND TEACHERS' PENSION SYSTEM⁷

Maryland uses the term "cost of living adjustment" (COLA).

Maryland has two retirement systems for teachers. The Teachers' Retirement System (TRS) is for teachers who became employed by a participating employer before January 1, 1980. The Teachers' Pension System (TPS) is for those who became employed thereafter. TPS members have one COLA option, as described below.

- **Type of Benefit:** Retirees of the Maryland Teachers' Pension System receive automatic annual COLAs.
- **Who Is Eligible for COLA?** Retirees of the Maryland Teachers' Pension System are eligible to receive the COLA on the second July 1 after the day preceding their retirement date.
- **How Is the Benefit Calculated?** The COLA is determined by multiplying a retiree's allowance for the preceding fiscal year by a rate not exceeding 3%. The rate is obtained by dividing the consumer price index (CPI) for the calendar year ending December 31 in the preceding fiscal year by the CPI for the calendar year ending December 31 in the second preceding fiscal year.
- **Is the COLA Compounded or Simple?** The COLA is compounded, which means that previous COLAs are counted when a new COLA is calculated.
- **Does the Amount of the COLA Depend on Age or Some Other Factor?** The amount of the COLA does not depend on age or any other factor.
- **How Is the COLA Funded?** Employer contributions, employee contributions, and investment earnings fund the COLA.

For further information, see Annotated Code of Maryland, State Personnel and Pensions § 29-401 and §§ 29-425 through 427 (Supp. 2004).

⁷ The Teachers' Pension System (TPS) went into effect January 1, 1980. Individuals who were members of the Teachers' Retirement System (TRS) on December 31, 1979 continued their TRS membership unless and until they elected to transfer to the TPS.

MARYLAND TEACHERS' RETIREMENT SYSTEM (TRS)

Maryland uses the term "cost of living adjustment" (COLA) .

Maryland has two retirement systems for teachers. The Teachers' Retirement System (TRS) is for teachers who became employed by a participating employer before January 1, 1980. The Teachers' Pension System (TPS) is for those who became employed thereafter. TRS members have three COLA options available to them, known as Selection A, Selection B, and Selection C. TPS members have only one option, as previously described.

- **Type of Benefit:** Retirees in Maryland TRS who elected Selection A, B or C receive automatic annual COLAs.
- **Who Is Eligible for COLA?** Retirees of the Teachers' retirement System are eligible to receive the COLA under Selection A, B or C on the second July 1 after the day preceding their retirement date.
- **How Is the Benefit Calculated?**

Selection A: The COLA is determined by multiplying a retiree's initial allowance by a fraction determined as follows: the numerator is the Consumer Price Index (CPI) for the calendar year ending December 31 of the preceding fiscal year and the denominator is the CPI for the calendar year ending December 31 of the fiscal year in which the retiree was last employed. No cap on the amount of the COLA exists.

Selection B: The COLA is determined by dividing the Consumer Price Index (CPI) for the calendar year ending December 31 in the preceding fiscal year by the CPI for the calendar year ending December 31 in the second preceding fiscal year and multiplying this amount by the retiree's allowance for the preceding fiscal year. The cost of living increase cannot exceed 5%.

Selection C: The COLA is a combination of: (1) the COLA elected prior to electing Selection C (i.e., either Selection A or B) applied to creditable service accumulated before electing Selection C; and, (2) the COLA received by TPS members (i.e., the change in the CPI to a maximum of 3%) applied to creditable service accumulated after electing Selection C.
- **Is the COLA Compounded or Simple?** The COLA is compounded, which means that previous COLAs are counted when a new COLA is calculated.

■ **Does the Amount of the COLA Depend on Age or Some Other Factor?**

The amount of the COLA depends on the selection made. TRS members who elected Selection A, agreed to contribute 7% of earnable compensation in return for unlimited COLAs after retirement. TRS members who elected Selection B, agreed to contribute only 5% of earnable compensation and in return receive COLAs that are limited to 5% annually after retirement. TRS members who elected Selection C, agreed to contribute only 2% of earnable compensation in return for COLAs that are a combination of: (1) the COLA elected prior to electing Selection C (i.e., either Selection A or B) applied to creditable service accumulated before electing Selection C; and, (2) the COLA received by TPS members (i.e., the change in the CPI to a maximum of 3%) applied to creditable service accumulated after electing Selection C.

■ **How Is the COLA Funded?**

Employer contributions, employee contributions, and investment earnings fund the COLA .

For further information, see Annotated Code of Maryland, State Personnel and Pensions § 29-401 and §§ 29-410 through 29-422 (2004).

Massachusetts

MASSACHUSETTS TEACHERS RETIREMENT SYSTEM (MTRS)

Massachusetts uses the term "cost of living increase" to describe its COLA.

- **Type of Benefit:** MTRS retirees receive cost of living increases according to a formula, but they are not automatic. The increases require the legislature's approval before they may be paid.
- **Who Is Eligible for COLA?** All retirees receiving an allowance on June 30 of the prior fiscal year are eligible for the cost of living increase.
- **How Is the Benefit Calculated?** The cost of living increase is based on the change in the Consumer Price Index (CPI). The Public Employee Retirement Administration Commission (PERAC) files a report with the clerk of the State House of Representatives indicating the amount of increase required. The legislature determines whether or not to accept the report and provide a COLA based on the increase in the CPI or 3%, whichever is less. The cost of living increase, if any, is payable on July 1 and only on the first \$12,000 of the retirement benefit. A 3% increase was approved by the legislature in 2004.
- **Is the COLA Compounded or Simple?** Cost of living increases are compounded, which means that previous cost of living increases are counted when a new cost of living increase is being calculated.
- **Does the Amount of the COLA Depend on Age or Some Other Factor?** The amount of the cost of living increase does not depend on age or any other factor.
- **How Is the COLA Funded?** The cost of living expense is funded from the investment income account of the retirement system.

For further information, see Massachusetts General Laws Annotated Ch. 32, § 21 and § 102 (2003) and Chapter 149 of the Acts of 2004.

Michigan

MICHIGAN PUBLIC SCHOOL EMPLOYEES RETIREMENT SYSTEM (MPSERS)

Michigan uses the term "increase in retirement allowances" to describe its COLA.

■ **Type of Benefit:**

MPSERS retirees are eligible for an increase in their retirement allowance under the noncontributory Basic Plan or under the contributory Member Investment Plan (MIP). Under the Basic Plan, members who retired before January 1, 1987 are entitled to the greater of an automatic 3% increase or a "supplemental payment" that represents a share in any plan investment earnings in excess of 8%. Members who retired on or after January 1, 1987, but who did not become MIP members, receive only the "supplemental payment". MIP members receive an automatic 3% increase.

■ **Who Is Eligible for COLA?**

The determination of whether a member is in the Basic Plan or the MIP depends on:

- (1) when he/she first became a member of MPSERS;
- (2) whether he/she made a certain election; or
- (3) both.

MPSERS members could voluntarily join MIP before December 3, 1989. Those who did contributed 4.0% from January 1, 1987 to December 31, 1989 and 3.9% thereafter. Membership in MIP became mandatory after December 31, 1989. Individuals who join MIP contribute 3.0% of the first \$5,000 of pay, plus 3.6% of the next \$10,000 of pay, plus 4.3% of pay in excess of \$15,000. Anyone who does not meet the foregoing contribution criteria is in the Basic Plan.

■ **How Is the Benefit Calculated?**

Calculation of the increase under the MIP. A retiree who has contributed to the MIP receives an annual permanent increase of 3% times his/her original retirement allowance.⁸ It is payable on October 1 of each year. A new retiree receives an increase in the retirement allowance on the first October 1 that is at least one full year after the effective date of his/her retirement allowance.

⁸ A special rule exists for calculating the increase if a retiree is receiving a "Social Security bridge payment." Under such a payment, a retiree who is 60 years of age or less may elect to be paid a larger retirement allowance until he/she reaches age 62. The larger payment covers his/her MPSERS retirement allowance plus an amount the retiree would have gotten from Social Security had he/she been old enough to receive it. The amount that represents what Social Security would have paid is called the "Social Security bridge payment." At age 62, the retiree receives a lower retirement allowance because he/she has now reached the age at which Social Security will begin paying him/her a benefit. The lower retirement allowance plus the Social Security benefit will approximate what the retiree had been receiving before he/she turned age 62. For purposes of calculating the COLA, the "bridge payment" and reduction are ignored.

Calculation of the increase under the Basic Plan. An individual who retired on or before January 1, 1987 is eligible for an annual increase of 3% or a "supplemental payment," also known as a "13th check," whichever is greater. The supplemental payment/13th check is paid if investment earnings reach a certain level. The calculation of the payment is made according to the following formulation:

Step 1 : Add the actuarial rate of return from the annual valuation to the carry forward from the previous year to calculate the Adjusted Actuarial Rate of Return (AAR).

Step 2: Subtract the Assumed Rate of Return (ARR), which is 8% as defined by statute, from the AAR to calculate the Preliminary Excess Investment Rate of Return (PEIRR).

Step 3: Determine the Applicable Excess Rate of Return (AERR) by taking the lesser of the PEIRR or the Maximum Excess Rate (MER), but not less than zero. The MER, which is 0.75%, is determined by the Retirement Board and is reviewed periodically. MER is a long-term prediction of investment returns in excess of ARR based upon Treasury analysis of investment portfolio composition and the respective comparative historical rates of return as published by Ibbotson Associates.

Step 4: Determine the carry forward by subtracting the PEIRR from the AERR.

Step 5: Determine the assets available for distribution by multiplying the AERR by the total retired life assets.

Step 6: Determine the unit value by dividing the assets available for distribution by the total units (MIP plus non-MIP).

Note: Basic Plan retirees receive unit value multiplied by units, which are retirees' service credit and years in retirement. Pre-1987 retirees receive unit value multiplied by units minus post-1987 permanent increases.

The formulation was altered in 1997 to "smooth" the level of payments over the years. Before that time, no payments were made in certain years, whereas "windfall" (i.e., very large) payments were made in other years. Under smoothing, the payment is made more regularly and its amount does not vary as widely.

■ **Is the COLA Compounded or Simple?**

The increase in retirement allowance under the MIP is simple, which means that previous increases in retirement allowances are not counted when calculating a new increase. The 3% increase in the Basic Plan is also simple.

■ **Does the Amount of the COLA Depend on Age or Some Other Factor?**

The amount depends on whether the retiree is in the Basic Plan or the MIP.

■ **How Is the COLA Funded?**

The Basic Plan is funded from surplus investment earnings. The MIP is funded from MPSERS members' contributions.

For further information, see Michigan Compiled Laws, Chapter 38, §§38.1343a, 38.1343c and 38.1404a (2004).

Minnesota

MINNESOTA TEACHERS RETIREMENT ASSOCIATION (TRA)

Minnesota uses the term "postretirement adjustment" to describe its COLA.

- **Type of Benefit:** Minnesota retirees receive automatic postretirement adjustments.
- **Who Is Eligible for COLA?** A retiree who has been retired at least one year as of the current June 30 is eligible for a postretirement adjustment. A retiree who has been retired at least one month, but less than twelve full months, is eligible for a partial postretirement adjustment.
- **How Is the Benefit Calculated?**

The postretirement adjustment is consists of two components:

 - (1) a annual increase of up to 2.5% to account for inflation, based on the increase in the CPI-W determined at the end of each fiscal year for the preceding 12-month period; and
 - (2) any excess earnings of investments in the Minnesota Postretirement Investment Fund (MPRIF).

The actuarial assumption for the MPRIF's investment returns is 6% and for the inflation rate, 2.5%, for a total of 8.5%. If excess earnings exceed this total and there is no gap between the assets and liabilities of the fund at the beginning of the fiscal year, retirees will receive an increase in addition to the guaranteed increase. (For example, 1/1/2002 eligible retirees received a total benefit increase of 4.4935% (an inflation component of 2.5% plus an excess earnings component of 1.9935%. However, with the decline of investment markets beginning in 2000, substantial investment losses have built up in the Post Retirement Fund. Consequently, investment gains had to occur in future years to offset those losses before an investment-based component could be paid. As a result, no investment-based component was granted for 2003, 2004 or 2005. For example, the January 1, 2005 benefit adjustment will be 2.5% and will consist solely of the inflation-based component.)
- **Is the COLA Compounded or Simple?** The postretirement adjustment is compounded, which means that previous postretirement adjustments are counted when a new postretirement adjustment is being calculated.
- **Does the Amount of the COLA Depend on Age or Some Other Factor?** The amount of the postretirement adjustment does not depend on age or any other factor.
- **How Is the COLA Funded?** Both portions of the postretirement adjustment are funded by the MPRIF.

For further information, see Minnesota Statutes, Chapter 11A, §11A.18 (2003).

Mississippi

PUBLIC EMPLOYEES' RETIREMENT SYSTEM OF MISSISSIPPI (PERS)

Mississippi uses the term "additional benefit" or "additional annual payment" to describe its COLA.

- **Type of Benefit:** Mississippi retirees receive automatic additional annual benefits.
- **Who Is Eligible for COLA?** Anyone who has been in retirement for at least one full fiscal year.
- **How Is the Benefit Calculated?** A retiree receives the greater of the following:
 - (1) 4% of the annual retirement allowance multiplied by the number of full fiscal years in retirement through June 30, 1998; or
 - (2) the sum of an amount equal to 3% of the annual retirement allowance multiplied by the number of full fiscal years in retirement before the end of the fiscal year in which the member reaches age 55, plus an additional amount equal to 3% compounded by the number of full fiscal years in retirement, beginning with the fiscal year in which the member reaches age 55, multiplied by the amount of the annual retirement allowance.
- **Is the COLA Compounded or Simple?** The additional benefit is compounded for years of retirement in which an individual is 55 years or older, which means that previous additional benefits are counted when a new additional benefit is being calculated. It is simple for years of retirement in which an individual was younger than 55.
- **Does the Amount of the COLA Depend on Age or Some Other Factor?** The amount of the additional benefit varies depending whether age 55 has been attained or not.
- **How Is the COLA Funded?** The additional benefit is funded by employer contributions, employee contributions, and investment income.
- **Special Features:** A retiree may receive the additional benefit in one lump sum or have the retirement system pay it in monthly installments.

For further information, see Mississippi Code, Title 25, Chapter 11, §25-11-112 (2004).

Missouri

PUBLIC SCHOOL RETIREMENT SYSTEM OF MISSOURI (PSRS)

Missouri uses the term "cost of living adjustment" (COLA).

- **Type of Benefit:** According to the statute, the retirement system board is authorized to grant a COLA to a maximum of 5%, if the board determines that the cost of living has increased. No COLA can be granted if the cost of living has not been increased. As administered by the board, the cost of living adjustment is automatic, depending on the change in the CPI.
- **Who Is Eligible for COLA?** A retiree is eligible for the COLA after the second January first following his/her retirement.
- **How Is the Benefit Calculated?** If the PSRS Board of Trustees determines that the cost of living has increased, as measured by the change in the Consumer Price Index for Urban Consumers (CPI-U), it will increase individuals' retirement allowances by an equal amount. The COLA cannot exceed 5% annually. In addition, the total of the COLAs granted to a retiree cannot exceed 80% of the amount of his/her initial retirement allowance.
- **Is the COLA Compounded or Simple?** COLAs are compounded, which means that previous COLAs are counted when a new increase is being calculated.
- **Does the Amount of the COLA Depend on Age or Some Other Factor?** Because of the 80% lifetime cap, the amount of COLA received varies by retirement date..
- **How Is the COLA Funded?** The COLA is funded as part of the basic benefit. Employer contributions, employee contributions, and investment earnings all help to fund it.

For further information, see Missouri Revised Statutes, §169.070 (2003).

Montana

MONTANA TEACHERS RETIREMENT SYSTEM (TRS)

Montana uses the term "guaranteed annual benefit adjustment" (GABA) to describe its COLA.

- **Type of Benefit:** Montana retirees receive automatic postretirement adjustments. The adjustment is payable January 1.
- **Who Is Eligible for COLA?** A retiree is eligible for the GABA if the retiree's most recent retirement effective date is at least 36 months prior to January 1 of the year in which the adjustment is made.
- **How Is the Benefit Calculated?** Through 2004, eligible retirees received a 1.5% GABA. However, the TRS retirement board is authorized by statute, on January 1 of each year following the system's biennial valuation, to increase the annual benefit adjustment up to a maximum of 3.0% if:
 - (a) the period required to amortize the system's unfunded liability, as determined by the most recent biennial valuation, adjusted for any benefit enhancement enacted by the legislature since the most recent biennial valuation, is less than 25 years;
 - (b) sufficient funds are available to increase the guaranteed annual benefit adjustment by at least 0.1%; and
 - (c) the increase granted by the board would not cause the amortization period, as of the most recent valuation, to exceed 25 years.
- **Is the COLA Compounded or Simple?** The GABA is compounded, which means that previous adjustments are counted when a new GABA is being calculated.
- **Does the Amount of the COLA Depend on Age or Some Other Factor?** The amount of the GABA does not depend on a retiree's years of service or age.
- **How Is the COLA Funded?** The cost of the benefit increase is added to the existing liabilities of the retirement system.

For further information, see Montana Code Annotated, §19-20-719 (2003).

Nebraska

SCHOOL RETIREMENT SYSTEM OF THE STATE OF NEBRASKA (SRS)

Nebraska uses the term "cost of living benefit adjustment" to describe its COLA.

- **Type of Benefit:** Retirees receive an automatic cost of living benefit adjustment.
- **Who Is Eligible for COLA?** All retirees are eligible for the adjustment.
- **How Is the Benefit Calculated?** A retiree qualifies for either an increase to restore him/her to 75% of purchasing power or an automatic COLA, depending on his/her situation. The purchasing power provision helps maintain the value of a retirement benefit in spite of inflation. The provision guarantees that a retiree's benefit maintains 75% of the purchasing power it provided when the retiree first began to receive it. If a retiree's benefit does not exceed 75% of purchasing power, he/she receives an increase to bring him/her up to the required purchasing power level. If a retiree's benefit exceeds 75% of purchasing power, he/she receives a 2.5% increase or the increase in the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W), whichever is lower.
- **Is the COLA Compounded or Simple?** The COLA is compounded, which means that previous COLAs are counted when a new increase is being calculated.
- **Does the Amount of the COLA Depend on Age or Some Other Factor?** The amount of the cost of living benefit adjustment does not depend on age or any other factor.
- **How Is the COLA Funded?** The cost of living benefit adjustment is funded from the trust fund and an annual state appropriation to the School Retirement Fund. Until July 1, 2002 this annual level dollar payment was made to the Annuity Reserve Fund; however, in 2002 balances existing in the Annuity Reserve Account, the School Employers Deposit Account, the School Employees Savings Account, the Service Annuity Account, and the School Employees Retirement System Reserve Account were combined and transferred into the School Retirement Fund. (Prior to July 1, 2000, the state had made such contributions to the School Employees Purchasing Power Stabilization Fund; on July 1, 2000 this latter fund was terminated and its assets transferred to the Annuity Reserve Fund.)
- **Special Feature:** *"Purchasing Power"*
As described above, retirees are guaranteed that their benefit will maintain 75% of its original purchasing power.

For further information, see Nebraska Revised Statutes § 79-947. 01 (2004).

Nevada

PUBLIC EMPLOYEES' RETIREMENT SYSTEM OF NEVADA (PERS)

Nevada uses the term "post-retirement increases" to describe its COLA.

- **Type of Benefit:** PERS retirees receive automatic post-retirement increases.
- **Who Is Eligible for COLA?** Retirees who have been retired for three years are eligible for the postretirement increase.
- **How Is the Benefit Calculated?** A retiree receives the post-retirement increase on the anniversary of the date he/she began receiving benefits. The post-retirement increase, which is paid annually, is the *lesser* of
 - (1) one of the following percentages:
 - 2% following the 3rd anniversary of beginning benefits,
 - 3% following the 6th anniversary of beginning benefits,
 - 3.5% following the 9th anniversary of beginning benefits,
 - 4% following the 12th anniversary of beginning benefits, and
 - 5% following the 14th anniversary of beginning benefits, or
 - (2) the average percentage increase in the Consumer Price Index (CPI) for the three preceding years.However, the percentage increase is not capped by the change in the CPI average for the previous three years if the purchasing power of the retiree's benefit has not kept pace with inflation during the period since retirement.
- **Is the COLA Compounded or Simple?** Post-retirement increases are compounded, which means that previous post-retirement increases are counted when a new postretirement increase is being calculated.
- **Does the Amount of the COLA Depend on Age or Some Other Factor?** Because of the five-tiered percentage rate for calculating the COLA, a retiree's increase in a given year depends on his/her date of retirement.
- **How Is the COLA Funded?** The cost of the benefit increase is added to the existing liabilities of the retirement system.

For further information, see Nevada Revised Statutes, §286.5756 (2003).

New Hampshire

NEW HAMPSHIRE RETIREMENT SYSTEM (NHRS)

New Hampshire uses the term "supplemental allowance" to describe its COLA.

- **Type of Benefit:** New Hampshire retirees receive supplemental allowances, which must be approved by the Fiscal Committee of the General Court (i.e., the state legislature) before they may be paid. The committee approves an allowance if the actuary can show that funding is available to pay for it.
- **Who Is Eligible for COLA?** A retiree who has been retired at least 12 months is eligible for the supplemental allowance.
- **How Is the Benefit Calculated?** The supplemental allowance is limited to an amount between 1% and 5%, with increments of at least 1/2%. The amount of the supplemental allowance is recommended by the actuary. It is based on information including, but not limited to, the change in the Consumer Price Index for Urban Consumers (CPI-U). Effective July 1, 2004, teacher retirees received a 1.0% COLA.
- **Is the COLA Compounded or Simple?** Supplemental allowances are compounded, which means that previous supplemental allowances are counted when a new one is being calculated.
- **Does the Amount of the COLA Depend on Age or Some Other Factor?** The amount of a retiree's supplemental allowance does not depend on age or any other factor.
- **How Is the COLA Funded?** A special account is set aside to fund supplemental allowances. The account is funded by excess investment income.

For further information, see New Hampshire Revised Statutes, § 100-A:41-a (2003).

NEW JERSEY DIVISION OF PENSIONS AND
BENEFITS
TEACHERS' PENSION AND ANNUITY FUND (TPAF)

New Jersey uses the term "pension adjustment benefit" to describe its COLA.

- **Type of Benefit:** New Jersey retirees receive automatic pension adjustment benefits.
- **Who Is Eligible for COLA?** A retiree is eligible for the pension adjustment benefit after 24 months of retirement. Thereafter, the COLA is computed and applied annually in the February 1 check.
- **How Is the Benefit Calculated?** The pension adjustment benefit is calculated as follows:

An eligible retiree receives a pension adjustment benefit equal to 60% of the change in the average Consumer Price Index for Urban Wage Earners and Clerical Workers, US City Average, All Items, 1982-84 = 100 (CPI-W) for the year in which the retiree retired *as compared to* the average CPI-W for a 12-month period ending with each August 31st immediately preceding the year in which the adjustment becomes payable.
- **Is the COLA Compounded or Simple?** The pension adjustment benefit is simple, which means that previous pension adjustment benefits are not counted when a new pension adjustment benefit is being calculated.
- **Does the Amount of the COLA Depend on Age or Some Other Factor?** The amount of the pension adjustment benefit does not depend on age or any other factor.
- **How Is the COLA Funded?** The pension adjustment benefits are paid by the Teachers' Pension and Annuity Fund. The cost of the pension adjustment benefit is considered in the annual actuarial calculations of the employer.

For further information, see New Jersey Permanent Statutes, §§ 18A:66-126.6 and 43:3B-1 et seq. (2004).

New Mexico uses the term "cost of living adjustment" (COLA).

■ **Type of Benefit:**

New Mexico retirees receive automatic COLAs.

■ **Who Is Eligible for COLA?**

Generally, a retiree is eligible for the COLA the year he/she turns 65. If an individual retires after reaching age 65, he/she is eligible for the COLA on July 1 following the year he/she retires.

■ **How Is the Benefit Calculated?**

The adjustment is equal to one-half of the increase or decrease in the Consumer Price Index for All Urban Consumers, U.S. City Average (CPI-U). The adjustment cannot exceed 4%. The adjustment also cannot be less than 2%, unless change in the CPI is less than 2%, in which case the adjustment will equal the change in the CPI.

A retiree's benefit cannot be reduced to less than the amount he/she was receiving at the date of retirement.

■ **Is the COLA Compounded or Simple?**

COLAs are compounded, which means that previous COLAs are counted when a new COLA is being calculated.

■ **Does the Amount of the COLA Depend on Age or Some Other Factor?**

The amount of the COLA does not depend on age or some other factor, although eligibility is determined by age.

■ **How Is the COLA Funded?**

The cost of the automatic COLA is added to the existing liabilities of the retirement system.

■ **Special Feature:**

"Catch Up Provision"

Ad hoc COLAs have been granted in 1981, 1987, 1991 and 1999. In 1999, the legislature authorized an ad hoc COLA in addition to the automatic COLA; the ad hoc COLA, granted in 1999 was funded by excess investment income.. A retiree received an adjustment based on length of retirement and years of service according to the following formula:

- (1) \$2 per month for each year of retirement, plus
- (2) \$1 per month for each year of credited service.

This formula provides a "catch up" because those retired the longest will receive the largest amounts.

For further information, see New Mexico Statutes § 22-11-31 (2004).

New York

NEW YORK STATE TEACHERS RETIREMENT SYSTEM

New York uses the term "cost-of-living adjustment" (COLA).

- **Type of Benefit:** New York retired members receive automatic cost-of-living increases on September 1st of each year.
- **Who Is Eligible for COLA?** Members are eligible for COLAS if they (1) have been retired from service for at least five years and are at least age 62, or (2) have been retired 10 years or more and have attained age 55, or (3) have been retired for at least five years as disability pensioners.
- **How Is the Benefit Calculated?** The COLA is computed on a base benefit amount limited to \$18,000. The base benefit is multiplied by the percentage change in the Consumer Price Index, All Urban Consumers, U.S. City Average, All Items, 1982-84 = 100 (CPI-U) over the one year period ending on the March 31st prior to the cost-of-living adjustment effective on the ensuing September 1st. The COLA cannot exceed 4%, but also cannot be less than 1%.
- **Is the COLA Compounded or Simple?** COLAs are compounded, which means that previous COLAs are counted when a new COLA is being calculated.
- **Does the Amount of the COLA Depend on Age or Some Other Factor?** The amount of the automatic COLA does not depend on age or some other factor, although eligibility is determined by age.
- **How Is the COLA Funded?** COLAs are funded through the employer normal rate of contributions as actuarially determined.
- **Special Feature:** **"Catch Up Provision"**

Effective September 1, 2000, all members who retired prior to 1997 were granted a one-time cost-of-living adjustment equal to the percentage change in the CPI-U, measured from the year of retirement through calendar year 1997 according to the following schedule:

Year of Retirement	Percentage adjustment
1968 through 1996	50%
1966 and 1967	55%
1965	60%
1964	65%
1963	70%
1962	80%
1961	90%
prior to 1961	100%

This "catch-up" adjustment was computed on a base benefit amount limited to maximum of \$18,000.

For further information, see New York State Consolidated Laws, Education, Article 11, § 532-a (2004)

North Carolina

TEACHERS' AND STATE EMPLOYEES' RETIREMENT SYSTEM OF NORTH CAROLINA (TSERS)

North Carolina uses the term "post-retirement increase" to describe its COLA.

- **Type of Benefit:** North Carolina retirees receive ad hoc post-retirement increases. Effective July 1, 2004, eligible retirees received a 1.7% increase in their retirement allowance
- **Who Is Eligible for COLA?** Those who retired on or before July 1, 2003, received the 2004 increase. Those retired after July 1, 2003 but before June 30, 2004 received a prorated increase.
- **How Is the Benefit Calculated?** In 2004, eligible retirees received a 1.7% increase in their retirement allowance.
- **Is the COLA Compounded or Simple?** The increase was compounded, which means that previous post-retirement increases are counted when a new post-retirement increase is being calculated.
- **Does the Amount of the COLA Depend on Age or Some Other Factor?** The amount of the post-retirement increase does not depend on age or any other factor.
- **How Is the COLA Funded?** The post-retirement increase is funded by unencumbered actuarial gains.

For further information, see North Carolina General Statutes, Chapter 135, Article 1, §135-5 (2003) as amended by Session Law 2004-124 .

North Dakota

NORTH DAKOTA TEACHERS' FUND FOR RETIREMENT (TFFR)

North Dakota uses the term "postretirement adjustment" to describe its COLA.

- **Type of Benefit:** North Dakota retirees receive ad hoc postretirement adjustments. The most recent postretirement adjustment was granted in 2001.
- **Who Is Eligible for COLA?** A retiree who was receiving benefits on June 30, 2001 received a postretirement adjustment.
- **How Is the Benefit Calculated?** The 2001 postretirement adjustment was calculated by taking two dollars per month multiplied by the member's number of years of service credit plus one dollar per month multiplied by the number of years since the member's retirement. In addition, two additional conditional annual benefit adjustments were approved which provide for an increase equal to 0.75% times the monthly benefit payable on July 1, 2001 and an increase equal to 0.75% times the monthly benefit payable on July 1, 2002. These latter two adjustments were conditional: if the actuarial margin is negative by 60 basis points or more, or if the margin has been negative by 30 or more basis points for two years, the board could elect to suspend the increase.
- **Is the COLA Compounded or Simple?** Postretirement adjustments are compounded, which means that previous postretirement adjustments are counted when a new postretirement adjustment is being calculated.
- **Does the Amount of the COLA Depend on Age or Some Other Factor?** The amount of the postretirement adjustment depends on a retiree's date of retirement and years of service credit.
- **How Is the COLA Funded?** The postretirement adjustment is funded from an actuarial margin. For example, if the actual investment returns exceeded the assumed returns, an actuarial margin would occur and allow the possibility of a postretirement adjustment.

For further information, see North Dakota Century Code Chapter 15-39.1-10.11 (2003).

Ohio

TEACHERS RETIREMENT SYSTEM OF OHIO (STRS)

Ohio uses the term "cost of living increase" to describe its COLA.

- **Type of Benefit:** Ohio retirees receive automatic increases, plus a variable annual supplemental benefit (known as a "13th check") which is paid from time to time as described in "Special Features" below.
- **Who Is Eligible for COLA?** A retiree is eligible for the increase twelve months after the date of his/her retirement.
- **How Is the Benefit Calculated?** The retiree's cost of living increase is equal to 3% calculated on the amount of the original monthly benefit.
- **Is the COLA Compounded or Simple?** The automatic COLA is simple, which means that previous cost-of-living adjustments are not counted when a new adjustment is calculated.
- **Does the Amount of the COLA Depend on Age or Some Other Factor?** The amount of the cost of living increase does not depend on age or any other factor, but the 13th check, described below, does.
- **How Is the COLA Funded?** The cost of the automatic COLA is added to the existing liabilities of the retirement system. The 13th check is funded from investment income earned in excess of the actuarial assumption for investment income.
- **Special Features:** *"13th Check"*

In addition to automatic cost of living increases, the STRS Board has the authority to grant an annual lump-sum supplemental benefit check (known as the "13th check") in December to those who have received benefits for the preceding 12 months. Funds are derived from prior year investment earnings that exceeded the actuarial funding requirements for the regular benefit plan. Each year the Board reviews the amount of investment earnings to determine if there are sufficient funds to provide a supplemental payment; a return of more than 8.00% on investments must be realized before the Board can consider awarding the supplemental benefit. From 1980 until 2001, a 13th check was granted; however, none was granted in 2002, 2003 or 2004.

Years of Ohio-valued service and years of retirement are used to determine the amount awarded to each eligible retiree. For example, a person who retired with 30 years of service and who has been retired for 10 years, has accumulated 40 units. If the unit value available to pay a supplemental benefit is established at \$10, then the person would receive a supplemental benefit equal to \$400. Because the 13th check pays the most to those retired the longest, it provides a "catch up" for older retirees.

For further information, see Anderson 's Ohio Revised Code §3307.67 and § 3307.671 (2004).

Oklahoma

TEACHERS' RETIREMENT SYSTEM OF OKLAHOMA (TRS)

Oklahoma uses the term "increase in retirement benefits" to describe its COLAs.

- **Type of Benefit:** Oklahoma retirees receive ad hoc increases in retirement benefits. The most recent increase in retirement benefits was granted July 1, 2004.
- **Who Is Eligible for COLA?** A retiree who was retired prior to July 1, 2003 was eligible for the increase in retirement benefits.
- **How Is the Benefit Calculated?** On August 1, 2004 retirees with 20 or more years of service and a monthly benefit of less than \$1,500 received an increase of 4.5%; retirees with 20 or more years of service and a monthly benefit of \$1,500 - \$2,500 received an increase of 4.0%; retirees with 20 or more years of service and a monthly benefit of more than \$2,500 received an increase of 3.5%; retirees with 15 to 19 years of service and a monthly benefit of less than \$1,000 received an increase of 4.0%; retirees with 15 to 19 years of service and a monthly benefit of \$1,000 - \$2,000 received an increase of 3.5%; retirees with 15 to 19 years of service and a monthly benefit of more than \$2,000 received an increase of 3.0%; retirees with 15 or fewer years of service and a monthly benefit of less than \$801 received an increase of 3.5%; retirees with 15 or fewer years of service and a monthly benefit of \$801 - \$1,499.99 received an increase of 3.0%; and retirees with 15 or fewer years of service and a monthly benefit of \$1,500 or more received an increase of 2.5%.
- **Is the COLA Compounded or Simple?** The increase is compounded, which means that previous COLAs are counted when a new increase is being calculated.
- **Does the Amount of the COLA Depend on Age or Some Other Factor?** The amount of the increase in retirement benefits granted in 2004 varied with the retirees length of credited service prior to retirement and the amount of monthly benefit received as of June 30, 2003.
- **How Is the COLA Funded?** The costs of ad hoc cost-of-living adjustments are added to the existing liabilities of the retirement system, with the system actuary assuming future ad hoc cost-of-living adjustments will be granted.

For further information, see Oklahoma Statutes § 17-116 et seq. (2003) as amended in 2004 by Senate Bill 1134.

Oregon

OREGON PUBLIC EMPLOYEES' RETIREMENT SYSTEM (PERS)

Oregon uses the term "cost of living adjustment" to describe its COLA.

- **Type of Benefit:** Oregon retirees receive automatic COLAs. In addition, the legislature has periodically granted ad hoc increases.
- **Who Is Eligible for COLA?** All individuals who retire by July 1 are eligible for the COLA. It is paid on August 1.
- **How Is the Benefit Calculated?** The COLA is equal to the percentage change in the Consumer Price Index (Portland area - all items). It cannot exceed 2%. Any change in the CPI over 2% will accumulate and be used for future benefit adjustments which would otherwise be less than 2%.⁹
- **Is the COLA Compounded or Simple?** The COLA is compounded, which means that previous increases are counted when a new increase is being calculated.
- **Does the Amount of the COLA Depend on Age or Some Other Factor?** The amount of the COLA does not depend on age or any other factor.
- **How Is the COLA Funded?** The COLA is funded by current employer contributions.

For further information, see Oregon Revised Statutes § 238.360 (2003) and Section 10, Chapter 67, Oregon Laws 2003.

⁹ Most PERS retirees received a cost-of-living allowance (COLA) increase in benefit payments dated August 1, 2004. PERS cost-of-living allowance (COLA) was suspended temporarily for Tier One members who retired with an effective date on or after April 1, 2000, and before April 1, 2004, under the Money Match calculation. (PERS uses three methods to calculate retirement benefits: Full Formula, Formula Plus Annuity, and Money Match. The retirement method retirees are eligible for that produces the highest benefit amount is used to determine their monthly benefit.) The COLA suspension applied to this group of retirees was due to 1999 account crediting rates. Tier One accounts were credited at 20 percent. The legislature determined that accounts should have been credited at 11.33 percent. Once the two amounts reconcile, COLA payments begin again.

If retiring April 1, 2004 or after, or if the member did not retire under the Money Match calculation between April 1, 2000 and April 1, 2004, the a retiree is eligible for automatic annual cost-of-living allowance (COLA) increases based on the consumer price index for the Portland area as noted above; the PERS Board determined that for 2004, that benefits would be adjusted as follows:

- July 1, 2000, or earlier retirement date: 2 percent.
- August 1, 2000, through July 1, 2001 retirement date: 1.73 percent.
- August 1, 2001 or later retirement date: 1.36 percent.

Pennsylvania

PENNSYLVANIA PUBLIC SCHOOL EMPLOYEES' RETIREMENT SYSTEM

Pennsylvania uses the term "supplemental annuity" to describe its COLA.

■ **Type of Benefit:**

Pennsylvania retirees receive ad hoc supplemental annuities. The last ad hoc supplemental annuity was granted in 2002. Other ad hoc increases were provided in 1979, 1984, 1989, 1994 and 1998.

■ **Who Is Eligible for COLA?**

Retirees who retired on or before July 1, 1990 were eligible for the supplemental annuity that became effective on July 1, 2002. Retirees who retired after July 1, 1990 were eligible for the supplemental annuity that became effective on July 1, 2003.

■ **How Is the Benefit Calculated?**

The amount of the supplemental annuity increases effective in 2002 varied according to retirement date as follows:

- Retirees who retired between July 2, 1988 and July 1, 1990 received an 8% increase.
- Retirees who retired between July 2, 1983 and July 1, 1988, received a 10% increase.
- Retirees who retired between July 2, 1980 and July 1, 1983 received a 15% increase.
- Retirees who retired before July 2, 1980 received a 25% increase.

The amount of the supplemental annuity increases effective in 2003 varied according to retirement date as follows:

- Retirees who retired between July 2, 2001 and July 1, 2002 received a 2.27% increase.
- Retirees who retired between July 2, 2000 and July 1, 2001 received a 3.08% increase.
- Retirees who retired between July 2, 1999 and July 1, 2000 received a 4.87% increase.
- Retirees who retired between July 2, 1998 and July 1, 1999 received a 6.35% increase.
- Retirees who retired between July 2, 1994 and July 1, 1998 received a 7.50% increase.
- Retirees who retired between July 2, 1990 and July 1, 1994 received a 9% increase.
- Retirees who retired before July 1, 1990 received no additional increase in 2003, because they received their increase in 2002.

■ **Is the COLA Compounded or Simple?**

The supplemental annuity is compounded, which means that previous supplemental annuities are counted when a new supplemental annuity is being calculated.

■ **Does the Amount of the COLA Depend on Age or Some Other Factor?**

The amount of the 2002 and 2003 cost-of-living adjustments depended on the date of retirement.

■ **How Is the COLA Funded?**

The 2002 and 2003 cost-of-living adjustments were funded through employer contributions in annual equal dollar installments over a period of 10 years beginning July 1, 2002 and July 1, 2003, respectively.

For further information, see Act 2002-38, enacted by the General Assembly of the Commonwealth of Pennsylvania.

Rhode Island

EMPLOYEES' RETIREMENT SYSTEM OF RHODE ISLAND (ERS)

Rhode Island uses the term "cost of living adjustment" (COLA).

- **Type of Benefit:** Rhode Island retirees receive automatic COLAs.
- **Who Is Eligible for COLA?** All retirees are eligible for the COLA after the third January of their retirement.
- **How Is the Benefit Calculated?** The COLA is 3%.
- **Is the COLA Compounded or Simple?** COLAs are compounded, which means that previous COLAs are counted when a new COLA is being calculated.
- **Does the Amount of the COLA Depend on Age or Some Other Factor?** The amount of the COLA does not depend on age or any other factor.
- **How Is the COLA Funded?** The cost of the benefit increase is added to the existing liabilities of the retirement system.

For further information, see General Laws of Rhode Island § 36-10-35 (2004).

South Carolina

SOUTH CAROLINA RETIREMENT SYSTEM (SCRS)

South Carolina uses the term "increase in allowances based on the Consumer Price Index" to describe its COLA.

- **Type of Benefit:** South Carolina retirees receive automatic post retirement increases.
- **Who Is Eligible for COLA?** An individual who was retired on the July 1 immediately preceding the effective date of the increase is eligible.
- **How Is the Benefit Calculated?** The amount of the increase is equal to the increase in the ratio of the Consumer Price Index for Wage Earners and Clerical Workers (CPI-W) at the end of the calendar year relative to the CPI-W as of the prior December 31st, up to a maximum of 4%.

The increase is payable only if the additional liabilities created by it do not require the total employer rate of contribution to be raised.
- **Is the COLA Compounded or Simple?** The post retirement increase is compounded, which means that previous increases are counted when a new increase is being calculated.
- **Does the Amount of the COLA Depend on Age or Some Other Factor?** The amount of the increase does not depend on age or any other factor.
- **How Is the COLA Funded?** The cost of the benefit increase is added to the existing liabilities of the retirement system

For further information, see Code of Laws of South Carolina § 9-1-1810 (2003).

South Dakota

SOUTH DAKOTA RETIREMENT SYSTEM (SDRS)

South Dakota uses the term "improvement factor" to describe its COLA.

- **Type of Benefit:** South Dakota retirees receive automatic improvement factors.
- **Who Is Eligible for COLA?** A retiree is eligible for the improvement factor on the first July 1 that is at least twelve months from the date of retirement.
- **How Is the Benefit Calculated?** The improvement factor is 3.1 %.
- **Is the COLA Compounded or Simple?** The improvement factor is compounded, which means that previous improvement factors are counted when a new improvement is calculated.
- **Does the Amount of the COLA Depend on Age or Some Other Factor?** The amount of the cost of living increase does not depend on age or any other factor.
- **How Is the COLA Funded?** The cost of the benefit increase is added to the existing liabilities of the retirement system.

For further information, see South Dakota Codified Laws § 3-12-47 (2004).

TENNESSEE CONSOLIDATED RETIREMENT
SYSTEM (TCRS)

Tennessee uses the term "cost of living adjustment" (COLA).

■ **Type of Benefit:**

Tennessee retirees receive automatic COLAs.

■ **Who Is Eligible for COLA?**

A retiree is eligible for the COLA if he/she has been retired at least twelve months on July 1, the date the COLA adjustment is made each year.

■ **How Is the Benefit Calculated?**

The COLA is calculated as follows:

(1) 100% minus

(2) the percentage representing the Consumer Price Index (CPI) as of the end of the calendar year divided by the CPI for the previous December 31st as of which a COLA was granted.

The COLA cannot exceed 3%. If the change in the CPI is less than 0.5%, no COLA will be granted. If the change in the CPI is between 0.5% and 1%, it will be rounded to 1%. If the change in the CPI is between 1% and 3%, the actual percentage change will be granted. If the change in the CPI exceeds 3%, a 3% COLA will be granted.

■ **Is the COLA Compounded or Simple?**

The COLA is compounded, which means that previous COLAs are counted when a new COLA is being calculated.

■ **Does the Amount of the COLA Depend on Age or Some Other Factor?**

The amount of the COLA does not depend on age or any other factor.

■ **How Is the COLA Funded?**

The cost of the benefit increase is added to the existing liabilities of the retirement system.

■ **Special Features:**

Ad Hoc Increase

Periodically, the General Assembly may grant ad hoc increases as was done in 1978, 1985, 1987, and 1997. These increases are in addition to the automatic COLAs.

For further information, see Tennessee Code §§ 8-36-306, 701, 707, and 713 (2004).

Texas

TEACHER RETIREMENT SYSTEM OF TEXAS (TRS)

Texas uses the term "increase" to describe its COLA.

- **Type of Benefit:** TRS retirees receive ad hoc increases. The most recent increase was granted in 2001.
- **Who Is Eligible for COLA?** Members who retired prior to August 31, 2001.
- **How Is the Benefit Calculated?** The 2001 increase consisted of two parts. First, members who retired prior to September 1, 2000 received a 10.77% increase in their annuities consisting of a 6 percent inflation adjustment plus a 4.5% annuity increase (the equivalent of the multiplier increase from 2.2% to 2.3% enacted for active employees). Second, members who retired between September 1, 2000 and August 31, 2001 received only a 4.5% annuity increase (the equivalent of the multiplier increase from 2.2% to 2.3% enacted for active employees).
- **Is the COLA Compounded or Simple?** The increase is compounded, which means that previous increases are counted when a new increase is being calculated.
- **Does the Amount of the COLA Depend on Age or Some Other Factor?** As noted above, the amount of the 2001 increase depended on the date of retirement.
- **How Is the COLA Funded?** The increase is funded by available investment income. Each regular legislative session, the legislature must determine whether the performance of the retirement system trust fund makes the fund capable of supporting improvements in the plan benefits, including cost-of-living adjustments. Investment performance is reviewed relative to existing liabilities and the cost of assuming additional liabilities associated with new plan benefits.

For further information, see Section 30 of Senate Bill 273, enacted by the 2001 Texas Legislature or Chapter 1229 of the General and Special Laws of Texas, 77R.S.(2003).

Utah

UTAH RETIREMENT SYSTEM

Utah uses the term "annual cost of living allowance adjustment" to describe its COLA.

- **Type of Benefit:** Utah retirees receive automatic adjustments.
- **Who Is Eligible for COLA?** Retirees receive an adjustment after one year of retirement.
- **How Is the Benefit Calculated?** The adjustment is equal to the annual increase in the Consumer Price Index (CPI) up to a maximum of 4%. If the annual increase in the CPI is greater than 4%, the excess amount over 4% will accumulate and be paid in future years when the adjustment is less than 4%.
- **Is the COLA Compounded or Simple?** The adjustment is simple, which means that previous adjustments are not counted when a new adjustment is being calculated.
- **Does the Amount of the COLA Depend on Age or Some Other Factor?** The amount of the adjustment does not depend on age or any other factor.
- **How Is the COLA Funded?** The employer contribution includes funding for the adjustment.

For further information, see Utah Code, §§ 49-12-407 and 49-13-407 (2004).

Vermont

STATE TEACHERS' RETIREMENT SYSTEM OF VERMONT (STRS)

Vermont uses the term "post-retirement adjustment" to describe its COLA.

- **Type of Benefit:** Vermont retirees receive automatic post-retirement adjustments.
- **Who Is Eligible for COLA?**

All Group A retirees who have received a retirement allowance at least one year as of December 31 are eligible for the post-retirement adjustment. A Group A member is any person who was first included in the membership of STRS prior to July 1, 1981.

All Group C retirees who have received a retirement allowance for at least one year as of December 31 are eligible for the postretirement adjustment. A Group C member is any person first included in the membership of STRS on or after July 1, 1990; any person who was a Group B member on June 30, 1990 and who was in service on that date; and any person who was a Group B member on June 30, 1990 who was absent from service on that date and who returns to service on or after July 1, 1990. Group C early retirees become eligible for post-retirement adjustments on the January 1 following attainment of age 62, provided the member has received benefits for at least 12 months as of December 31 of the year preceding any January adjustment.
- **How Is the Benefit Calculated?**

Group A members receive a post-retirement adjustment equal to the percentage change in the Consumer Price Index for All Urban Consumers (CPI-U) to the nearest one-tenth of one percent. The postretirement adjustment cannot exceed 5%.

Group C members receive a post-retirement adjustment equal to one-half the percentage change in the Consumer Price Index for All Urban Consumers (CPI-U) to the nearest one-tenth of one percent. The post-retirement adjustment cannot exceed 5%.
- **Is the COLA Compounded or Simple?** The post-retirement adjustment is compounded, which means that previous post-retirement adjustments are counted when a new post-retirement adjustment is being calculated.
- **Does the Amount of the COLA Depend on Age or Some Other Factor?** The amount of the post-retirement adjustment depends on the group in which a retiree has membership.
- **How Is the COLA Funded?** The cost of the benefit increase is added to the existing liabilities of the retirement system.

For further information, see Vermont Statutes, Title 16, Chapter 55, §§ 1931 and 1949 (2003).

Virginia

VIRGINIA RETIREMENT SYSTEM (VRS)

Virginia uses the term "post retirement supplement" to describe its COLA.

- **Type of Benefit:** Virginia retirees receive automatic post retirement supplements.
- **Who Is Eligible for COLA?** A retiree is eligible to receive the post retirement supplement on July 1 of the second calendar year after retirement.
- **How Is the Benefit Calculated?** A retiree receives a post retirement supplement on July 1 of each year. The post retirement supplement is:
 - (1) the full annual increase in the Consumer Price Index for All Urban Consumers (CPI-U) up to 3%, plus
 - (2) one-half of the increase in the CPI-U between 3% and 7%.
- **Is the COLA Compounded or Simple?** Post retirement supplements are compounded, which means that the previous post retirement supplements are counted when a new post retirement supplement is being calculated.
- **Does the Amount of the COLA Depend on Age or Some Other Factor?** The amount of the post retirement supplement does not depend on age or any other factor.
- **How Is the COLA Funded?** Employer contributions include funding for the post retirement supplements.

For further information, see Code of Virginia § 51.1-166 (2004).

WASHINGTON TEACHER RETIREMENT SYSTEM (TRS)

Washington uses the term "annual pension increase" and "gain sharing" for members of TRS Plan 1 (see below), "post-retirement cost-of living" for members of TRS Plan 2, and "post-retirement cost-of living" and "extraordinary investment gain" for members of TRS Plans 3.

The Washington State Department of Retirement Systems (DRS) administers the Teachers' Retirement System (TRS) and the other public retirement systems in Washington. TRS has three tiers of benefits, TRS Plan 1, TRS Plan 2, and TRS Plan 3. Plan 1 is a defined benefit plan that covers individuals who first became members of TRS before October 1, 1977. Plan 2 is a defined benefit plan for individuals who first became members on or after October 1, 1977 and before July 1, 1996. Plan 3 is a hybrid defined benefit/defined contribution plan for individuals who first become members on or after July 1, 1996.

■ **Type of Benefit:**

Washington retirees receive automatic increases in each of the three plans, however Plan 3 members only have such increases applied to the defined benefits portion of their benefit.

■ **Who Is Eligible for COLA?**

A Plan 1 retiree receives an increase if he/she has been retired at least one year and is age 66 or older. Plan 2 and Plan 3 retirees are eligible for the post-retirement adjustment if his/her retirement allowance has been in effect for at least one year.

■ **How Is the Benefit Calculated?**

Plan 1 retirees receive an annual increase each July in the Uniform COLA and may receive an additional increase in every even-numbered year from the Gainsharing COLA. The gain sharing increase amount is the amount of increase that can be fully funded in actuarial present value by the amount of extraordinary investment gains, if any, calculated as follows: one-half of the sum of the value of the net assets held in trust for pension benefits in the Teachers' Retirement System Plan 1 fund and the Public Employees' Retirement System Plan 1 fund at the close of the previous state fiscal year, multiplied by the amount which the compound average of investment returns on those assets over the previous four state fiscal years exceeds 10%. The amount of the Uniform COLA on 7/1/99 was 77 cents per month per year of service. The amount of the Gainsharing COLA on 1/1/2000 was 28 cents per year of service. The next Uniform COLA amount is calculated as the last Uniform COLA amount plus any Gainsharing COLA amount, all increased by 3%. On 7/1/2000 it was $[(\$0.77 + \$0.28) \times 1.03]$ or \$1.08. On 7/1/2001 it was $[(\$1.08 + \$0.00) \times 1.03]$ or \$1.11.

Plan 2 retirees receive a COLA that equals 3% or change in the Consumer Price Index for the Seattle area, whichever is lower.

Plan 3 retirees receive a COLA on the defined benefit portion of their retirement benefit that equals 3% or the change in the Consumer Price Index for the Seattle area, whichever is lower. In addition, Plan 3 retirees may receive gain-sharing payments to their defined contribution account in January of even-numbered years when earnings for the state

retirement funds (other than TRS Plan 1) average more than 10 percent over a four-year period. The amount credited to the retirees' account is the amount of extraordinary investment gains, if any, calculated as follows: one-half of the sum of the value of the net assets held in trust for pension benefits in the Teachers' Retirement System combined Plan 2 and Plan 3 fund and the School Employees' Retirement System combined Plan 2 and 3 fund at the close of the previous state fiscal year, multiplied by the amount which the compound average of investment returns on those assets over the previous four state fiscal years exceeds 10%.

■ **Is the COLA Compounded or Simple?**

The COLA increases for Plans 1, 2, and 3 are compounded, which means that previous increases are counted when a new increase is being calculated.

■ **Does the Amount of the COLA Depend on Age or Some Other Factor?**

The amount of the increase depends on the plan in which a retiree is a member. Plan 1 members' COLA depends on years of service as well as on any changes in gain sharing. COLAs based only on changes in the cost-of-living are generally applied to monthly benefits for Plan 2 and 3 members. However, while Plan 3 members only receive such COLAs on the defined benefit portion of their retirement benefit, they may receive a gainsharing distribution that is credited to the defined contribution portion of their retirement program.

■ **How Is the COLA Funded?**

The COLA is funded as follows. The entire cost under Plan 1 is funded by an increase in the employer contribution rates, including the gain sharing amount. The cost under Plan 2 is funded equally by employer and employee contributions. In Plan 3, the defined benefit portion of the plan has the COLA and is funded entirely by the employer, including the cost of the COLA; the defined contribution gainsharing is funded by investment gains on the defined benefit trust that is funded by employer contributions.

■ **Special Features**

Legislation enacted in 2004 establishes a \$1,000 minimum monthly benefit for TRS Plan 1 members who have at least twenty-five years of service and who have been retired at least twenty years. Members meeting eligibility would have their benefit payment, before applicable reductions, increased to \$1,000 effective with their July 2004 payment. The new minimum amount would remain in effect until the original benefit calculation plus annual cost of living increases exceeds \$1,000.

For further information, see Revised Code of Washington, §§41.31.010, 41.31.020, 41.31A.020, 41.32.010, 41.32.4851, 41.32.489, 41.32.770, and 41.32.845 (2004).

West Virginia

WEST VIRGINIA STATE TEACHERS RETIREMENT SYSTEM (STRS)¹⁰

West Virginia uses the term "supplement" to describe its COLA.

- **Type of Benefit:** West Virginia retirees receive ad hoc supplements. Since 1980, supplements have been granted to various groups of retirees every few years. The most recent was in 2001.
- **Who Is Eligible for COLA?** Generally, the 2001 supplement applied to retirees, 65 years of age or more, who were retired for five years as of July 1, 2001. In addition, certain other retirees, 65 years of age or more, who had retired under an early retirement incentive provision were also eligible.
- **How Is the Benefit Calculated?**

The 2001 supplement was calculated as follows:

A retiree who, as of July 1, 2001, was age 65 and had been an annuitant for five consecutive years received a one-time supplement equal to 5% of his/her annuity benefit.

A retiree who, as of July 1, 2001, was age 70 and had been an annuitant for five consecutive years received a one-time supplement equal to 10% of his/her annuity benefit.

A retiree who, as of July 1, 2001, was age 65 and who retired under an early retirement incentive program, received a one-time supplement equal to 3% of his/her annuity benefit.
- **Is the COLA Compounded or Simple?** The 2001 increase was a "one-time" supplement to the amount of his/her annuity benefit as of the date of the adjustment; that is, the supplement was compounded.
- **Does the Amount of the COLA Depend on Age or Some Other Factor?** While previous ad hoc supplements depended on a retiree's years of service credit, the 2001 one-time supplement varied primarily by age.
- **How Is the COLA Funded?** Any supplement given will increase the system's unfunded liability.

For further information, see West Virginia Code § 18-7A-26s (2004).

¹⁰ STRS covers teachers who joined the system before July 1, 1991. Anyone hired thereafter is a member of the West Virginia Teachers Defined Contribution Retirement System (TDCRS). No provision is made for a COLA in TDCRS.

WISCONSIN RETIREMENT SYSTEM (WRS)

The WRS is a hybrid pension plan with both defined benefit and defined contribution features. Although structured as a defined benefit plan, separate participant accounts are also maintained. At the time retirement begins, the amount necessary to fund the lifetime benefit (the greater of the benefit calculated by either a defined benefit formula or the value accumulated in the participant account matched equally by the employer) is transferred from the employee and employer reserve into the annuity reserve. Each year, annuitants receive a “dividend” adjustment based on the actual investment return applicable to the annuity reserve. The system's assets are invested by the State of Wisconsin Investment Board (SWIB). Assets are held in either the Fixed Retirement Investment Trust "Fixed Fund" or the Variable Retirement Investment Trust "Variable Fund."

A fixed annuity is guaranteed to never be less than the initial monthly amount. The variable portion of annuity payments are increased or decreased based on variable investment results as of December 31 each year. There are no guarantees. The variable annuity may be decreased to less than the initial monthly amount.

- **Type of Benefit:** WRS retirees receive a percentage increase or decrease in their monthly annuity based on the investment experience of the WRS. The dividend is determined annually and is paid monthly beginning May 1.
- **Who Is Eligible for the Dividends?** All recipients of monthly WRS annuities are eligible.
- **How Is the Benefit Calculated?** Surpluses in the fixed annuity reserve are distributed if the distribution will result in at least a 0.5% increase in the amount of annuities in force, on recommendation of the actuary. Whenever the balance in the variable annuity reserve, as of December 31 of any year, exceeds or is less than the then present value of all variable annuities in force, determined in accordance with the rate of interest and approved actuarial tables then in effect, by at least 2% of the present value of all variable annuities in force, the amount of each variable annuity payment shall be proportionately increased or decreased, disregarding fractional percentages, so as to reduce the variance between the balance of the variable annuity reserve and the present value of variable annuities to less than one percent. WRS retirees received a 0.0% dividend (increase) in the fixed portion of their May 1, 2003 retirement checks, while the variable fund adjustment was a decrease of 27%. WRS retirees received a 1.4% dividend (increase) in the fixed portion of their May 1, 2004 retirement checks, while the variable fund adjustment was an increase of 25%.
- **Is the Dividend Compounded or Simple?** The post-retirement adjustments are compounded. “Dividends” are intended (though not guaranteed) to be permanent increases in the monthly fixed annuity amounts paid.

■ **Does the Amount of the Dividend Depend on Age or Some Other Factor?**

The amount of the dividend depends on actual investment returns.

■ **How is the Dividend Funded?**

The dividend is fully funded by surplus investment returns.

■ **Special Features:**

Ad Hoc Increases

“Annuity supplements” have been provided by the legislature from time to time to further compensate annuitants for erosion of their retirement benefits due to inflation. Annuity supplements are paid directly out of state tax revenues, rather than trust fund earnings, and are dependent on appropriations by the legislature.

For further information, see Wisconsin Statutes and Annotations §§ 40.04, 40.27, and 40.28 (2003).

Wyoming

WYOMING RETIREMENT SYSTEM (WRS)

Wyoming uses the term "adjustment" to describe its COLA.

- **Type of Benefit:** Wyoming retirees receive automatic adjustments.
- **Who Is Eligible for COLA?** A retiree who has been retired for two years is eligible for the adjustment.
- **How Is the Benefit Calculated?**

The adjustment is based on the percentage increase in the cost of living. The cost of living is established by the Wyoming cost-of-living index, which is established by the Division of Economic Analysis of the Department of Administration and Information.

The amount of the adjustment is the greater of (1) the percentage increase in the cost of living or (2) a percentage increase that the system's actuary determines to be actuarially sound, but in either case cannot exceed 3%. If the cost of living exceeds that amount, the amount in excess is accumulated and added to future years' adjustments.
- **Is the COLA Compounded or Simple?** Adjustments are compounded, which means that previous adjustments are counted when a new adjustment is being calculated.
- **Does the Amount of the COLA Depend on Age or Some Other Factor?** The amount of the adjustment does not depend on age or any other factor.
- **How Is the COLA Funded?** The cost of the automatic COLA is added to the existing liabilities of the retirement system.

For further information, see Wyoming Statutes § 9-3-419 (2004).

PART III

A CLOSING NOTE ON INFLATION PROTECTION EFFECTIVENESS: COLA YIELD

COLA YIELD: THE IMPACT OF FORMULAS, FREQUENCY OF ADJUSTMENT AND ELIGIBILITY TIME LAGS

Cost-of-living adjustments or COLAs are designed to provide protection against losses in the purchasing power of retiree benefits due to inflation. As shown in Part II of this compilation, cost-of-living adjustments can take many forms. Some retirement plans provide for cost-of-living adjustments on an ad hoc basis, while others provide for automatic adjustments. Some retirement plans provide for adjustments based on a fixed percent amount, while others may make adjustments based on the percent change in the Consumer Price Index (CPI). Some retirement plans provide for applying percentage adjustments to the original benefit, while others provide for compounded percentage adjustments. Still other systems employ multipart automatic adjustments, with a small fixed percent change and a further adjustment based on changes in the CPI above the fixed percent amount but less than some higher ceiling. In short there is a robust variety of COLA approaches followed in teacher retirement plans.

How can the effectiveness of these varying approaches be gauged? Generally, the better a COLA formula preserves the purchasing power of the retiree's benefit, the more effective is the COLA. This is referred to as the *COLA yield*, defined as the proportion of inflation loss that is recaptured through the application of the COLA. How well COLAs maintain benefit purchasing power usually is determined by at least three factors – the COLA formula, the frequency of adjustment and the time lag in applying the adjustment.

For example, suppose one COLA formula calls for a fixed percentage adjustment of 1 percent each January, while another calls for a percent adjustment in January based on the percent change in the CPI during the previous 12 months. In this case, as long as inflation is greater than 1 percent, the latter formula will *yield* a larger benefit adjustment and provide better purchasing power protection. It does so simply because, as long as inflation is greater than 1 percent, the second formula provides for a larger percentage adjustment.

Purchasing power can be impacted by timing issues unrelated to the nature of the COLA formula. For example, if a COLA based on the CPI in one plan is applied every three months and in another plan the same COLA formula is applied annually, the former will produce a greater benefit than the latter even though the formula is the same. That happens because the retiree receives an increased number of dollars over a longer period of time or, put another way, the retiree receiving more frequent adjustments is compensated sooner for price increases. A COLA provision providing monthly adjustments would have reduced the loss due to inflation even more quickly.

A related application issue is the effect of time lags in adjustment due to eligibility rules. For example, some retirement plans require new retirees to wait for a period of several years before receiving their first cost-of-living adjusted benefit. The impact of waiting periods is to cause retirees to incur uncompensated purchasing power losses until such time as they become eligible for a COLA.

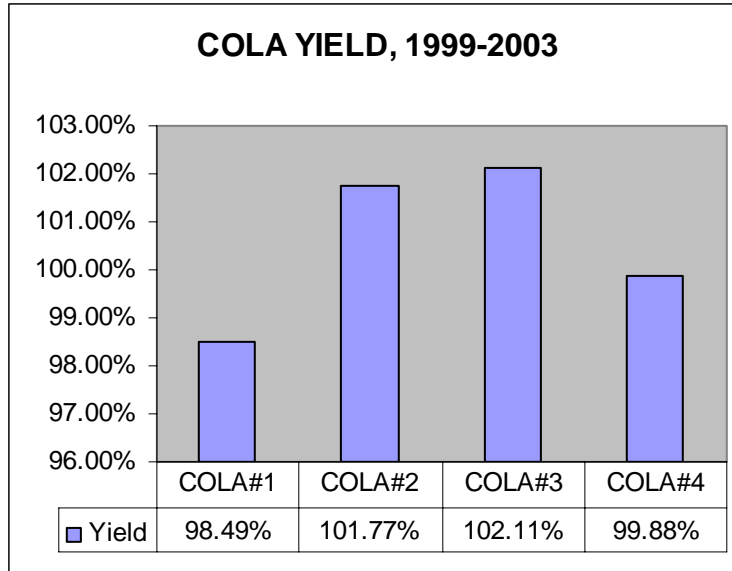
Four COLAs, Four Yields: An Illustration

In order to demonstrate the varying effectiveness of different COLA approaches typically found in state teacher retirement plans, the COLA yield was estimated for four typical COLA provisions below. The COLA yield is defined as the proportion of inflation loss as measured by the change in the CPI-U recaptured by a COLA provision. For purposes of simplicity, time lags due to eligibility differences were assumed not to exist. Furthermore, it was assumed that all cost-of-living adjustments would take place in January, and that where such adjustments were based on the CPI, they would be made based on the change in the CPI during the immediately preceding twelve month period.

The four COLA approaches for which the COLA yield was estimated were:

- **COLA #1:** An ad hoc COLA of 3 percent (compounded) granted regularly every two years by the state legislature meeting in even numbered years to be effective in January of each odd-numbered year.
- **COLA #2:** An automatic annual 3 percent (simple) COLA.
- **COLA #3:** An automatic annual 3 percent (compounded) COLA.
- **COLA #4:** An automatic annual (compounded) COLA based on the full change in the CPI-U up to 3 percent and $\frac{1}{2}$ of the change in the CPI-U between 3 percent and 7 percent.

The performance of these varying COLAs during the period 1999 – 2003 was compared against actual inflation that occurred during the five year period ending December 31, 2002. Prices, as measured by the change in the CPI-U, increased a total of about 12 percent during this period or by nearly 2.5 percent per year. As shown in the chart below, the most effective COLA provision in terms of maintaining the purchasing power of retiree benefits during this period was COLA #3 with a yield of 102.11 percent, while the least effective was COLA #1 with a yield of 98.49 percent.

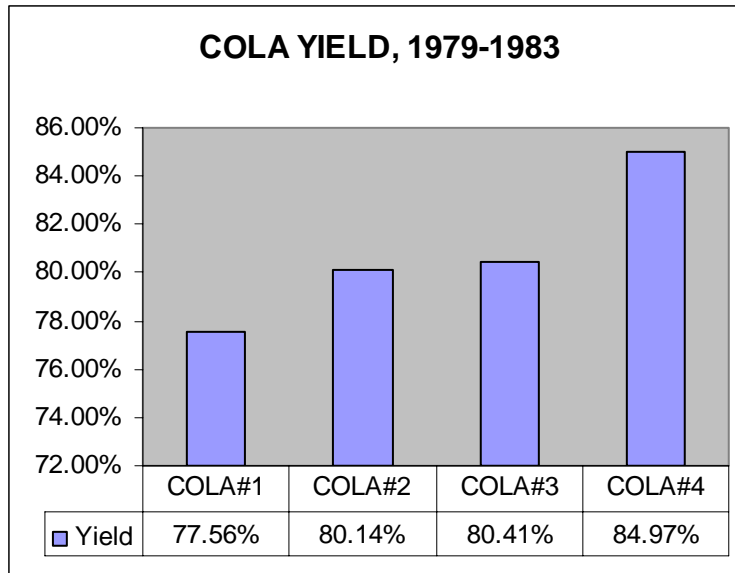


COLA #1 (the ad hoc approach) was less effective in recapturing lost purchasing power than the other COLAs examined because of its major timing difference – adjustments occurred only every two years, rather than annually as in the case of the other COLAs. While the yield for the ad hoc COLA was good, the amount of purchasing power lost or lesser benefit received was still substantial; assuming a monthly retirement benefit of \$4,000 at the start of the period, the ad hoc COLA recipient received a total of \$3,874 less than she would have received in benefit payments for the five years if she had been fully compensated for her inflation losses over the period.

Both COLA #2 and COLA #3 showed returns in excess of the rate of inflation during this period. That is because each of these COLA approaches called for a fixed annual percentage adjustment of 3 percent during a period when the annual change in the rate of inflation averaged about 2.5 percent. COLA #3 performed slightly better than COLA #2 because the former provided for compounding in making adjustments, while the latter permitted percentage calculations only based on the amount of the original benefit. When the calculation is compounded, prior COLA adjustments are taken into account in calculating each subsequent year’s increase, and the resulting amount is greater than in the absence of compounding.

COLA #4 did not quite recapture all of the purchasing power loss due to inflation because, like COLAs in many states, it has a ceiling on the amount that can be recovered and in one year during the study period inflation as measured by the change in the CPI-U exceeded the 3 percent.

The results shown above are unique to the period of inflation studied. The period studied was characterized by relatively low inflation. Therefore, to fully evaluate these same COLAs, a period of higher inflation was also studied to see if yields changed. The performance of these varying COLAs during the period 1979 – 1983 was compared against actual inflation that occurred during the five year period. Prices, as measured by the change in the CPI-U, increased a total of about 57 percent during that earlier five year period or by nearly 11.5 percent per year. Each of the four COLA yields is presented in the chart below.



As shown above, COLA #1 (the ad hoc approach) was also less effective in protecting purchasing power in periods of high inflation. Assuming a monthly retirement benefit of \$4,000 at the start of the period, the ad hoc COLA recipient received a total of \$73,238 less than she would have received in benefit payments for the five years if she had been fully compensated for her inflation losses over the period.

During the high inflation period, the automatic COLA that based its adjustment on the CPI performed better than the fixed percent increase formulas because, even though its increases were capped, the ceiling in its formula was higher than that of the fixed 3 percent formula COLAs. During such periods of high inflation, capped COLAs and low fixed percentage COLAs can fall well short of the amounts necessary to compensate retirees for purchasing power losses due to inflation. The annual change in the rate of inflation averaged about 11.5 percent during the period. Therefore, even COLA #4, the best performing approach, only produced a yield of 84.97 percent. Assuming a monthly retirement benefit of \$4,000 at the start of the period, the COLA #4 recipient received a total of \$49,066 less than she would have received in benefit payments for the five years if she had been fully compensated for her inflation losses over the period. In short, COLA #4 performed much better than the other COLA provisions, but still fell well short of fully recapturing purchasing power losses.

Assessing a COLA's yield during varying periods of inflation can provide useful information in evaluating or formulating an effective COLA design. Existing designs may appear to have outlived their usefulness or become unnecessarily costly at first glance until one reviews their performance in periods with a different inflation experience.