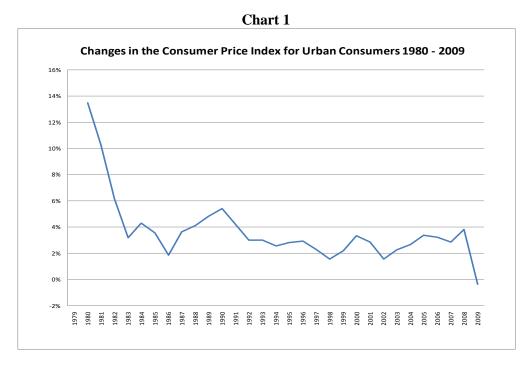
# **Wyoming Retirement System COLA Study**

The sharp investment declines that occurred from 2008-2009 and the resulting financial pressures on state and local governments have led government officials to search for ways of controlling pension costs and stabilizing required contributions. As a result, many pension plans and plan sponsors are reviewing their plan designs, including reviewing the costs associated with postemployment cost-of-living adjustments (COLAs). This paper discusses (1) the purpose of COLAs; (2) how they are provided by public pension plans; (3) their advantages and disadvantages; (4) recent changes in their designs; and (5) the relative costs of providing different types of COLAs. The report also includes an appendix, which summarizes recent changes in state legislation related to COLAs as compiled by the National Conference of State Legislatures.

Many public retirement systems provide COLAs to protect the purchasing power of retiree benefits from inflation. Inflation is typically measured through one of two indexes, both produced by the U.S. Bureau of Labor Statistics. The first is the Consumer Price Index for All Urban Consumers (CPI-U) and the other is the Consumer Price Index for Wage and Clerical Workers (CPI-W). Over the past 30 years, both measures have shown similar patterns of inflation. Chart 1 below shows inflation based on the CPI-U over the past 30 years.

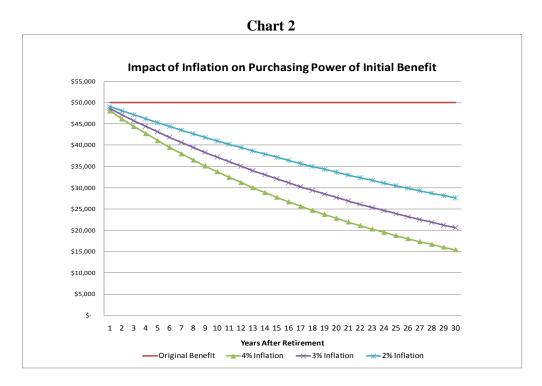


As measured by the CPI-U, inflation has averaged 3.7% over the past 30 years and ranged from 13.5% in 1980 to -0.4% in 2009. Over the past 10 years, inflation has averaged 2.6% and ranged from 3.8% in 2008 to -0.4% in 2009.

<sup>&</sup>lt;sup>1</sup> The CPI measures average changes over time in the prices for goods and services, including food, clothing, shelter, fuels, transportation, medical services, and other items people buy for day-to-day living. The CPI-U measures the average change in prices for approximately 87% of the U.S. population, and is collected from 87 urban areas across the country. The CPI-W is a narrower measure than the CPI-U, in that it only covers wage earners and clerical workers, who make up about 32% of the U.S. population. Note that there is some overlap between the populations included in the CPI-U and CPI-W.

#### The Effect of Inflation on Benefits

For people receiving retirement benefits that are not adjusted for inflation, even relatively small rates of inflation can significantly reduce their purchasing power when applied over extended periods. As shown in Chart 2 below, annual inflation at a 3% rate reduces the purchasing power of the initial benefit by 45% over a 20 year period and 59% over a 30 year period – that is, a \$50,000 initial benefit will buy the equivalent of \$27,700 worth of goods and services after 20 years and \$20,600 after 30 years. Annual inflation at 4% reduces purchasing power by 54% over a 20 year period and 69% over a 30 year period.

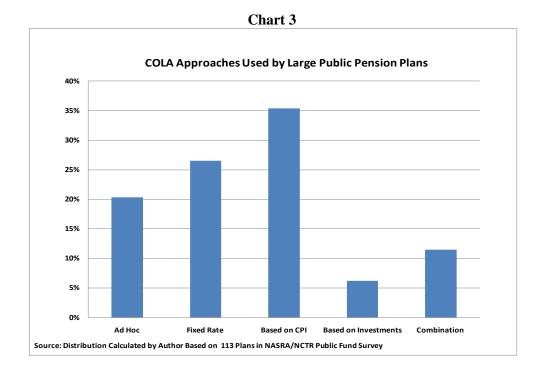


### **COLAs Provided by Public Plans**

Historically, most public pension plans have provided postretirement COLAs either on an ad hoc basis or an automatic basis. A key feature of ad hoc COLAs is that they are granted at the discretion of the plan sponsor's governing body (or in some cases at the discretion of the plan's board). Automatic COLAs do not require a governing body's approval and are often based either on a fixed rate (e.g., 3% per year) or on the CPI. When based on the CPI, there is often an upper limit (e.g., CPI up to 3%).

Some public plans base COLAs on investment earnings for a given year that are above some benchmark rate of return (e.g., the assumed long-term rate of return). COLAs based on investment returns were introduced in the 1990s due, in part, to the relatively high investment returns earned in that decade. More recently, some plans have turned to a combined approach, including a relatively low fixed COLA (e.g., 2%) in combination with a COLA based on investment earnings that exceed long-term expected returns.

Chart 3 on the next page summarizes the general COLA approaches used by over 100 large public plans surveyed by the National Association of State Retirement Administrators (NASRA) and the National Council on Teacher Retirement (NCTR) through the Public Fund Survey.



About 20% of the plans use ad hoc COLAs, 27% use a fixed rate (often 3%), and 35% base their COLAs on the CPI (often capped at 3%). Only about 6% base their COLAs solely on investment return. However, about half of the 12% that provide COLAs through a combination of approaches, include COLAs based partly on investment returns.

**Wyoming Retirement System COLAs.** In general, the Wyoming Retirement System applies ad hoc COLAs. Currently, only the Wyoming Paid Firemen's Retirement Fund Plan A has a guaranteed COLA between 3% to 5%. For the other seven funds, an ad hoc "Break-Even" COLA is determined each year by the System's Board of Trustees in consultation with the System's actuary. Chart 4 shows the relative purchasing power provided by WRS Public Employee Plan COLA compared with the increases needed to keep up with inflation as measured by the CPI-U.

Chart 4

Purchasing Power Comparison - Growth of a Dollar **WRS Public Employee Plan Break-Even COLA** \$1.80 \$1.73 WRS Break-Even COLA \$1.70 → 3% COLA CPI-U \$1.60 \$1.55 \$1.50 \$1.30 \$1.20 \$1.10 \$1.00 2002 2003

7/26/2010

Under the Break-Even COLA, the maximum COLA allowable each year is limited to a percentage adjustment of retiree benefits that the actuary determines to be actuarially sound (but not more than the lesser of 3% or the Wyoming Cost of Living Index in any one year). Historically, this has been the COLA, that if given in perpetuity, would result in a 30-year Annual Required Contribution (as defined by the Governmental Accounting Standards Board) that is equal to the current contribution policy of the individual fund. The Board of Trustees has not granted an ad hoc COLA for the past two years (although it has paid the Wyoming Paid Firemen's Retirement Fund Plan A's 3% minimum guaranteed COLA as required by state law).

#### **Advantages and Disadvantages of COLA Designs**

Different COLA designs have different advantages and disadvantages as shown in the following table.

Type of COLA	Key Feature	Advantages	Disadvantages
Ad Hoc	COLA is provided at the discretion of the sponsoring employer's governing body (or the plan's board)	COLA is provided when judged affordable by the sponsoring entity	COLA may be infrequent and not sufficient to protect retirees' purchasing power     COLA is not included in actuarially determined contributions and so is not prefunded
Fixed Rate	COLA is provided automatically at a fixed rate (e.g., 3%) each year	<ul> <li>COLA can be relied on to protect some portion of retirees' purchasing power</li> <li>COLA is included in actuarially determined contributions and so is more likely to be prefunded</li> </ul>	COLA may be higher than     necessary to protect against     inflation in some years and lower     than necessary in other years
Based on CPI	COLA is provided automatically as some proportion of CPI increase (e.g., 100% of the CPI up to 3%) each year	COLA can be relied on to protect some portion of retirees' purchasing power     COLA is included in actuarially determined contributions and so is more likely to be funded     COLA is not higher than necessary to protect against inflation	COLA may be lower than necessary to protect against inflation in some years, if limited to a set percentage     In periods of high inflation, the COLA may sharply increase contributions, unless capped
Based on Investment Earnings	COLA is provided when annual investment earnings exceed some benchmark (e.g., exceed the actuarially assumed long-term rate of return)	COLA is provided from investment returns rather than current contributions	COLAs may be infrequent and not sufficient to protect retirees' purchasing power     Using investment returns to pay the COLA lowers the effective investment return and so may increase future contributions or lead to a lower funded status
Based on Break-Even Contributions	COLA is provided to the extent the Annual Required Contribution (including the COLA) does not exceed the current contribution policy	COLA is provided when judged affordable by the sponsoring entity     COLA is included in actuarially determined contributions and so is more likely to be funded	COLA may be infrequent and not sufficient to protect retirees' purchasing power     When given routinely, a Break-Even COLA reduces plan surpluses that protect against future investment market downturns
Based on Reserve Account	COLA is provided to the extent funds held in a separate reserve account are sufficient to pay the COLA	<ul> <li>COLA can be funded by plan investments or by an external source</li> <li>COLA is provided when judged affordable by the sponsoring entity</li> <li>COLA is provided (partly or fully) to the extent funds have been set aside</li> </ul>	COLA may be infrequent and not sufficient to protect retirees' purchasing power     Using investment returns to pay the COLA lowers the effective investment return and so may increase future contributions or lead to a lower funded status

Possible GASB Changes to Pension Accounting Rules. In evaluating the advantages and disadvantages of various COLA designs, it is also important to consider how COLAs might be affected by future changes to accounting standards currently under discussion by the Governmental Accounting Standards Board (GASB). As tentatively decided by the GASB Board, changes in benefits related to inactive or retired plan members should be recognized immediately in the plan sponsor's pension expense. Consequently, if the GASB ultimately approves this tentative decision, changes in postemployment COLAs would not be amortized, but immediately recognized in the plan sponsor's pension expense. This would likely result in a higher and more volatile measure of the pension expense reported in a government's financial statements than is currently the case.

#### **Recent Changes to Public Pension COLAs**

As a result of the sharp decline in investment returns from 2008-2009, a significant number of public plan sponsors and retirement systems have redesigned their COLAs in order to control their overall plan costs. These changes include:

- Lowering COLAs. In 2008, the Board of Trustees of the Georgia Employees Retirement System lowered its ad hoc COLA from 3% to 2% and expressed caution about providing future COLAs until additional funding becomes available or its funded ratio improves.
- Capping the COLA. In 2010, the State of Rhode Island changed its COLA to only apply cost-of-living increases to the first \$35,000 of the annual retirement benefit.
- Extending the date the retiree becomes eligible to receive the COLA. In 2010, Illinois passed legislation providing that the COLA will become available one year after the beneficiary begins receiving benefits or age 67, whichever is later. In Rhode Island, in addition to the \$35,000 cap, the State is also delaying payment of the first COLA to the later of age 65 or the member's third anniversary of retirement.
- Lowering the amount of the CPI provided by the COLA. In 2010, the Illinois legislature lowered its COLA from a fixed 3% rate to the lesser of 3% or one-half of the CPI, but not less than zero.
- Making the COLA contingent on the plan's funded ratio. In 2010, South Dakota passed legislation linking the COLA to the system's funded ratio based on the market value of assets. The COLA is 2.1% if the funded ratio is below 80%; 2.4% if the ratio is between 80% and 89%; 2.8% if the ratio is between 90% and 99%, and 3.1% if the ratio is 100% or more.
- Allowing a member to self-fund a fixed-rate COLA through a reduction in the member's initial retirement benefit. In 2009, Louisiana passed legislation allowing members to self-fund a guaranteed 2.5% annual COLA through an actuarial reduction in benefits.
- Establishing a reserve account to fund the COLA. The Teachers' Retirement System of Louisiana maintains an Experience Account funded by one-half of investment earnings in excess of 8.25%. COLAs are payable only if there are sufficient funds in the account and the COLA is approved by the state legislature. In 2009, the Louisiana legislature tightened the rules for determining the COLAs paid from the account.

It should also be noted that in several states, changes in automatic COLAs are being legally challenged by retirees on the grounds that reductions in vested pension benefits violate contract protections included in the U.S. Constitution and the state constitutions.

## **Potential Costs Related to Different COLA Designs**

Exhibit 1 on the following page shows the relative estimated cost impact of several different COLA designs. The first line of Exhibit 1 shows a cost factor of 1.0 for a retirement plan with no cost-of-living adjustments (our baseline). The following COLA alternatives then show the relative cost impact of the

alternative COLA designs in relation to the baseline cost factor of 1.0. For example, a 3% compound COLA with a cost factor of 1.26 is 26% more expensive than the baseline of no COLA.

Exhibit 1
COLAs and Their Relative Cost Impact

Assumes Cost of Living Increases at 3% per annum, unless otherwise noted

		Increase over	er			
COLA Scenario	Notes	No COLA				
No COLA		1.00				
1% Compound		1.07		-		
2% Compound		1.16			•	
3% Compound		1.26				
3% Simple	3% of original benefit with fixed dollar increases	1.21				
Full Consumer Price Index (CPI)	Assume 3% compound increase	1.26				•
50% of CPI	Assume 1.5% compound increase	1.11				
CPI capped at 3%	Assumption is 2.5% per year to approximate cap	1.21				
CPI deferred to age 65	Later of two-year deferral or age 65	1.17			-	
CPI deferred for 3 years	Deferred three years instead of the current two	1.23				
CPI only on first \$12,000	Maximum annual COLA = \$360	1.12				
CPI only on first \$12,000 - indexed	Index \$12,000 cap at 3% assumed CPI	1.15			•	
CPI only on first \$24,000	Maximum annual COLA = \$720	1.17				
CPI only on first \$24,000- indexed	Index \$24,000 cap at 3% assumed CPI	1.20				
CPI prorated by service less than 30	Maximum 3% COLA with 30 years of service	1.16			-	
CPI, capped at 50% of original benefit	Maximum benefit = 150% of original benefit	1.19				
			1.00	1.10	1.20	1.30

#### **Conclusions**

As shown in this report, there are a variety of ways that COLAs can be designed and funded. They can be provided on an ad hoc basis, which helps ensure that the COLA is only provided when judged affordable, but which may result in the COLA being offered infrequently, and the cost not pre-funded in actuarially determined contributions. Alternatively, COLAs can be provided automatically, which helps ensure that the cost-of-living adjustment is provided on a regular basis, but which may also put additional strain on the plan if inflation spikes or sudden investment downturns result in increased funding pressure.

The Break-Even COLA, used for seven of the eight WRS funds, has the advantage of being provided only when the Board of Trustees and the actuary have judged the benefits to be affordable. However, it has the disadvantage of potentially being paid infrequently, especially in times of financial stress. Moreover, automatic COLAs and the Break-Even COLA have the potential disadvantage of reducing plan surpluses that help to protect the plan against future investment market declines.

Currently, COLAs are funded in a several ways. Automatic COLAs are normally funded from plan resources, i.e., plan assets, contributions, and investment earnings. However, some governments have set up dedicated funds to accumulate assets for funding COLAs. Due to the current financial pressures, governments are examining a variety of different approaches.

In addition to discussing possible changes in the COLA design, decision makers may also consider different approaches for funding the COLA. For example, a separate account might be set up to receive contributions specifically designated for paying future COLAs, possibly through a dedicated revenue source. This account might exist side-by-side with the base pension funds and could help to alleviate some of the financial pressure on the funds.

# Appendix A Recent State Legislative Changes Related to Cost-of-Living Adjustments **Source: Ron Snell, Pensions and Retirement Plan Enactments**

National Conference of State Legislatures (http://www.ncsl.org/?tabid=13399)

State	Year	Changes in Cost-of-Living Adjustments
Colorado	2010	SB 1 reduces PERA's COLA to the lesser of 2% or inflation for 2010, and requires the inflation calculation to be based on periods in 2009, resulting in a 0% COLA.
		For 2011 and future years, the COLA is limited to 2%, unless PERA experiences a negative investment return, in which case the COLA will be calculated as the lesser of the inflation from the preceding 3 years or 2%.
		SB 1 also sets rules for adjusting the COLA based on PERA's actuarial funded ratio.
Illinois	2010	Current law provides an annual 3% increase for SERS and TRS, compounded. SB 1946 affects most statewide plans and is applicable to employees who become plan members in 2011. Under SB 1946:
		<ul> <li>Post-retirement increases will be available one year after a beneficiary begins receiving benefits or reaches the age of 67, whichever is later.</li> </ul>
		<ul> <li>The increase will be 3% or 50% of CPI, whichever is less, but not less than zero.</li> <li>The increases will apply only to the base annuity, and will not be compounded.</li> </ul>
Maryland	2010	SB 317 and HB 775 require that retirement allowances for most Maryland State Retirement and Pension System (MSRPS) retirees not be subject to COLAs in fiscal 2011 if the average change in the CPI-U from 2008 to 2009 is negative.
		If COLAs are not applied in fiscal 2011, then fiscal 2012 retirement allowances must be reduced by the difference between fiscal 2010 allowances and the allowances that would have been paid in fiscal 2011 if COLAs had been applied.
		The acts do not apply to retirees of the Legislative Pension Plan or the Judges' Retirement System, whose benefits are linked to the salaries of active legislators and judges, respectively.
South Dakota	2010	SB 20 pins the annual improvement factor (COLA), currently 3.1%, to 2.1% for one year, and thereafter pins it to the market value funded ratio for the system.
		<ul> <li>If the ratio is 100% or more, the COLA remains at 3.1%</li> <li>If the ratio is 90% to 99.9%, the COLA will be indexed to the CPI with a maximum of 2.8% and a minimum of 2.1%</li> </ul>
		If the ratio is 80% to 89.9%, the COLA will be indexed to the CPI with a maximum of 2.4% and a minimum of 2.1%      If the article less than 200% the COLA will be 2.1%      The provided by the COLA will be 2.1%.
Louisiana	2009	• If the ratio is less than 80% the COLA will be 2.1%  HB 96 allows a member of any state-wide retirement system who retires after July 1, 2009, to self-fund a guaranteed 2.5% annual cost of living adjustment through an actuarial reduction of benefits. Any COLAs provided by the retirement system will be in addition to the self-funded annual 2.5%.
		SB 296 places limits on the granting of COLAs and changes the terminology from "cost-of-living" adjustment to "permanent benefit increase." After July 1, 2009, such increases will be limited to those who have been retired for at least one year and who are at least 60 years old (current law: 55 years old).
		SB 296 also adds controls to permanent benefit increases given by the State Employee Retirement System (LASERS). Under existing law, the Experience Fund, which receives revenue under certain conditions when investment return exceeds the actuarial assumption (8.25%) must hold funds sufficient to amortize the full cost of such an increase. Additional controls now applied to LASERS are that if the actuarial return for a year is below the assumption and the fund is below 80% funded, no increase can be granted. If the investment return is below the assumption but the fund is 80% or more funded, an increase up to CPI capped at 2% can be
		given. If the investment return exceeds the actuarial assumption, the cap on an increased will be 3%.  HB 586 provides retirees, beneficiaries, and survivors who have benefits below \$1,200 with a month a minimum benefit increase, based on several requirements including: having 30 or more years of service credit, being at least 60 years of age, and having been retired for at least 15 years. The increase may not be more than \$300 a month.

State	Year	Changes in Cost-of-Living Adjustments	
Nevada	2009	SB 427 reduces postretirement increases for those who become members of the Public Employee Retirement System on or after 1/1/2010. Current law provides for a gradually increasing percentage in the COLA until the retiree has reached a 14th anniversary of retirement when it reaches 5% annually. SB 427 provides that the 12th anniversary amount of 4% annually will be in effect thereafter.	
Vermont	2008	HB 403 changed state employees' qualifications for retirement benefit eligibility, contribution requirements and provisions for COLAs, among other changes.  The Act replaces the existing-law COLA, which is an annual adjustment equal to 50% of the CPI, whether	
		positive or negative. For active members as of June 30, 2008 who retire after July 1, 2008, the COLA will be the CPI percentage or at least 1%, to a maximum of 5%, beginning on January 1, 2014. Members' contribution rates are increased from 3.25% to 5% until July 1, 2019, when the contribution rate will fall to 4.75%. The additional cost of the COLA will be amortized separately from the existing UAAL over 30 years.	
Georgia	2008	House Resolution 1271 creates the House Public Retirement System COLA Study Committee to undertake a study regarding the granting of future COLAs.  For most years, the ERS Board of Trustees (BOT) has granted eligible retirees a 3% COLA each fiscal year.	
		The annual reports of the actuary indicate a declining funding ratio trend which prompted the BOT to reduce the COLA for FY 2008 to 2% and caution in granting future COLAs until such time as additional funding is made available and the funding ratio improves to an acceptable level.	
Kansas	2007	In 2007, Kansas revamped its entire state retirement system. An unusual feature of the new law is the requirement that future costs of the plan will be equally shared by employers and employees. Future automatic COLAs and reduced vesting requirements for present and future members addressed long-standing concerns.	
Washington	2007	HB 2391 (and others) provides for closing the retirement systems' gain-sharing plans. After January 1, 2008, gain-sharing distribution, gain-sharing is eliminated for all members of Plan 1 and Plan 3. On July 1, 2009, the Annual Increase Amount (Uniform COLA) in PERS and TRS Plan 1 is increased by approximately 14 cents. The increase is calculated by determining the difference between the actual January 1, 2008, gain-sharing amount, and 40 cents. The Uniform COLA is increased by this difference (but may not be decreased by a negative number), up to 20 cents.	
		In addition, the early retirement reduction factors are improved for both members of Plans 2 and 3 of PERS, SERS, and TRS that have completed 30 or more years of service. Eligible members may retire from age 62 with no reduction in benefits, while members aged 61 or less may retire with a 2 percent benefit reduction, plus an additional 3 percent reduction for each year between age 60 and 55.	
		The subsidized early retirement (improved early retirement reduction factors), the increases to the Uniform COLA are intended as a replacement for gain-sharing, and are not provided as a matter of contractual right to members until there is legal certainty with respect to the repeal of gain-sharing, including the expiration of any statutory limitations on actions and the end of the process of judicial review. Any legal action brought under the bill must be commenced within three years after the effective date of the act.	