## Time to Consider the

 Appropriateness of COLAs Tuesday October 3, 2023 10:30am - 11:35amBRAD LEE ARMSTRONG, ASA, EA, FCA, MAAA
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## Why COLAs?

- To offset or reduce the effects of inflation on fixed pension income benefits.
- If you are covered by social security, you will have some sort of inflation protection from your Social Security Primary Insurance Amount.
- Collective Bargaining Agreements.
- Plan design objectives.


## Why COLAs?

- To maintain or restore purchasing power lost due to inflation.
- May depend on the financial condition of the plan or the employer.


## Why Now?

- After 20 years of mild to moderate inflation, the pandemic was a primary driver of a surge in inflation over the last 3 years.
- Even $2 \%$ annual inflation can wipe out one-third of a pension benefit's purchasing power after 20 years of retirement.


## Why Now?

- Many revenue sources for employers increase during periods of higher inflation, so budgets may have expanded versus projections.
- Cost of implementing or changing a COLA will determine the appetite and ability to consider alterations in COLA plan provisions.


## Recent Increases in CPI

## Cumulative Increase in CPI



## Decrease in Purchasing Power

## Value of \$5,000 Monthly Pension in Today’s (2023) Dollars



## To Die with Dignity

I don't understand how a cemetery can raise it's funeral prices and blame it on the cost of living.

## Types of COLAs

- Periodic (Recurring)
> COLA's could be applied annually or at any other interval (e.g., every " $X$ " years, or at ages $65,70,75, .$. ).
- Ad hoc
> One-time COLA for all retirees meeting certain criteria.
- Limited Benefit Basis
> Applying COLA only to first $\$ \mathrm{X}, \mathrm{XXX}$ of pension benefit.


## Features of COLAs

- Fixed vs. Variable (inflation/performance-based)
- Percentage-based vs. Dollar-based
- Simple vs. Compound
- Immediate vs. Deferred
- Permanent vs. Temporary
- Caps / Floors (annual and/or lifetime)


## Periodic COLAs

| Date | Monthly Benefit Amount |  | COLA |
| :---: | :---: | :---: | :---: |
|  | Annually | Biannually |  |
| $10 / 1 / 2024$ | $\$ 1,000.00$ | $\$ 1,000.00$ |  |
| $10 / 1 / 2025$ | $\$ 1,020.00$ | $\$ 1,000.00$ | $2 \% / 0 \%$ |
| $10 / 1 / 2026$ | $\$ 1,040.40$ | $\$ 1,020.00$ | $2 \% / 2 \%$ |
| $10 / 1 / 2027$ | $\$ 1,061.21$ | $\$ 1,020.00$ | $2 \% / 0 \%$ |
| $10 / 1 / 2028$ | $\$ 1,082.43$ | $\$ 1,040.40$ | $2 \% / 2 \%$ |
| $10 / 1 / 2029$ | $\$ 1,104.08$ | $\$ 1,040.40$ | $2 \% / 0 \%$ |
| $10 / 1 / 2030$ | $\$ 1,126.16$ | $\$ 1,061.21$ | $2 \% / 2 \%$ |

Period/interval can be anything: annually, biennially, every $3^{\text {rd }}$ year, every $5^{\text {th }}$ year.

Timing can be based on years since retirement or attainment of different ages (e.g., 65, 70, 75,...).

## Fixed vs. Variable COLAs

| Date | Monthly Benefit Amount | Var. COLA | If the objective is to retain |
| :---: | :---: | :---: | :---: | :---: |
| purchasing power, variable |  |  |  |

## Variable COLAs

- Inflation-based variable COLAs are usually tied to an index (e.g., CPI-U, CPI-W).
> Could be 100\% of increase in inflation, as measured by the index, or any other percentage (such as $50 \%$ or $75 \%$ ).
> Could have an annual cap (such as 3\%).


## Variable COLAs

- Performance-based variable COLAs can be linked to investment performance, such as:

| Investment Return | Annual COLA |
| :---: | :---: |
| Less than $0 \%$ | $0.0 \%$ |
| $0 \%$ to $4 \%$ | $0.5 \%$ |
| $4 \%$ to $8 \%$ | $1.0 \%$ |
| $8 \%$ to $12 \%$ | $1.5 \%$ |
| $12 \%$ to $16 \%$ | $2.0 \%$ |
| $16 \%$ or Higher | $2.5 \%$ |

## Percentage-Based vs. Flat Dollar

| Date | Monthly Benefit Amount |  | COLA |
| :---: | :---: | :---: | :---: |
|  | Percentage- <br> Based COLA | Flat-Dollar <br> Based COLA |  |
| $10 / 1 / 2024$ | $\$ 1,000.00$ | $\$ 1,000.00$ |  |
| $10 / 1 / 2025$ | $\$ 1,020.00$ | $\$ 1,025.00$ | $2 \% / \$ 25$ |
| $10 / 1 / 2026$ | $\$ 1,040.40$ | $\$ 1,050.00$ | $2 \% / \$ 25$ |
| $10 / 1 / 2027$ | $\$ 1,061.21$ | $\$ 1,075.00$ | $2 \% / \$ 25$ |
| $10 / 1 / 2028$ | $\$ 1,082.43$ | $\$ 1,100.00$ | $2 \% / \$ 25$ |
| $10 / 1 / 2029$ | $\$ 1,104.08$ | $\$ 1,125.00$ | $2 \% / \$ 25$ |

If the objective is to retain more purchasing power for lower-income retirees, then a flat dollar COLA may be well-suited to meet this objective.
Flat dollar-based COLAs are typically less expensive than percentage-based.

## Simple vs. Compound COLAs

| Date | Monthly Benefit Amount |  | COLA |
| :---: | :---: | :---: | :---: |
|  | Compound | Simple |  |
| $10 / 1 / 2024$ | $\$ 1,000.00$ | $\$ 1,000.00$ |  |
| $10 / 1 / 2025$ | $\$ 1,020.00$ | $\$ 1,020.00$ | $2 \%$ |
| $10 / 1 / 2026$ | $\$ 1,040.40$ | $\$ 1,040.00$ | $2 \%$ |
| $10 / 1 / 2027$ | $\$ 1,061.21$ | $\$ 1,060.00$ | $2 \%$ |
| $10 / 1 / 2028$ | $\$ 1,082.43$ | $\$ 1,080.00$ | $2 \%$ |
| $10 / 1 / 2029$ | $\$ 1,104.08$ | $\$ 1,100.00$ | $2 \%$ |
| $10 / 1 / 2030$ | $\$ 1,126.16$ | $\$ 1,120.00$ | $2 \%$ |

Simple COLAs apply the same dollar increase each period (based on a \% of the initial pension benefit).
Compound COLAs are a better representation of how inflation operates in the economy, although they are a little more expensive than simple COLAs.

## Immediate vs. Deferred COLAs

- COLAs can either start immediately after retirement or be deferred (to a stated age or for a stated number of years after retirement, or some combination).
> Primary purpose is to reduce cost impact.
$>$ May make sense to at least defer the COLA while participating in a DROP, as salary increases during DROP participation provide some inflation protection.


## Immediate vs. Deferred COLAs

- The longer the COLA delay, the less expensive it will be. > COLAs can be deferred for 5 years, 10 years, or longer this reduces Plan costs and provides a boost to purchasing power after other sources of income (such as from a sunset career or part-time job) cease.
- COLAs can also be deferred to an age (e.g., 60, 65, 70).
- Could also combine age and service (e.g., deferred to age 60 or 65 , with at least a 5 -year delay).


## 3-Year vs. 5-Year Deferred COLA

| Date | Monthly Benefit Amount |  | COLA |
| :---: | :---: | :---: | :---: |
|  | 3 -Year Deferral | 5 -Year Deferral |  |
| $10 / 1 / 2024$ | $\$ 1,000.00$ | $\$ 1,000.00$ |  |
| $10 / 1 / 2025$ | $\$ 1,000.00$ | $\$ 1,000.00$ | $0 \% / 0 \%$ |
| $10 / 1 / 2026$ | $\$ 1,000.00$ | $\$ 1,000.00$ | $0 \% / 0 \%$ |
| $10 / 1 / 2027$ | $\$ 1,020.00$ | $\$ 1,000.00$ | $2 \% / 0 \%$ |
| $10 / 1 / 2028$ | $\$ 1,040.40$ | $\$ 1,000.00$ | $2 \% / 0 \%$ |
| $10 / 1 / 2029$ | $\$ 1,061.21$ | $\$ 1,020.00$ | $2 \% / 2 \%$ |
| $10 / 1 / 2030$ | $\$ 1,082.43$ | $\$ 1,040.40$ | $2 \% / 2 \%$ |

## Permanent vs. Temporary COLAs

- COLAs can be permanent (applying periodically for life) or temporary (applying for $X$ years or from ages $Y$ to Z - e.g., from age 55 to 65).
- Temporary COLAs are usually less expensive than permanent COLAs.
- Temporary COLAs can help bridge gaps by applying until eligibility for other benefits, such as Social Security, Medicare, post-ret health/VEBA benefits, etc.


## Temporary COLAs

- Temporary COLAs can have same COLA features as Permanent (Lifetime) COLAs.
$>$ Could be fixed or variable during temporary period.
> Could be percentage-based or dollar-based.
> Could be deferred (5 or 10 years or to a certain age, then applied annually for 10 years).
> Could be compound or simple COLAs.


## Caps and Floors with COLAs

- COLA Caps and Floors are more commonly used with variable (inflation-based) COLAs.
> An annual COLA cap could be something like 3\% to limit increases (and Plan costs) when inflation is high.
> An annual COLA floor (such as 1\%) could apply when inflation is very low to help offset the effect of capped increases in years when inflation exceeds the cap.


## Caps and Floors with COLAs

- Lifetime Caps
> No further COLA increases once benefits have increased by a total of X\% (e.g., 50\%) or by a total of $\$ \mathrm{X}, \mathrm{XXX}$ per month since retirement.
> Lifetime Caps help reduce the cost of COLAs.
> They essentially turn permanent COLAs into temporary COLAs for those who live the longest (ceasing once the lifetime cap is reached).


## Other COLA Types: Ad hoc COLAs

- "Ad hoc COLAs" are one-time benefit increases given to retirees who have not received periodic COLAs, to help restore at least a portion of lost purchasing power since retirement.
- During periods of favorable experience or budget surpluses, or after several years of inflation without any COLAs for retirees, an ad hoc COLA could be considered.


## Ad hoc COLAs

- An ad hoc COLA can be designed in many ways:
$>$ A fixed percentage increase (or a fixed percentage per year retired, up to a \% cap).
$>$ A fixed dollar increase (or a fixed amount per year retired, up to a \$cap).
> A restoration of all or a percentage (such as 50\%) of lost purchasing power since retirement.


## Ad hoc COLAs

- An ad hoc COLA can be applied in many ways:
> Only to retirees over a certain age (e.g., 65 or 70).
$>$ Only to retirees who had at least $X$ years of credited service at retirement (e.g., at least 20 years).
> Only to retirees who have been retired for at least X years (e.g., those who retired 5+ or 10+ years ago).
$>$ Some combination of the above.


## Ad hoc COLAs

- A one-time ad hoc COLA will not increase a Plan's cost/liability until it is implemented. It should then be funded over a shorter amortization period than other plan amendment bases because the changes only apply to retirees.
> Unfunded liabilities attributable only to retirees should be amortized over no more than 10-15 years.


## Ad hoc COLAs

- If a pattern emerges of granting ad hoc COLAs every few years (say, every 3 to 5 years), then they essentially become periodic COLAs; it will then become advisable to incorporate an assumption for future ad hoc COLAs into the Plan cost/liability.
> This is required to be done for GASB 67/68 purposes once a pattern of ad hoc COLAs emerges (once they are deemed to be "substantively automatic").


## Limited Benefit Basis COLAs

- COLAs that are applied to the first \$X,XXX of monthly benefit payments (this can be indexed to maintain intergenerational equity). E.g., COLAs only apply to first \$2,500 of monthly payments.
- All other features should be defined (fixed or variable, percentage or dollar based, deferred, temporary, simple or compound, caps, etc.).


## Limited Benefit Basis COLAs

- Career service proration can be incorporated into limited benefit basis COLAs.
> For instance, if COLAs are applied to the first $\$ 2,500$ of the monthly benefit, this could be prorated based on actual years of service divided by 25; e.g., a retiree with 20 years of service would receive a COLA on the first $\$ 2,000$ of their monthly benefit (=\$2,500 * $20 / 25$ ).


## Inexpensive COLA Options

- COLAs could be provided through a reduced Optional Form of Payment irrevocably elected at retirement, which could either be combined with other (joint survivorship) options or restricted to specific options.
> E.g., Initial monthly benefit could be actuarially reduced (by 15\% to 20\%) in exchange for a lifetime $2 \%$ annual COLA.


## Inexpensive COLA Options

- COLAs could also be elected by employees upon being hired in exchange for accepting a lower benefit multiplier AND/OR a higher employee contribution rate (to offset the cost of the COLA).
- These types of COLA Options carry some adverse selection risks (if employees/retirees with longer life expectancies elect the COLA Options).


## Scaling

- Every type of COLA can be scaled to suit your needs, objectives, and available funding resources.
- Think in terms of a zero entry pool -- if the stakeholders for your fund believe there is a need for a COLA or a need to increase an existing COLA provision, it can be scaled to be as small or as large as desired or as the Plan sponsor can afford.


## Scaling

- Small COLAs are usually considered as being too small to make a meaningful difference; however, an elderly retiree or beneficiary may assign a meaningful value to any amount, even if it just improves their emotional well being.


## Examples for Cost Comparison

- 1\%, 2\% or 3\% Fixed Annual Compound COLAs
- 3\% Fixed Annual Simple COLA
- 3\% Fixed Annual Compound COLA Deferred 5 Years or 10 Years
- CPI-Based Variable Annual Compound COLA with +50\% Lifetime Increase Cap
- Temporary 3\% Annual Compound COLA for 10 Years (Ages 55-65 or First 10 Years If Retire>55)


## Examples for Cost Comparison

- Limited Benefit Basis 3\% Annual Compound COLA Applicable to First $\$ 2,500 /$ Month of Pension Benefit
- Fixed Dollar-Based Annual COLA of $+\$ 50 /$ Month


## Cost Comparison of COLAs

| COLA Example | \% Increase in <br> Normal Cost | Increase in Normal <br> Cost as \% of Pay |
| :--- | :--- | :--- |
| 1\% Immediate Fixed Annual Compound COLA | $+11.0 \%$ | $+3.4 \%$ |
| 2\% Immediate Fixed Annual Compound COLA | $+24.2 \%$ | $+7.6 \%$ |
| 3\% Immediate Fixed Annual Compound COLA | $+40.1 \%$ | $+12.6 \%$ |
| 3\% Immediate Fixed Annual Simple COLA | $+30.2 \%$ | $+9.5 \%$ |
| 3\% Fixed Annual Compound COLA Deferred 5 Years | $+26.6 \%$ | $+8.3 \%$ |
| 3\% Fixed Annual Compound COLA Deferred 10 Years | $+15.4 \%$ | $+4.8 \%$ |
| CPI-Based Variable Compound COLA w/ 50\% Lifetime Cap | $+25.7 \%$ | $+8.0 \%$ |
| Temp. Fixed 3\% Annual Compound COLA (55-65 or 10Yrs) | $+16.3 \%$ | $+5.1 \%$ |
| Limited Benefit Basis 3\% Annual COLA on First \$2500/Mo. | $+13.5 \%$ | $+4.2 \%$ |
| Fixed Dollar-Based Immediate COLA of \$50/Mo. Each Year | $+8.4 \%$ | $+2.6 \%$ |

## Cost Comparison of COLAs



## Drafting Ordinance Language and Impact Statements for COLAs

- Examples are paramount to make sure all parties understand what is being agreed upon.
- Examples will aid in both the proper costing and the effective administration.


# Drafting Ordinance Language and Impact Statements for COLAs 

- Depending on the type of COLA, the plan's funding policy may need to be updated.
- Be clear who is eligible and who is not.
$>$ E.g., actives (hired on or after a specific date), vested terminated members, retired members, and/or beneficiaries.

