Select Committee on Pension Policy

Plans 1 COLA (HB 1390/SB 5400)

Issue

The Select Committee on Pension Policy (SCPP) is revisiting the post-retirement Cost-Of-Living Adjustment (COLA) provided in Plan 1 of the Public Employees' Retirement System (PERS) and the Teachers' Retirement System (TRS). (The term "Plans 1" will be used throughout to refer to PERS and TRS Plans 1.)

Background

Current Situation

Prior to 2011, the primary COLA provided in the Plans 1 was the Uniform COLA (UCOLA). The UCOLA was a service-based COLA payable the first calendar year in which the recipient turns age 66 and has been retired for one year. The UCOLA was a fixed dollar amount multiplied by the member's total Years Of Service (YOS). The dollar amount of the UCOLA increased by 3 percent every year on July 1. As of July 1, 2010, the UCOLA was $1.88 per month/per YOS. This amounted to an annual increase of $677 for a recipient with 30 YOS. Statute specified that future increases to the UCOLA were not a contractual right, and the Legislature exercised the option to discontinue the UCOLA in the 2011 Legislative Session.

An optional Consumer Price Index (CPI)-based automatic COLA is available to the Plans 1 members who elect it at retirement. The Optional COLA[1] provides an annual percentage increase in the retirement allowance. The increase is based on changes in the CPI[2] up to a maximum of 3 percent per year (essentially the same COLA as provided in the Plans 2/3). The Optional COLA begins one year after retirement—regardless of age or service—and is in addition to any other COLAs received. Members who elect the Optional COLA receive an actuarially reduced retirement allowance to offset the cost.

The Plans 1 also provide minimum retirement benefits in addition to the COLAs discussed above. While COLAs address how well a pension maintains its value over time, minimum benefits address the adequacy of a pension and serve as a safety net. Minimum benefits increase every year – effectively providing a COLA to those at the minimum benefit level. Two minimums are provided: the Basic Minimum Benefit and the Alternate Minimum Benefit.

The Basic Minimum is $62.35 per month[3] multiplied by the member's total YOS. The Alternate Minimum is $1,957.15 per month[4] for recipients who:

- Have at least 25 YOS and have been retired at least 20 years, or;
- Have at least 20 YOS and have been retired at least 25 years.

[1] *First available in 1990.*
[2] *CPI for Urban Wage Earners and Clerical Workers for Seattle-Tacoma-Bellevue.*
[3] *As of July 1, 2019.*
[4] *Ibid.*

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The Basic Minimum increases every year by the dollar amount of the UCOLA annual increase. (For example, the Basic Minimum increased from $59.89 in 2018 to $62.35 in 2019. The $2.46 increase was the amount of the UCOLA annual increase for that year.) The Alternate Minimum increases by 3 percent each year. See **Appendix B** for more information on the demographics of Plans 1 retirees who receive the Basic and Alternate Minimums.

Other Plans

By design, Plans 2 and 3 of Washington's retirement systems include a provision for an annual COLA. This COLA is equal to the lesser of the increase in Seattle-Tacoma-Bellevue CPI-W, or 3 percent. If inflation is greater than 3 percent, then inflation in excess of 3 percent is "banked" and will supplement the CPI-W measure when it is less than 3 percent.

Legislative History

See **Appendix A** for the full history of legislative COLA policy.

Committee History

The SCPP studied the issue of purchasing power for Plans 1 retirees in 2003 and 2004, and received an update on the issue in 2005.

The SCPP has made several recommendations on COLAs in the Plans 1 that have been adopted by the Legislature. (Note: Some proposals were recommended by the SCPP in more than one year. See **Appendix A** for the years proposals were enacted.)

2003

- $1,000 Alternate Minimum Benefit for members with more than 25 YOS and retired more than 20 years.

2004

- $1,000 Alternate Minimum Benefit for members with more than 20 YOS and retired more than 25 years.
- Increase the amount of the Alternate Minimum by 3 percent each year.
- One-time increase in the UCOLA.
- Provide the UCOLA to members who will turn age 66 during the calendar year.

2017

In 2017, the SCPP recommended to the Legislature a one-time 3 percent COLA, capped at a maximum increase of $62.50 per month, for all members not receiving a minimum benefit. The Legislature passed Substitute Senate Bill 6340, which implemented a one-time 1.5 percent COLA, capped at a maximum increase of $62.50 per month, for all members not receiving a minimum benefit.

2018

In 2018, the SCPP once again recommended to the Legislature a one-time 3 percent COLA, capped at a maximum increase of $62.50 per month, for all members not receiving a minimum benefit. This proposal was introduced into the 2019 Legislative Session as House Bill (HB) 1390 and Senate Bill (SB) 5400 (see **Attachment A**). These companion bills are currently under consideration before the Committee.

Other States

The majority of Washington's peer systems provide an automatic post-retirement COLA in their open plans (see table below). Systems where members are not covered by Social Security tend to provide larger COLAs. Several of the peer systems provide protection against specific losses of purchasing power. Benefits in the California systems cannot fall below a minimum percent (75 or 85 percent) of the original benefit's purchasing power. Benefits in the Seattle system cannot fall below 65 percent of their original purchasing power. This is similar to a 1992 COLA provision that protected Plans 1 members from the loss of more than 40 percent of their age 65 benefits' purchasing power.

COLA Provisions by Select Retirement Systems*

System	COLA Provisions
CalPERS	CPI based 2% max, 75% purchasing power protection.
CalSTRS	2% increase, 85% purchasing power protection funded through supplemental benefits maintenance account. Contractually guaranteed for those retiring after 2014 with contribution rate increases.
Colorado PERA	Member prior to 2007: 2% unless negative investment year, then lesser of 2% or CPI-W**. Member after 2007: Lesser of 2% or CPI-W, not exceeding 10% of Annual Increase Reserve funds.
Florida FRS	Automatic 3% per year. Any service rendered after 2011 is not eligible for COLA increases.
Idaho PERSI	Automatic 1%, discretionary increase may not exceed lesser of CPI or 6%, subject to Legislature.
Iowa IPERS	No COLA, dividend in place for those retired prior to 1990.
Minnesota MSRS	Automatic 2%, funding dependent.
Missouri MOSERS	80% of CPI-U*** up to 5%.
Ohio OPERS	CPI-W up to 3%.
Oregon PERS	CPI up to 2% for service rendered prior to June 2013. CPI up to 1.25% on first $60,000 of benefit and 0.15% on amounts above $60,000 for benefits earned after June 2013.
Seattle SCERS	1.5% COLA, 65% purchasing power minimum.

**For new hires. Source: Member handbooks published on system administrators' websites as of 6/28/17.*
***CPI-W: Urban Wage Earners and Clerical Workers.*
****CPI-U: All Urban Consumers.*

COLAs take many forms both inside and outside of Washington's peer systems. Several are tied to fund performance or are only applicable to a set amount of annual benefit. Others are funded out of a dedicated reserve account, and most are tied directly to the CPI under certain constraints. For example, in Oregon a COLA up to 1.25 percent is only applied to a benefit up to a certain dollar amount. This ensures that all members receive a COLA on a predetermined level of benefit.

The Great Recession placed pressure on state pension systems and led to systematic reductions in plan benefits throughout the country. COLAs have received increased attention in recent years as many states look to make adjustments to the cost of benefits while experiencing challenging fiscal conditions. According to the 2018 National Association of State Retirement Administrators' Issue Brief: Cost-of-Living Adjustments, "Since 2009, 18 states have changed COLAs affecting current retirees, seven states have addressed current employees' benefits, and six states have changed the COLA structure only for future employees."

Policy Analysis

COLA policy is primarily driven by three concerns: benefit adequacy, purchasing power protection, and reward-for-service. While related, these three considerations are distinct policy goals and have different implications.

Benefit adequacy describes how well a pension can provide an expected standard of living. Purchasing power refers to how well a pension maintains value relative to inflation. To illustrate the difference, the pension of a highly-paid retiree might lose considerable purchasing power over time and still be considered "adequate," while the pension of a low-paid retiree might retain its full purchasing power over time but be considered "inadequate" to provide an expected standard of living. Reward-for-service is a way to target a COLA to those with more service in the retirement systems.

Currently, Plans 1 COLA policy addresses the joint concerns of benefit adequacy and purchasing power protection through the use of minimum benefits. These minimum benefits provide a threshold pension benefit to certain populations, and the annual change in those amounts provide inflation protection. By looking at information regarding the different populations within Plans 1, a COLA can be targeted to those who have lost the most purchasing power.

The following table shows the loss of purchasing power broken out by those on the Basic Minimum, Alternate Minimum, or those not receiving a COLA in any form.

Purchasing Power by System and COLA Type*			
System	COLA Type	Average Purchasing Power	Approximate Number Receiving
PERS 1	No COLA	81.3%	38,000
PERS 1	Basic Minimum	108.2%	9,100
PERS 1	Alternate Minimum	93.8%	2,340
TRS 1	No COLA	78.5%	32,000
TRS 1	Basic Minimum	122.4%	1,800
TRS 1	Alternate Minimum	76.4%	1,300

**Data as of the* June 30, 2016, Actuarial Valuation Report.

Purchasing Power

Purchasing power is impacted by three factors:

- Inflation after retirement.
- Length of retirement.
- Post-retirement COLAs.

Inflation is the driving force behind the decline in the relative value of a pension over time. Members who retire during periods of high inflation will generally lose more purchasing power than members who retire during periods of relatively low inflation.[5]

Likewise, members who are retired for a longer period of time are likely to lose more purchasing power due to post-retirement inflation than members who are retired for shorter periods. Earlier retirement ages and increasing life spans are also significant factors in the loss of purchasing power experienced by some members.

Post-retirement COLAs offset the effects of inflation and help maintain purchasing power. The Legislature has provided numerous COLAs in the Plans 1 (see **Appendix A**). Members who receive less in COLAs will generally lose more purchasing power over time than members who receive more in COLAs.

Policy Considerations

While stakeholders have advocated for an improved Plans 1 COLA, it is likely that substantial improvements to the COLA will face fiscal constraints. The Great Recession and the low-return investment periods that followed placed significant pressure on state pension plans, and those effects are still felt today. Policy makers may choose to direct limited COLA dollars to those individuals whom they perceive as having the greatest need for a COLA. COLAs can be targeted to recipients based on:

- Loss of purchasing power.
- Years retired.

[5]*See the Office of the State Actuary's (OSA) Inflation Data webpage for more information on CPIs and annual inflation data.*

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- YOS.
- Size of benefit.

There are several related policy considerations when looking to implement a Plans 1 COLA. Intergenerational equity is a funding concept that looks to fund benefits over a member's career, and is financed by their contributions and the taxpayers that receive them. This approach to funding ensures that each generation is paying for the pensions of the members who provided services to employers and taxpayers.

A retiree cannot fund their own pension once retired, and with very few active employees left in Plans 1, intergenerational equity will be difficult to achieve. Because there are very few Plans 1 members left in active service, the source of funds for Plan 1 benefit improvements are primarily taxpayers who likely do not receive services from the majority of Plans 1 members.

Additionally, benefit improvements for past service increase the Unfunded Actuarial Accrued Liability (UAAL) for the Plans 1. A UAAL exists when the benefit earned by beneficiaries is greater than the expected assets to pay for them. Current funding policy requires that the UAAL in the Plans 1 be fully paid within a rolling ten-year period.[6] The level of benefit improvements that can be financed over the remaining amortization period may serve to constrain policy options.

Potential Approaches to COLA Design

If policy makers wish to maintain purchasing power, they could target COLAs based on purchasing power or years retired. If the desire is to reward long careers, then COLAs could be targeted to members with many YOS. If the concern is adequacy of benefits, then COLAs could be targeted to members with the lowest pensions.

To address concerns of benefit adequacy, those with the lowest annual benefit could be targeted through increases to threshold dollar amount per YOS of the minimum benefit. However, these beneficiaries have been receiving the most inflation protection (over 100 percent). As such, increases to the annual increase triggered by falling below the threshold will only provide proportionally greater increases to those who are already over 100 percent purchasing power.

Additional inflation protection could be provided by changing pre-existing minimum benefits. If lawmakers feel the minimums are generally well-designed and targeting the desired population for benefit increases, one could consider increasing (a) the targeted population, and (b) the amount of the minimum benefits. Expanding the eligibility threshold for the Alternate Minimum would effectively provide both benefit adequacy and inflation protection that increases 3 percent per year. Those currently receiving this benefit have experienced at least 20 years of inflation before qualifying. Expanding the minimum benefits could also be done by raising the dollar amount of the Alternate Minimum, but due to the restriction on YOS, some members who have experienced substantial inflation will never qualify. For example, a

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[6]See *RCW 41.45.010(3)*.

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beneficiary with 15 YOS will never qualify for the Alternate Minimum, as it requires at least 20 YOS, and being retired for 25 years.

CPI-based COLAs are the most direct way to protect a benefit against inflation since the COLA is based on actual, measured inflation. CPI-based COLAs provide the same inflation protection to all recipients regardless of the size of their pension. This does little to address benefit adequacy, as those with the largest pensions will receive proportionally equal increases to match inflation. Those with the largest pensions will also receive the largest dollar amount of a COLA. CPI-based COLAs often have an annual percentage cap to control costs. However, an annual cap means that recipients will lose purchasing power when inflation exceeds the cap.

Fixed percentage COLAs (e.g., 2 or 3 percent) protect against a set amount of inflation while controlling costs. They provide the same amount of inflation protection to all recipients regardless of the size of their pension. However, recipients will lose purchasing power when inflation exceeds the fixed percent. Likewise, recipients could experience greater purchasing power during periods when inflation is lower than the beneficiary's annual increase. A fixed percentage COLA could also be applied to a specific dollar amount or portion of benefits. For example, beneficiaries could receive a 3 percent COLA on the first $20,000 of their annual benefit.

Flat dollar amount COLAs (e.g., $100/month) provide proportionally greater increases to recipients with smaller pensions. While they may do little to protect purchasing power for retirees with larger pensions, flat dollar amount COLAs are an effective way to address adequacy of benefit concerns.

COLAs based on a dollar amount per YOS (e.g., $10/month/YOS) provide larger increases to members with more service and proportionally larger increases to members who retired with lower salaries. This type of COLA is a blend between adequacy of benefits and reward for service policies. It may do little to protect the purchasing power of high-salaried retirees. The repealed UCOLA is an example of how this type of COLA was implemented in the Plans 1.

As an additional possibility for COLA implementation, a COLA could be purchased, in part or in whole, by a retiree. Similar to the CPI COLA, retirees could have the opportunity to purchase inflation protection.

Additional COLA Design Considerations

Plan members have the ability to choose optional payment forms at the time of retirements. These payment forms typically reduce a member's initial benefit in exchange for a later one, such as a survivor benefit or CPI COLA. The Basic and Alternate Minimum Benefits are currently adjusted to reflect optional payment form choices made by the retiree at the time of retirement. For example, a member might receive 80 percent of their initial benefit due to selecting a 100 percent survivor option. If this member qualified for the Alternate Minimum Benefit YOS and years retired criteria, the benefit amount would also be reduced to 80 percent of its current level. Future COLA proposals may incorporate a similar reduction into their design.

Current optional payment forms in PERS and TRS Plans 1 include:

- Survivor option choice.
- Beneficiary reductions.
- Vesting factor reductions.
- Optional COLA reductions.
- TRS 1 withdrawn annuity.

From a policy perspective, reducing prospective COLAs proportional to optional reductions chosen by the member ensures an equitable percentage COLA for members, regardless of any option they may have chosen at the time of retirement. However, this means that beneficiaries who currently receive an equal annual benefit may receive differing COLA dollar amounts.

Tax Considerations

Any of the COLA designs mentioned above might be impacted by Internal Revenue Service (IRS) requirements. Some designs might result in COLAs that do not conform to IRS requirements for tax-qualified plans or must be administratively reduced to comply with IRS requirements. This is more likely to be an issue with COLAs designed to make up for long periods of past inflation. Policy makers may wish to consult tax counsel before making significant changes in COLA policy.

Current Proposal

The proposal before the Committee for consideration during the 2019 Interim is a one-time, 3 percent COLA capped at $62.50 per month. This proposal excludes those on the Basic or Alternate Minimum Benefit. Policy makers may pursue this option if they want to increase purchasing power and protect benefit adequacy.

This option would provide a COLA up to the approximate average annual benefit of Plans 1 members. The benefit cap provides, at most, a $750 annual benefit increase to recipients. Retirees who receive an annual benefit of $25,000 or less will receive a full 3 percent COLA. Retirees who receive an annual benefit above $25,000 will receive a COLA only on the first $25,000 of annual benefit. This results in a total COLA of less than 3 percent. For example, a retiree with a $40,000 annual benefit would receive a 1.875 percent COLA.

This proposal was considered and endorsed by the Committee during the 2018 Interim and introduced into the 2019 Legislative Session as HB 1390/SB 5400. See **Attachment A** for the full bill language.

Fiscal Impact

Please see **Attachment B** for the full fiscal note provided by OSA for HB 1390/SB 5400 as introduced in the 2019 Legislative Session. While OSA believes the actuarial analysis for these companion bills is sufficient for the Committee's consideration of this proposal, the fiscal note may be updated for the 2020 Legislative Session.

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Conclusion

The issue of COLAs in the Plans 1 raises three basic questions for policy makers.

- Should some form of an across-the board COLA be re-implemented in Plans 1?
- If a COLA is needed, who should it target?
- Are the minimum benefits sufficient?

In considering these questions, policy makers will likely balance a wide variety of concerns including inflation protection, adequacy of benefits, intergenerational equity, and funding. Any change to the minimum benefits will likely involve further trade-offs. Given likely fiscal constraints, policy makers may choose to direct limited COLA dollars to recipients with the greatest perceived need.

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Appendix A: Legislative History

History of Post-Retirement Adjustments in TRS 1 and PERS 1		
Date	**TRS 1**	**PERS 1**
3/21/61	No change enacted.	Minimum pension $900/year if retired at age 70 with 10 or more YOS. $60/month if 15-19 YOS. $70/month if 20-24 YOS. $80/month if 25-29 YOS. $90/month if 30 or more YOS.
3/21/67	No change enacted.	Minimum benefit increases to: $60/month if 12-15 YOS. $90/month if 16-19 YOS. $120/month if 20 or more YOS.
7/1/67	Pension portion of benefit increased to $5.50/month/YOS if age 65 and not qualified for Social Security.	No change enacted.
3/25/69	No change enacted.	Minimum benefit increases to: $75/month if 12-15 YOS. $100/month if 16-19 YOS. $130/month if 20 or more YOS.
7/1/70	Minimum benefit revised to $5.50/month/YOS. Applicable to members retiring before 4/1/69. Applied to the pension portion of the benefit.	The following received for each $1 of pension by year of retirement: ‘49 - $1.5239 ‘56 - $1.3687 ‘63 - $1.2116 ‘50 - $1.5386 ‘57 - $1.3485 ‘64 - $1.1960 ‘51 - $1.5239 ‘58 - $1.3031 ‘65 - $1.1813 ‘52 - $1.4110 ‘59 - $1.2601 ‘64 - $1.1620 ‘53 - $1.3805 ‘60 - $1.2501 ‘65 - $1.1291 ‘54 - $1.3702 ‘61 - $1.2116 ‘66 - $1.0980 ‘55 - $1.3643 ‘62 - $1.2255 ‘67 - $1.0536
7/1/71	No change enacted.	5.95% COLA applied to pension portion of the benefit if retired before 12/31/70.
7/1/72	5.9% COLA for all members retired before 7/1/71, plus an additional 5.4% for those retired between 7/1/69 and 6/30/70.	No change enacted.
4/25/73	No change enacted.	Minimum benefit of $6.50/month/YOS. 3% permanent increase based on assets in excess of current liabilities.
7/1/73	$3/month/YOS for retirees not eligible for Social Security.	Increase of 1.0609% if the member retired before 1972 and their service retirement allowance was adjusted in section (1) for adjustment made of 4/25/73.

History of Post-Retirement Adjustments in TRS 1 and PERS 1		
Date	**TRS 1**	**PERS 1**
7/1/74	11.9% pension increase for those retired on 6/31/70. 2.9% pension increase for those retired 7/1/70 - 6/30/73. 3% COLA on total allowance for those retired on 12/31/73.	3% COLA for those retired prior to 12/31/73.
7/1/75	No change enacted.	3% COLA for those retired prior to 12/31/74.
7/1/76	Minimum pension benefit of $7.50/month/YOS if retired prior to 4/25/73.	3% COLA for those retired prior to 12/31/75.
7/1/77	Minimum pension benefit of $8.00/month/YOS if retired prior to 4/25/73.	3% COLA for those retired prior to 12/31/76.
7/1/78	No change enacted.	3% COLA for those retired prior to 12/31/77.
7/1/79	Minimum pension benefit of $10/month/YOS for retirees of 7/1/79. Disability and survivor benefits as of 12/31/78, and service benefits as of 7/1/74, permanently increased by $0.8171 multiplied by the member's YOS.	Minimum pension benefit of $10/month/YOS for retirees of 7/1/79. 3% COLA for those retired prior to 12/31/78.
7/1/80	No change enacted.	3% COLA for those retired prior to 12/31/79.
7/1/81	No change enacted.	Excess earnings adjustment no longer in effect as employer contribution rate increased above rate on 4/24/73.

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History of Post-Retirement Adjustments in TRS 1 and PERS 1	
Date	**TRS 1 and PERS 1**
7/1/83	$0.74/month/YOS COLA to disability and survivor benefits being received on 12/31/82, and service retirement benefits being received on 7/1/78.
7/1/86	Minimum benefit increased to $13.00/month/YOS.
7/1/87	Minimum pension benefit increased to $13.50/month/YOS. Permanent automatic 3% annual increase to the minimum benefit becomes effective.
7/1/88	Minimum pension benefit increased to $13.82/month/YOS.
7/1/89	Minimum pension benefit increased by $1 to $14.91/month/YOS and then increased 3% to $15.36/month/YOS. Permanent automatic COLA enacted for retirees whose age 65 purchasing power had been reduced by more than 40%.
7/1/90	Minimum pension benefit increased 3% to $15.72/month/YOS. 3% COLA for eligible retirees.
7/1/91	Minimum pension benefit increased 3% to $16.19/month/YOS. 3% COLA for eligible retirees.
2/1/92	The current benefits of those eligible for the COLA adjusted to be equal to 60% of their age 65 retirement allowance.
7/1/92	Minimum pension benefit increased 3% to $16.68/month/YOS. 3% COLA for eligible retirees.
7/1/93	Minimum pension benefit increased 3% to $17.18/month/YOS. 3% COLA for eligible retirees. Continuation of special adjustment effective 2/1/92. Temporary ad-hoc COLA effective through 6/30/94, $3/month/YOS for those retired 5 years, who were 70 years of age, and did not receive a COLA in 1992.
7/1/94	Minimum pension benefit increased 3% to $17.70/month/YOS. 3% COLA for eligible retirees. Special adjustment effective 2/1/92 made permanent. Temporary ad-hoc COLA extended to 6/30/95. Provides $3/month/YOS to eligible retirees.
7/1/95	Uniform Increase established. Initial increase of $0.59/month/YOS to be increased by 3% per year. Retirees are eligible for the Uniform Increase if they have been retired at least 1 year and are age 66 by 7/1 in the calendar year in which the annual increase is given, or if their retirement allowance is lower than the minimum benefit amount. Minimum benefit increased to $24.22/month/YOS, and to automatically increase each year by the Annual Increase amount. Temporary ad-hoc COLA that had been extended to 6/30/95 made permanent.
7/1/98	Gain-sharing established, providing even-year enhancements to the Annual Increase amount based on half the compound average investment returns in TRS 1 and PERS 1 plan assets over the previous four fiscal years that exceed 10%.
7/1/04	$1,000 Minimum Benefit (before optional benefit payments) established for retirees with 25 YOS and at least 20 years of retirement. Does not include an automatic increase. Effectively sunsets after the regular minimum increases to $40/month/YOS.
7/1/06	$1,000 Minimum Benefit (before optional benefit payments) extended to retirees with 20 YOS and at least 25 years of retirement. Automatic increase provided for $1,000 minimum of 3% per year.
7/1/07	UCOLA eligibility changed to include all retirees who have been retired 1 year and will have attained age 66 by 12/31 of the calendar year in which the increase is given.

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History of Post-Retirement Adjustments in TRS 1 and PERS 1	
Date	**TRS 1 and PERS 1**
7/22/07	Gain-sharing repealed after 2008 distribution. One-time increase in the UCOLA of $0.40*/month/YOS in lieu of future gain-sharing.
7/1/11	UCOLA repealed and $500 increase applied to Alternate Minimum Benefit.
7/1/18	One-time 1.5% COLA capped at $62.50 for all members not receiving a Minimum Benefit

**$0.35 of the increase payable 1/1/08; $0.05 payable on 7/1/09.*

Appendix B: Plans 1 Annuitant Demographics

Plans 1 Annuitant Profile – Overall	PERS 1	TRS 1	Total
All Annuitants	47,000	33,000	80,000
Service Years	25	27	26
Age	76	77	76
Years Retired	17	18	18
Annual Benefit	$25,000	$26,000	$26,000
Average Final Compensation	$48,000	$55,000	$51,000

Note: All data as of the June 30, 2018, Actuarial Valuation Report. Annuitant, annual benefit, and average final compensation figures are rounded to the nearest thousand.

Plans 1 Annuitant Profile – Receiving Basic Minimum	PERS 1	TRS 1	Total
All Annuitants	10,000	2,000	12,000
Service Years	19	12	18
Age	79	80	79
Years Retired	19	22	19
Annual Benefit	$13,000	$8,000	$12,000
Average Final Compensation	$21,000	$18,000	$21,000

Note: All data as of the June 30, 2018, Actuarial Valuation Report. Annuitant, annual benefit, and average final compensation figures are rounded to the nearest thousand.

Plans 1 Annuitant Profile – Receiving Alternate Minimum	PERS 1	TRS 1	Total
All Annuitants	3,000	2,000	5,000
Service Years	25	24	25
Age	85	88	86
Years Retired	29	33	30
Annual Benefit	$21,000	$19,000	$20,000
Average Final Compensation	$24,000	$29,000	$26,000

Note: All data as of the June 30, 2018, Actuarial Valuation Report. Annuitant, annual benefit, and average final compensation figures are rounded to the nearest thousand.

Attachment A: HB 1390/SB 5400 Bill Language

Z-0233.1

HOUSE BILL 1390

State of Washington 66th Legislature 2019 Regular Session

By Representatives Leavitt, Volz, Dolan, Fitzgibbon, Caldier, Wylie, Pellicciotti, MacEwen, Griffey, Callan, Kilduff, Appleton, Jinkins, Tharinger, Blake, Ramos, Eslick, Slatter, Valdez, Schmick, Shewmake, Doglio, Goodman, Pollet, and Ortiz-Self; by request of Select Committee on Pension Policy

Read first time 01/21/19. Referred to Committee on Appropriations.

AN ACT Relating to providing a benefit increase to certain retirees of the public employees' retirement system plan 1 and the teachers' retirement system plan 1; amending RCW 41.40.1987 and 41.32.4992; providing an effective date; and declaring an emergency.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF WASHINGTON:

Sec. 1. RCW 41.40.1987 and 2018 c 151 s 2 are each amended to read as follows:

(1) Beneficiaries who are receiving a monthly benefit from the public employees' retirement system plan 1 on July 1, 2017, shall receive, effective July 1, 2018, an increase to their monthly benefit of one and one-half percent multiplied by the beneficiaries' monthly benefit, not to exceed sixty-two dollars and fifty cents.

(2) <u>Beneficiaries who are receiving a monthly benefit from the public employees' retirement system plan 1 on July 1, 2018, shall receive, effective July 1, 2019, an increase to their monthly benefit of three percent multiplied by the beneficiaries' monthly benefit, not to exceed sixty-two dollars and fifty cents.</u>

<u>(3)</u> This section does not apply to those receiving benefits pursuant to RCW 41.40.1984.

Sec. 2. RCW 41.32.4992 and 2018 c 151 s 1 are each amended to read as follows:

(1) Beneficiaries who are receiving a monthly benefit from the teachers' retirement system plan 1 on July 1, 2017, shall receive, effective July 1, 2018, an increase to their monthly benefit of one and one-half percent multiplied by the beneficiaries' monthly benefit, not to exceed sixty-two dollars and fifty cents.

(2) <u>Beneficiaries who are receiving a monthly benefit from the teachers' retirement system plan 1 on July 1, 2018, shall receive, effective July 1, 2019, an increase to their monthly benefit of three percent multiplied by the beneficiaries' monthly benefit, not to exceed sixty-two dollars and fifty cents.</u>

<u>(3)</u> This section does not apply to those receiving benefits pursuant to RCW 41.32.489 or 41.32.540.

<u>NEW SECTION.</u> **Sec. 3.** This act is necessary for the immediate preservation of the public peace, health, or safety, or support of the state government and its existing public institutions, and takes effect July 1, 2019.

--- END ---

Attachment B: HB 1390/SB 5400 Fiscal Note

SUMMARY OF RESULTS

BRIEF SUMMARY OF BILL: For all eligible PERS 1 and TRS 1 retirees, this bill enacts a one-time permanent increase equal to 3 percent of their benefit, not to exceed a maximum of $62.50 per month.

COST SUMMARY

Impact on Contribution Rates (Effective 9/1/2019)				
System/Plan	PERS	TRS	SERS	PSERS
Plan 1 UAAL	0.12%	0.28%	0.12%	0.12%

Consistent with RCW 41.45.070, PERS, PSERS, SERS, and TRS employers will fund the cost of this benefit improvement through a supplemental contribution rate starting September 1, 2019. There is no impact to employee rates from this bill.

Budget Impacts			
(Dollars in Millions)	2019-2021	2021-2023	10-Year
General Fund-State	$38.3	$42.5	$234.1
Local Government	$22.1	$25.1	$134.9
Total Employer	**$67.5**	**$75.8**	**$412.4**

Note: We use long-term assumptions to produce our short-term budget impacts. Therefore, our short-term budget impacts will likely vary from estimates produced from other short-term budget models.

HIGHLIGHTS OF ACTUARIAL ANALYSIS

- This bill results in a cost to the retirement systems because it provides larger benefits to eligible PERS 1 and TRS 1 annuitants than the benefits provided under current law.
- Because the increased benefits under this bill were not anticipated or funded during affected members' careers, the bill will increase the UAAL in PERS 1 and TRS 1.
- Based on the data, assumptions, and methods disclosed in the fiscal note, the bill increases the PERS 1 UAAL by $138.7 million and the TRS 1 UAAL by $139.9 million (on a present value basis). Consistent with current funding policy, the increase in the PERS 1 and TRS 1 UAAL rates described in the above table will be collected over a ten-year period.
- The cost of this bill could vary from our best estimate if actual experience varies from our assumptions. For more information, please see the **How The Results Change When The Assumptions Change** section of the fiscal note.

See the remainder of this fiscal note for additional details on the summary and highlights presented here.

WHAT IS THE PROPOSED CHANGE?

Summary Of Benefit Improvement

This bill impacts the following systems:

- Public Employees' Retirement System (PERS) Plan 1.
- Teachers' Retirement System (TRS) Plan 1.

This bill enacts a one-time permanent increase to monthly retirement benefits for members of the PERS 1 and TRS 1 systems of 3 percent multiplied by their monthly benefit, not to exceed $62.50, for all members who received a monthly benefit on July 1, 2018. Annuitants receiving Basic Minimum, Alternate Minimum, or temporary disability benefits are not eligible for the benefit increase under this bill.

Effective Date: July 1, 2019.

What Is The Current Situation?

Before it was repealed in 2011, the primary Cost-Of-Living Adjustment (COLA) provided in the Plans 1 was the Uniform Cost-Of-Living Adjustment (UCOLA). The UCOLA was a fixed dollar amount multiplied by the member's total years of service and increased annually by 3 percent every July 1. The UCOLA was payable on the first calendar year in which the recipient turned age 66 and had been retired for one year. By July 1, 2010, the UCOLA was $1.88 per month/per year of service. This amounted to an annual increase of $677 for a recipient with 30 years of service.

Statute specified that future increases to the UCOLA were not a contractual right and the Legislature exercised the option to discontinue the UCOLA for most plan members during the 2011 Legislative Session.

Currently, the PERS and TRS Plans 1 provide automatic COLAs under two types of minimum retirement benefits only: the Basic Minimum and the Alternate Minimum.

The Basic Minimum is a fixed dollar amount per month multiplied by the member's total years of service and increases on July 1 every year by the dollar amount of the UCOLA. The Basic Minimum is currently $59.89*. If a member's benefit falls below this amount, they receive the UCOLA annual increase, which is $2.39/month per year of service as of July 1, 2018.

The Alternate Minimum is a fixed dollar amount per month (currently $1,900.15*) that increases by 3 percent each year. Eligible members must have at least:

- 20 years of service and be retired for at least 25 years, or
- 25 years of service and be retired for at least 20 years.

An optional Consumer Price Index (CPI)-based automatic COLA is available to the Plans 1 members who elect it at retirement. The auto-COLA was first made available in 1990, and provides an annual percentage increase in the retirement allowance. The increase is based on changes in the CPI for Urban Wage Earners and Clerical Workers for the Seattle area, up to a maximum of 3 percent per year. The auto-COLA begins one year after retirement—regardless of age or service—and is in addition to any other COLAs received. Members who elect the auto-COLA receive an actuarially reduced retirement allowance to offset the expected cost of the COLA over their lifetime.

In the 2018 Legislative Session, the Legislature passed SSB 6340 (Chapter 151, Laws of 2018), which provided a 1.5 percent COLA capped at $62.50 for Plans 1 members not receiving a minimum benefit who had been retired for a year as of July 1, 2018. This one-time COLA went in to effect on July 1, 2018.

**As of July 1, 2018. Note: The Alternate and Basic Minimum amounts are adjusted if the member elects voluntary payment options upon retirement. Throughout this fiscal note, we refer to the Basic and Alternate Minimum amounts prior to any voluntary reductions.*

Who Is Impacted And How?

As of June 30, 2017, we expect this bill would affect retirement benefits of approximately 34,100 out of the 48,100 PERS 1 annuitants and 29,800 out of the 34,200 TRS 1 annuitants. This bill will increase the benefits for a typical annuitant by providing a one-time COLA during retirement. We estimate the average eligible PERS 1 and TRS 1 annuitant would receive a benefit increase of $53 and $56 per month, respectively.

This bill impacts all PERS, TRS, School Employees' Retirement System (SERS), and Public Safety Employees' Retirement System (PSERS) employers through increased Unfunded Actuarial Accrued Liability (UAAL) contribution rates. This bill will not affect member contribution rates.

WHY THIS BILL HAS A COST AND WHO PAYS FOR IT

Why This Bill Has A Cost

This bill has a cost because it provides larger benefits for eligible PERS and TRS Plans 1 annuitants than the benefits provided under current law.

Who Will Pay For These Costs?

The costs that result from this bill will be paid by employers of PERS, TRS, SERS, and PSERS according to the standard funding method. PERS, SERS, and PSERS employers make PERS 1 UAAL payments, whereas TRS employers make TRS 1 UAAL payments.

HOW WE VALUED THESE COSTS

Assumptions We Made

We developed these costs using the same assumptions as disclosed in the *June 30, 2017, Actuarial Valuation Report* (AVR), *Projections Disclosures*, and *Risk Assessment* analysis available on our website.

How We Applied These Assumptions

The fiscal impact of this bill represents the change in projected contributions. To estimate the fiscal impact of this bill, we compared projected pension contributions under current law to the projected contributions we expect under this bill.

To determine the projected costs under this bill, we modified the programming to reflect the increased benefits from the one-time COLA under this bill. More specifically, we adjusted our valuation such that all currently retired members not already receiving a COLA through the Basic or Alternate Minimum monthly benefit, receive a one-time 3 percent COLA subject to a $62.50 cap. We compared the results to our base model under current law and recorded the changes in actuarial measurements.

We also made an adjustment for assumed demographic changes from the date of our valuation, June 30, 2017, to the effective date of this bill, July 1, 2019. Based on projections of our 2017 AVR, which takes into account expected mortality and new retirements, we estimate the total annuitant population on July 1, 2019, will be approximately 4 percent smaller in both PERS 1 and TRS 1. We also looked at how many of those annuitants we would expect to be eligible for the ad-hoc COLA awarded under this bill and reduced the liability impact for both plans by 4 percent to reflect the demographic changes to the eligible group. This decreased the UAAL rounded supplemental rate by 1 basis point in both PERS and TRS Plans 1.

Lastly, we amortized the cost of this benefit improvement over a fixed ten-year period, consistent with PERS and TRS Plan 1 funding policy for benefit improvements.

Otherwise, we developed these costs using the same methods as disclosed in the AVR.

Special Data Needed

There was no special data needed for this pricing.

ACTUARIAL RESULTS

How The Liabilities Changed

This bill will impact the actuarial funding of PERS 1 and TRS 1 by increasing the present value of future benefits payable to the members. The impact of the increasing present value of future benefits payable for current members is shown below.

Impact on Pension Liability			
(Dollars in Millions)	**Current**	**Increase**	**Total**
Actuarial Present Value of Projected Benefits *(The Value of the Total Commitment to All Current Members)*			
PERS 1	$12,412	$138.7	$12,550
TRS 1	$8,938	$139.9	$9,078
Unfunded Actuarial Accrued Liability *(The Portion of the Plan 1 Liability that is Amortized According to Funding Policy)**			
PERS 1	$5,099	$138.7	$5,238
TRS 1	$3,407	$139.9	$3,547
Unfunded Entry Age Accrued Liability *(The Value of the Total Commitment to All Current Members Attributable to Past Service that is Not Covered by Current Assets)*			
PERS 1	$5,299	$138.7	$5,437
TRS 1	$3,547	$139.9	$3,687

Note: Totals may not agree due to rounding.
**PERS 1 and TRS 1 are amortized over a ten-year period.*

How The Assets Changed

This bill does not change current asset values, so there is no impact on the actuarial funding of the affected plans due to asset changes.

How The Present Value Of Future Salaries (PVFS) Changed

This bill does not change the PVFS of the members, so there is no impact on the actuarial funding of the affected plans due to PVFS changes.

How Contribution Rates Changed

The rounded increase in the required actuarial contribution rate results in the supplemental contribution rate shown on page one that applies in the current biennium. This fixed rate is collected for a ten-year period consistent with how benefit improvements are funded in PERS 1 and TRS 1 under RCW 41.45.070.

Impact on Contribution Rates (Effective 9/1/2019)				
System/Plan	**PERS**	**TRS**	**SERS**	**PSERS**
Current Members				
Employee (Plan 2)	0.00%	0.00%	0.00%	0.00%
Employer				
Normal Cost	0.00%	0.00%	0.00%	0.00%
Plan 1 UAAL	0.12%	0.28%	0.12%	0.12%
Total	**0.12%**	**0.28%**	**0.12%**	**0.12%**
New Entrants*				
Employee (Plan 2)	0.00%	0.00%	0.00%	0.00%
Employer				
Normal Cost	0.00%	0.00%	0.00%	0.00%
Plan 1 UAAL	0.12%	0.28%	0.12%	0.12%
Total	**0.12%**	**0.28%**	**0.12%**	**0.12%**

**Rate change applied to future new entrant payroll and used to determine budget impacts only. Current members and new entrants pay the same contribution rate.*

How This Impacts Budgets And Employees

Budget Impacts					
(Dollars in Millions)	**PERS**	**TRS**	**SERS**	**PSERS**	**Total**
2019-2021					
General Fund	$4.7	$30.0	$3.2	$0.5	$38.3
Non-General Fund	7.0	0.0	0.0	0.1	7.1
Total State	**$11.7**	**$30.0**	**$3.2**	**$0.6**	**$45.4**
Local Government	13.3	6.1	2.1	0.6	22.1
Total Employer	**$24.9**	**$36.1**	**$5.3**	**$1.2**	**$67.5**
Total Employee	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**
2021-2023					
General Fund	$5.4	$33.0	$3.5	$0.6	$42.5
Non-General Fund	8.1	0.0	0.0	0.1	8.2
Total State	**$13.5**	**$33.0**	**$3.5**	**$0.7**	**$50.7**
Local Government	15.3	6.8	2.3	0.7	25.1
Total Employer	**$28.8**	**$39.8**	**$5.8**	**$1.4**	**$75.8**
Total Employee	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**
2019-2029					
General Fund	$28.5	$183.4	$18.8	$3.4	$234.1
Non-General Fund	42.9	0.0	0.0	0.5	43.3
Total State	**$71.4**	**$183.4**	**$18.8**	**$3.9**	**$277.5**
Local Government	81.1	37.6	12.0	4.2	134.9
Total Employer	**$152.5**	**$221.0**	**$30.8**	**$8.1**	**$412.4**
Total Employee	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**

Note: Totals may not agree due to rounding. We use long-term assumptions to produce our short-term budget impacts. Therefore, our short-term budget impacts will likely vary from estimates produced from other short-term budget models.

The analysis of this bill does not consider any other proposed changes to the systems. The combined effect of several changes to the systems could exceed the sum of each proposed change considered individually.

Comments On Risk

Our office performs annual risk assessments to help us demonstrate and assess the effect of unexpected experience on pension plans. The risk assessment allows us to measure how affordability and funded status can change if investment experience, expected state revenue growth, and inflation do not match our long-term assumptions. Our annual risk assessment also considers past practices, for funding and benefit enhancements, and their impact on pension plan risk if those practices continue.

The table below displays our latest risk measurements as of June 30, 2017. The figures below do not reflect changes from this bill. For more information, please see our Risk Assessment webpage and the **Glossary**.

Select Measures of Pension Risk as of June 30, 2017[1]		
	FY 2018-37	FY 2038-67
Affordability Measures		
Chance of Pensions Double their Current Share of GF-S[2]	1%	3%
Chance of Pensions Half their Current Share of GF-S[2]	47%	46%
Solvency Measures		
Chance of PERS 1 or TRS 1 in Pay-Go[3]	15%	18%
Chance of Any Open Plan in Pay-Go[3]	1%	8%
Chance of PERS 1, TRS 1 Total Funded Status Below 60%	29%	27%
Chance of Open Plans Total Funded Status Below 60%	24%	36%

[1]FY 2018 returns used for purposes of this analysis are 10.04%. Due to a restatement in October 2018, this differs from the 10.20% reported by the Washington State Investment Board. We expect this difference to have limited impacts to the risk measures.
[2]Pensions approximately 5.5% of current General Fund-State (GF-S) budget; does not include higher education.

At this time we have only prepared a qualitative risk analysis on this bill and may submit a revised fiscal note at a future date with quantitative risk analysis. The results of any future quantitative risk analysis could vary from this preliminary risk analysis.

Increasing PERS 1 and TRS 1 annuitant benefits will increase the chance of those plans entering pay-go status as well as increase the cost of benefits required if the plan enters pay-go. We expect the short-term impact to funded status from this bill to be an immediate reduction of the PERS and TRS Plans 1 funded status by 1 percent each.

Similar to legislation passed in 2018, this bill provides a one-time, permanent increase in benefits for eligible annuitants. If the Legislature develops a repeated pattern of providing similar ad-hoc COLAs in the future, it could have a significant impact to short-term budgets, projected Plan 1 pay-off dates, and the pension risk measures. Furthermore, the Office of the State Actuary may be required to reflect an assumption of future COLAs when preparing the financial reporting under the Government Accounting Standards Board requirements.

HOW THE RESULTS CHANGE WHEN THE ASSUMPTIONS CHANGE

The best estimate results can vary under a different set of assumptions. To determine the sensitivity of the actuarial results to the best estimate assumptions selected for this pricing we varied the following assumptions:

- Future Investment Return.
- Mortality.

If the plan realizes investment returns higher than the prescribed long-term assumption of 7.5 percent per year, then the costs of this bill will be less than the costs shared on page one of this fiscal note. Conversely, if the plan realizes investment returns lower than the prescribed long-term assumption of 7.5 percent per year, then the costs of this bill will be more.

Similar to changes in investment returns, if members of PERS 1 and TRS 1 live longer than expected, the costs of this bill will be more expensive than the costs shared on page one. Conversely, if members of PERS 1 and TRS 1 live shorter than expected, the costs of this bill will be less expensive.

The table below outlines how the liability impacts attributable to this bill change when we assume the investment return is 1 percent lower or higher than the prescribed assumption.

Impact of Higher/Lower Assumed Returns on Pension Liability			
(Dollars in Millions)	**Higher 8.5%**	**Best Estimate 7.5%**	**Lower 6.5%**
PERS 1	**$131.9**	**$138.7**	**$146.2**
Percent Change from Best Estimate	(4.9%)		5.4%
TRS 1	**$132.9**	**$139.9**	**$147.7**
Percent Change from Best Estimate	(5.0%)		5.5%

Likewise, the table below outlines how the liability impacts attributable to this bill change when we assume higher or lower rates of future mortality than our best estimate for service retirees and beneficiaries. For higher mortality, we assumed members experience mortality as if they were one year older than their current age under our best estimate. Similarly, for lower mortality, we assumed members experience mortality as if they were one year younger.

Impact on Pension Liability			
(Dollars in Millions)	**Higher Mortality**	**Best Estimate**	**Lower Mortality**
PERS 1	**$136.6**	**$138.7**	**$140.7**
Percent Change from Best Estimate	(1.5%)		1.4%
TRS 1	**$138.0**	**$139.9**	**$141.7**
Percent Change from Best Estimate	(1.4%)		1.3%

If the liability increase from this bill is more or less than expected, it will be funded through higher/lower UAAL contributions as defined in RCW 41.45.010.

This can occur up to and beyond the ten-year supplemental rate period as required. Under current law, the supplemental rate described on page one, or how long that supplemental rate is collected, will not change if the liability increase from this bill is more or less than expected.

For example, if future investments return 6.5 percent instead of 7.5 percent per year, the costs associated with this bill will increase by $7.5 million for PERS 1 and $7.7 million for TRS 1 on a present value basis. Therefore, the ten-year funding of the supplemental rate, under this example, would fall short of collecting the full cost of this bill and the remaining unfunded costs from this bill would be funded through higher UAAL contributions.

The two scenarios shown above are provided for illustration purposes only. The actual cost of this bill may vary from our best estimate and may fall outside the range of cost identified in this section.

WHAT THE READER SHOULD KNOW

The Office of the State Actuary ("we") prepared this fiscal note based on our understanding of the bill as of the date shown in the footer. We intend this fiscal note to be used by the Legislature during the 2019 Legislative Session only.

We advise readers of this fiscal note to seek professional guidance as to its content and interpretation, and not to rely upon this communication without such guidance. Please read the analysis shown in this fiscal note as a whole. Distribution of, or reliance on, only parts of this fiscal note could result in its misuse, and may mislead others.

ACTUARY'S CERTIFICATION

The undersigned hereby certifies that:

1. The actuarial cost and asset valuation methods are appropriate for the purposes of this pricing exercise.
2. The actuarial assumptions used are appropriate for the purposes of this pricing exercise.
3. The data on which this fiscal note is based are sufficient and reliable for the purposes of this pricing exercise.
4. Use of another set of methods and assumptions may also be reasonable, and might produce different results.
5. The risk analysis summarized in this fiscal note involves the interpretation of many factors and the application of professional judgment. We believe that the data, assumptions, and methods used in our risk assessment model are reasonable and appropriate for the purposes of this pricing exercise. The use of another set of data, assumptions, and methods, however, could also be reasonable and could produce different results.
6. We prepared this fiscal note for the Legislature during the 2019 Legislative Session.
7. We prepared this fiscal note and provided opinions in accordance with Washington State law and accepted actuarial standards of practice as of the date shown in the footer of this fiscal note.

The undersigned, with actuarial credentials, meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

While this fiscal note is meant to be complete, the undersigned is available to provide extra advice and explanations as needed.

Luke Masselink

Luke Masselink, ASA, EA, MAAA
Senior Actuary

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GLOSSARY OF ACTUARIAL TERMS

Actuarial Accrued Liability: Computed differently under different funding methods, the actuarial accrued liability generally represents the portion of the present value of fully projected benefits attributable to service credit that has been earned (or accrued) as of the valuation date.

Actuarial Present Value: The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of actuarial assumptions (i.e., interest rate, rate of salary increases, mortality, etc.).

Aggregate Funding Method: The Aggregate Funding Method is a standard actuarial funding method. The annual cost of benefits under the Aggregate Method is equal to the normal cost. Under this method, all plan costs (for past and future service credit) are included under the normal cost. Therefore, the method does not produce an unfunded actuarial accrued liability outside the normal cost. It's most common for the normal cost to be determined for the entire group rather than on an individual basis for this method.

Entry Age Normal Cost Method (EANC): The EANC method is a standard actuarial funding method. The annual cost of benefits under EANC is comprised of two components:

- Normal cost.
- Amortization of the unfunded actuarial accrued liability.

The normal cost is most commonly determined on an individual basis, from a member's age at plan entry, and is designed to be a level percentage of pay throughout a member's career.

Normal Cost: Computed differently under different funding methods, the normal cost generally represents the portion of the cost of projected benefits allocated to the current plan year.

Projected Benefits: Pension benefit amounts that are expected to be paid in the future taking into account such items as the effect of advancement in age as well as past and anticipated future compensation and service credits.

Unfunded Actuarial Accrued Liability (UAAL): The excess, if any, of the actuarial accrued liability over the actuarial value of assets. In other words, the present value of benefits earned to date that are not covered by plan assets.

Unfunded EAN Liability: The excess, if any, of the present value of benefits calculated under the EAN cost method over the valuation assets. This is the portion of all benefits earned to date that are not covered by plan assets.

GLOSSARY OF RISK TERMS

Affordability Risk: Measures the affordability of the pension systems. Affordability risk measures the chance that pension contributions will cross certain thresholds with regards to the General-Fund and contribution rates.

"Current Law": Scenarios in which assumptions about legislative behavior are excluded. These scenarios show projections regarding the current state of Washington statutes.

Funded Status: The ratio of a plan's current assets to the present value of earned pensions. There are several acceptable methods of measuring a plan's assets and liabilities. In financial reporting of public pension plans, funded status is reported using consistent measures by all governmental entities. According to the Government Accounting Standards Board (GASB), the funded ratio equals the actuarial value of assets divided by the actuarial accrued liability calculated under the allowable actuarial methods.

Optimistic: A measurement of the pension system under favorable conditions (above expected investment returns, for example). Optimistic refers to the 75th percentile, where there is a 25 percent chance of the measurement being better and 75 percent chance of the measurement being worse. Very optimistic refers to the 95th percentile.

"Past Practices": Scenarios in which assumptions regarding legislative behavior are introduced. These assumptions include actual contributions below what are actuarially required and improving benefits over time. These scenarios are meant to project past behavior into the future.

Pay-Go: The trust fund runs out of assets, and payments from the General Fund must be made to meet contractual obligations.

Pessimistic: A measurement of the pension system under unfavorable conditions (below expected investment returns, for example). Pessimistic refers to the 25th percentile, where there is a 75 percent chance of the measurement being better and 25 percent chance of the measurement being worse. Very pessimistic refers to the 5th percentile.

Premature Pay-Go: Pay-go payments, measured in today's value, which might be considered "significant" in terms of the potential impact on the General Fund.

Risk Tolerance: The amount of risk an individual or group is willing to accept with regards to the likelihood and severity of unfavorable outcomes.

Solvency Risk: Measures the risk metrics of the pension systems, including the chance that the pension systems will prematurely run out of assets, the amount of potential pay-go contributions, and the chance that the funded status will cross a certain threshold.