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February 13, 2024

Timothy Allen Retirement System Director Tacoma Employees' Retirement System 3628 South 35th Street Tacoma, WA 98409

Re: July 2024 Cost-of-Living Adjustments

Dear Tim:

We have calculated the COLAs to be applied to member benefits in July 2024. The COLAs are summarized as follows.

Date of Retirement	COLA	Percent of Original Purchasing Power*
On or before July 1, 1979	5.516%	50.0%
July 2, 1979, through July 1, 2023	2.125%	51.1% - 100.0%
After July 1, 2023	No COLA	100.0%

^{*} Loss of purchasing power is not measured until a full year has passed since retirement.

Summary of CPI increases

The Seattle-Tacoma-Bremerton CPI-W experienced a 5.516% increase from 941.416 in 2022 to 993.346 in 2023. Therefore, all members who retired on or before July 1, 2023 are eligible for the full 2.125% COLA, based on TMC Section 1.30.665. Per Section 1.30.665A the CPI-W increase is rounded to the nearest 0.05 of one percent but not more than 2.125%. Two exhibits detailing the development of the COLA factors are enclosed with this letter.

Members with retirement dates on or before July 1, 1978 were included in the 50% restorations for 2009 and 2022. Members with retirement dates on or before July 1, 1979 were included in the 50% restorations for 2023 and will have their benefits increased by 5.516% for 2024. Their resulting purchasing power will be 50% of their original purchasing power after the increase in July 2024.



Calculations

The calculations were performed consistently with the interpretation of TMC Section 1.30.665 used in prior years. This letter provides the COLAs and describes their calculation. The letter is sent early to give the Board time to review the COLAs. In June or July, the System will calculate the increase in each member's retirement benefit using the appropriate COLA factor based on the date of the original member's retirement. We will be available to review those calculations and to answer any questions the System may have at that time.

The COLAs are based on the Seattle-Tacoma-Bremerton Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W), as specified in the law. This letter covers a great amount of detail. Most of this detail is a restatement of explanations provided in past years. The description provides a thorough documentation of the COLA process.

Examples

Example 1: members retired in June 2003.

These members will be receiving their twenty-first COLAs. The CPI increases have been 1.42%, 1.57%, 3.02%, 3.73%, 3.79%, 4.48%, 0.44%, 0.78%, 3.17%, 2.54%, 1.22%, 1.93%, 0.91%, 2.28%, 3.32%, 3.36%, 2.14%,1.90%, 4.75%, 8.81%, and 5.52% respectively. These members have received COLAs of 1.400% in 2004, 1.600% in 2005 and 2.125% for each year from 2006 through 2023. These members will receive a 2.125% COLA in 2024.

Total COLA and CPI increases including 2024:

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CPI increases = 1.0142 \times 1.0157 \times 1.0302 \times 1.0373 \times 1.0379 \times 1.0448 \times 1.0044 \times 1.0078 \times 1.0317 \times 1.0254 \times 1.0122 \times 1.0193 \times 1.0091 \times 1.0228 \times 1.0332 \times 1.0336 \times 1.0214 \times 1.0190 \times 1.0475 \times 1.0881 \times 1.0552 = 1.81981 \text{ (Column 5 of Exhibit 1)} = 993.346/545.850
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COLA increases = $1.01400 \times 1.01600 \times 1.02125^{19} = 1.5362$

Since the cumulative COLA increases including the 2.125% COLA in 2024 are less than the cumulative CPI increases, these members get the entire 2.125% COLA.

Example 2: members retired in June 2023.

These members will be receiving their COLAs. The CPI increase was 5.52%. Since the code states the COLA is the minimum of 2.125% and the CPI rounded to the nearest 0.05%, these members will receive a 2.125% COLA.

Example 3: members retired in June 2019.

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CPI increases = 1.0214 x 1.0190 x 1.0475 x 1.0881 x 1.0552
= 1.25177 (Column 5 of Exhibit 1)

COLA increases = 1.02125 x 1.0190 x 1.02125 x 1.02125 = 1.08535 prior to 2024
adjustment (Column 8 of Exhibit 1). Including a 2.125% increase for
2024 would result in a total of 1.10841 = 1.08535 x 1.02125.
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Since the cumulative COLA increases including the 2.125% COLA in 2024 (1.10841) are less than the cumulative CPI increases (1.25177), these members will receive the entire 2.125% COLA.

Overview of COLAs

Annual COLAs for TERS are granted in July to all members who retired on or before July 1 of the preceding year. The COLAs are based on the Seattle-Tacoma-Bellevue Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) for the two years preceding the year in which the COLA is granted. Therefore, a member retiring in June of 2023 will receive the first COLA in July of 2024, and it will be based on the increase in CPI-W from 2022 to 2023. A member retiring in August of 2023 will receive the first COLA in July of 2025, and it will be based on the increase in CPI-W from 2023 to 2024.

The generalizations are:

- All COLAs are based on increases in the CPI for the period ending in the year preceding the COLA.
- The first COLA for members who retired on or before July 1 is based on increases in the CPI from the calendar year prior to retirement to the calendar year of retirement.
- The first COLA for members who retired after July 1 is based on increases in the CPI from the calendar year of retirement to the calendar year after retirement.

Calculation of Factors

The enclosed Exhibit 1 "Factors Applied in Calculating the 2024 COLA Increases" uses 17 columns to calculate the COLA factors. Consistent with the previous discussion, the factors will be different for members who retired in the first or second half of the calendar year. A complete description of the columns follows:

- 1. The first three columns show the Seattle-Tacoma-Bellevue CPI-W. The average value given in Column 3 is the beginning point for the calculation.
- 2. Column 4 documents the annual increase in the CPI.
- 3. Columns 5 and 6 document the cumulative increase in the CPI to be used in calculating the 50% restoration benefits and maximum accumulated COLA. As an example, if a member retired in March of 1980, the member's 2024 restoration COLA and maximum accumulated COLA would be based on increases in the CPI from 1979 (214.600) to 2023 (993.346). The corresponding factor is 993.346 / 214.600 = 4.62883. This number is shown in Column 5.
- 4. Column 7 documents the general TERS COLA given in each year. Some retirees have received less than this amount, as benefits are limited to 100% of original purchasing power.



- 5. Columns 8 and 9 document the cumulative annual COLAs granted prior to the 2024 COLA. They ignore the effect of any restorations of purchasing power. As an example, members retiring in March of 1980 received the first COLA in July of 1981, and as of June 2024 have received sixteen 1.75% COLAs (1981 1996), four 2.00% COLAs (1997-2000), and twenty-three 2.125% COLAs (2001-2023) for a cumulative increase of 1.0175¹⁶ x 1.02⁴ x 1.02125²³ = 2.31734. This number is shown in Column 8. In 2003 to 2005, in 2010 to 2011, in 2014 to 2016, and in 2021, some recent retirees were not eligible for the full 2.125% COLA due to inflation less than 2.125%. Exhibit 2 documents how these COLAs less than 2.125% combined to provide the cumulative COLAs shown in Columns 8 and 9.
- 6. Columns 10 and 11 document the maximum accumulated COLA which represents the magnitude of accumulated CPI-W increases over the cumulative TERS COLA increases. The maximum accumulated COLA would restore the member to 100% of original purchasing power. Note that these are rounded to the nearest 0.05%. This is used to determine whether or not the full 2.125% increase can be granted under Section 1.30.665C.
- 7. Columns 12 and 13 document the percent of original purchasing power which members have before the July 1, 2024 COLA based on the CPI measures used to calculate the 2024 COLA. As an example, if a member retired in March of 1980, the cumulative increase in the CPI (Column 5) has been 4.62883 while the member's cumulative COLA increases (Column 8) have been 2.31734. The combined effect is that the member's benefit now provides 2.31734 / 4.62883 = 50.063% of its original purchasing power. This number is shown in Column 12.

Prior restorations are included in these calculations. Members who were included in the prior 50% restoration are currently receiving 47.386% of their original purchasing power as seen in the bottom of Columns 12 and 13.

- 8. Columns 14 and 15 show the COLA factor to be applied to the portion of the current retirement benefit that is subject to escalation. Due to the CPI increasing by 5.52% this year, all members who retired on or before July 1, 2023 will receive the greater of (a) the 2.125% increase and (b) the COLA to restore them to 50% of their purchasing power.
- 9. Columns 16 and 17 show the Percent of Original Purchasing Power after the July 2024 COLA increases. All members have at least 50% of their original purchasing power. Members retiring on or before July 1, 1979 will have 50.000% of their original purchasing power. A restoration of purchasing power increase will be required this year. In some years, some members may be slightly above or below the 100% mark since the COLAs are rounded to the nearest 0.05%.



Caveats and Certification

Milliman's work product was prepared exclusively for the use or benefit of the Tacoma Employees' Retirement System for a specific and limited purpose. It is not for the use or benefit of any third party for any purpose. Any third party recipient of Milliman's work product who desires professional guidance should not rely upon Milliman's work product, but should engage qualified professionals for advice appropriate to its own specific needs. Any distribution of this letter must be in its entirety, unless prior written consent from Milliman is obtained.

The consultants who worked on this assignment are retirement actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuary is independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, I hereby certify that, to the best of my knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. I am a member of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

If you have any questions, feel free to contact me.

Sincerely,

Daniel R. Wade, FSA, EA, MAAA

Consulting Actuary

DRW/va

Attachments

cc: Cathy Marx (w/ Attachments)

Julie Smith (w/ Attachments)

Claire Armstrong-Hann (w/ Attachments)

Tacoma Employees' Retirement System Factors Applied in Calculating the 2024 COLA Increases

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14) Total C		(16)	(17)
	AVERAGE CPI-W URBAN WAGE, CLERICAL SEATTLE		Annual	(Cumulative Increase in CPI at 2024 based on year w/ prior 6/30) CPI(2023)/CPI(T)		Tacoma COLA given	Cumulative Tacoma		Maximum Accumulated COLA **		Percent of Original Purchasing Power @ 6/30/2024 **		Factor at 7/2024 with 50% Minimum ROPP		Percent of Original Purchasing Power @ 7/1/2024 **		
	(All Items 1967 = 100)			CPI	DOR	DOR	on 7/1 of	DOR	DOR	DOR	DOR	DOR	DOR	DOR DOR		DOR	DOR
Ret Year	_	2nd Half	Avg	Increase	<= 7/1	>=7/2	Year *	<= 7/1	>=7/2	<= 7/1	>=7/2	<= 7/1	>=7/2	<= 7/1	>=7/2	<= 7/1	>=7/2
rict real	13t Hall	Ziid i idii	Avg	mercase	<u> </u>	7-1/2	Toal	<u> // </u>	1/2	// !	F-1/2	<u> </u>	7-1/2	<u> </u>	r = 1/2	<u> </u>	7-172
2024					1.00000	N/A	2.125%	1.00000	N/A	1.0000	N/A	100.000%	N/A	1.00000	N/A	100.000%	N/A
2023			993.346	5.52%	1.05516	1.00000	2.125%	1.00000	1.00000	1.0550	1.0000	94.772%	100.000%	1.02125	1.00000	96.786%	100.000%
2022			941.416	8.81%	1.14812	1.05516	2.125%	1.02125	1.00000	1.1240	1.0550	88.950%	94.772%	1.02125	1.02125	90.840%	96.786%
2021			865.195	4.75%	1.20265	1.14812	2.125%	1.04295	1.02125	1.1530	1.1240	86.721%	88.950%	1.02125	1.02125	88.564%	90.840%
2020			825.961	1.90%	1.22556	1.20265	2.125%	1.06277	1.04295	1.1530	1.1530	86.717%	86.721%	1.02125	1.02125	88.560%	88.564%
2019			810.526	2.14%	1.25177	1.22556	2.125%	1.08535	1.06277	1.1535	1.1530	86.705%	86.717%	1.02125	1.02125	88.548%	88.560%
2018			793.554	3.36%	1.29386	1.25177	2.125%	1.11086	1.08535	1.1645	1.1535	85.857%	86.705%	1.02125	1.02125	87.681%	88.548%
2017			767.741	3.32%	1.33685	1.29386	2.125%	1.13447	1.11086	1.1785	1.1645	84.861%	85.857%	1.02125	1.02125	86.665%	87.681%
2016			743.051	2.28%	1.36736	1.33685	2.125%	1.15858	1.13447	1.1800	1.1785	84.731%	84.861%	1.02125	1.02125	86.531%	86.665%
2015			726.470	0.91%	1.37976	1.36736	2.125%	1.16900	1.15858	1.1805	1.1800	84.725%	84.731%	1.02125	1.02125	86.526%	86.531%
2014			719.942	1.93%	1.40643	1.37976	2.125%	1.19180	1.16900	1.1800	1.1805	84.740%	84.725%	1.02125	1.02125	86.540%	86.526%
2013			706.291	1.22%	1.42357	1.40643	2.125%	1.20610	1.19180	1.1805	1.1800	84.723%	84.740%	1.02125	1.02125	86.524%	86.540%
2012			697.784	2.54%	1.45972	1.42357	2.125%	1.23660	1.20610	1.1805	1.1805	84.715%	84.723%	1.02125	1.02125	86.515%	86.524%
2011			680.504	3.17%	1.50601	1.45972	2.125%	1.27599	1.23660	1.1805	1.1805	84.727%	84.715%	1.02125	1.02125	86.527%	86.515%
2010			659.589	0.78%	1.51778	1.50601	2.125%	1.28620	1.27599	1.1800	1.1805	84.742%	84.727%	1.02125	1.02125	86.543%	86.527%
2009			654.472	0.44%	1.52445	1.51778	2.125%	1.29198	1.28620	1.1800	1.1800	84.751%	84.742%	1.02125	1.02125	86.552%	86.543%
2008			651.608	4.48%	1.59279	1.52445	2.125%	1.34943	1.29198	1.1805	1.1800	84.721%	84.751%	1.02125	1.02125	86.521%	86.552%
2007			623.650	3.79%	1.65310	1.59279	2.125%	1.39995	1.34943	1.1810	1.1805	84.687%	84.721%	1.02125	1.02125	86.486%	86.521%
2006			600.900	3.73%	1.71474	1.65310	2.125%	1.42970	1.39995	1.1995	1.1810	83.377%	84.687%	1.02125	1.02125	85.149%	86.486%
2005			579.300	3.02%	1.76658	1.71474	2.125%	1.46008	1.42970	1.2100	1.1995	82.650%	83.377%	1.02125	1.02125	84.407%	85.149%
2004			562.300	1.57%	1.79434	1.76658	2.125%	1.48271	1.46008	1.2100	1.2100	82.633%	82.650%	1.02125	1.02125	84.389%	84.407%
2003			553.600	1.42%	1.81981	1.79434	2.125%	1.50421	1.48271	1.2100	1.2100	82.657%	82.633%	1.02125	1.02125	84.414%	84.389%
2002	543.2	548.5	545.850	1.80%	1.85257	1.81981	2.13%	1.53129	1.50421	1.2100	1.2100	82.658%	82.657%	1.02125	1.02125	84.414%	84.414%
2001	532.8	539.6	536.200	3.54%	1.91821	1.85257	2.13%	1.58548	1.53129	1.2100	1.2100	82.654%	82.658%	1.02125	1.02125	84.410%	84.414%
2000	512.4	523.3	517.850	3.77%	1.99047	1.91821	2.00%	1.62195	1.58548	1.2270	1.2100	81.486%	82.654%	1.02125	1.02125	83.217%	84.410%
1999	495.3	502.8	499.050	3.10%	2.05216	1.99047	2.00%	1.65439	1.62195	1.2405	1.2270	80.617%	81.486%	1.02125	1.02125	82.330%	83.217%
1998	480.7	487.4	484.050	2.61%	2.10566	2.05216	2.00%	1.68748	1.65439	1.2480	1.2405	80.140%	80.617%	1.02125	1.02125	81.843%	82.330%
1997	469.1	474.4	471.750	3.10%	2.17101	2.10566	2.00%	1.72123	1.68748	1.2615	1.2480	79.282%	80.140%	1.02125	1.02125	80.967%	81.843%
1996	452.7	462.4	457.550	3.31%	2.24282	2.17101	1.75%	1.75565	1.72123	1.2775	1.2615	78.279%	79.282%	1.02125	1.02125	79.942%	80.967%
1995	439.8	446.0	442.900	2.90%	2.30796	2.24282	1.75%	1.78638	1.75565	1.2920	1.2775	77.401%	78.279%	1.02125	1.02125	79.045%	79.942%
1994	426.2	434.6	430.400	3.65%	2.39216	2.30796	1.75%	1.81764	1.78638	1.3160	1.2920	75.983%	77.401%	1.02125	1.02125	77.598%	79.045%
1993	411.9	418.6	415.250	2.99%	2.46366	2.39216	1.75%	1.84945	1.81764	1.3320	1.3160	75.069%	75.983%	1.02125	1.02125	76.664%	77.598%
1992	399.6	406.8	403.200	3.53%	2.55064	2.46366	1.75%	1.88181	1.84945	1.3555	1.3320	73.778%	75.069%	1.02125	1.02125	75.346%	76.664%
1991	386.1	392.8	389.450	5.54%	2.69199	2.55064	1.75%	1.91474	1.88181	1.4060	1.3555	71.127%	73.778%	1.02125	1.02125	72.639%	75.346%
1990	361.8	376.2	369.000	7.13%	2.88386	2.69199	1.75%	1.94825	1.91474	1.4800	1.4060	67.557%	71.127%	1.02125	1.02125	68.993%	72.639%
1989	340.3	348.6	344.450	4.66%	3.01837	2.88386	1.75%	1.98234	1.94825	1.5225	1.4800	65.676%	67.557%	1.02125	1.02125	67.072%	68.993%
1988	326.1	332.1	329.100	3.30%	3.11785	3.01837	1.75%	2.01704	1.98234	1.5460	1.5225	64.693%	65.676%	1.02125	1.02125	66.068%	67.072%
1987	315.6	321.6	318.600	2.35%	3.19096	3.11785	1.75%	2.05233	2.01704	1.5550	1.5460	64.317%	64.693%	1.02125	1.02125	65.684%	66.068%
1986			311.300	0.71%	3.21367	3.19096	1.75%	2.08825	2.05233	1.5390	1.5550	64.980%	64.317%	1.02125	1.02125	66.361%	65.684%
1985			309.100	2.08%	3.28054	3.21367	1.75%	2.12479	2.08825	1.5440	1.5390	64.770%	64.980%	1.02125	1.02125	66.146%	66.361%
1984			302.800	3.27%	3.38795	3.28054	1.75%	2.16198	2.12479	1.5670	1.5440	63.814%	64.770%	1.02125	1.02125	65.170%	66.146%

^{*} See Exhibit 2 for detail. Amount shown is the maximum for the year, ignoring restoration of purchasing power COLAs, which are not included. Some retirees received less based on 100% of purchasing power maximum.

^{**} All members retiring on or before July 1, 1979 have had their benefits increased to at least 50% of original purchasing power. These increases are included.



Tacoma Employees' Retirement System Factors Applied in Calculating the 2024 COLA Increases

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	
														Total (
					(Cumulati	ve Increase								Fac	tor			
	AVERAGE CPI-W				in CPI at:	2024 based	Tacoma			Maxir	num	Percent of	Original	at 7/202	24 with	Percent of Original		
	URBAN WAGE, CLERICAL				on year w	/ prior 6/30)	COLA	Cumulat	ive Tacoma	Accum	ulated	Purchasin	g Power	50% N	linimum	Purchasing Power		
	SEATTLE			Annual	CPI(2023)/CPI(T)		given	COLA @	6/30/2024 *	COLA **		@ 6/30/2	2024 **	ROI	PP	@ 7/1/2024 **		
	(All Items 1967 = 100)		= 100)	CPI	DOR	DOR	on 7/1 of	DOR	DOR	DOR	DOR	DOR	DOR	DOR	DOR	DOR	DOR	
Ret Year	1st Half	2nd Half	Avg	Increase	<= 7/1	>=7/2	Year *	<= 7/1	>=7/2	<= 7/1	>=7/2	<= 7/1	>=7/2	<= 7/1	>=7/2	<= 7/1	>=7/2	
1983			293.200	-0.27%	3.37873	3.38795	1.75%	2.19981	2.16198	1.5360	1.5670	65.108%	63.814%	1.02125	1.02125	66.491%	65.170%	
1982			294.000	6.48%	3.59778	3.37873	1.75%	2.23831	2.19981	1.6075	1.5360	62.214%	65.108%	1.02125	1.02125	63.536%	66.491%	
1981			276.100	10.84%	3.98774	3.59778	1.75%	2.27748	2.23831	1.7510	1.6075	57.112%	62.214%	1.02125	1.02125	58.326%	63.536%	
1980			249.100	16.08%	4.62883	3.98774	1.75%	2.31734	2.27748	1.9975	1.7510	50.063%	57.112%	1.02125	1.02125	51.127%	58.326%	
1979			214.600	10.73%	5.12562	4.62883	1.75%	2.35789	2.31734	2.1103	1.9975	47.386%	50.063%	1.05516	1.02125	50.000%	51.127%	
1978			193.800	9.12%	5.59316	5.12562	1.75%	2.39915	2.35789	2.1103	2.1103	47.386%	47.386%	1.05516	1.05516	50.000%	50.000%	
1977			177.600	7.96%	6.03858	5.59316	1.75%	2.44114	2.39915	2.1103	2.1103	47.386%	47.386%	1.05516	1.05516	50.000%	50.000%	
1976			164.500	5.58%	6.37578	6.03858	1.75%	2.48386	2.44114	2.1103	2.1103	47.386%	47.386%	1.05516	1.05516	50.000%	50.000%	
1975			155.800	10.11%	7.02011	6.37578	1.75%	2.52732	2.48386	2.1103	2.1103	47.386%	47.386%	1.05516	1.05516	50.000%	50.000%	
1974			141.500	10.98%	7.79095	7.02011	1.75%	2.57155	2.52732	2.1103	2.1103	47.386%	47.386%	1.05516	1.05516	50.000%	50.000%	
1973			127.500	6.52%	8.29863	7.79095	6.00%	2.61656	2.57155	2.1103	2.1103	47.386%	47.386%	1.05516	1.05516	50.000%	50.000%	
1972			119.700	2.84%	8.53390	8.29863	1.50%	2.77355	2.61656	2.1103	2.1103	47.386%	47.386%	1.05516	1.05516	50.000%	50.000%	
1971			116.400	2.11%	8.71356	8.53390	7.50%	2.81515	2.77355	2.1103	2.1103	47.386%	47.386%	1.05516	1.05516	50.000%	50.000%	
1970			114.000	4.40%	9.09658	8.71356	1.50%	3.02629	2.81515	2.1103	2.1103	47.386%	47.386%	1.05516	1.05516	50.000%	50.000%	

^{*} See Exhibit 2 for detail. Amount shown is the maximum for the year, ignoring restoration of purchasing power COLAs, which are not included. Some retirees received less based on 100% of purchasing power maximum.



^{**} All members retiring on or before July 1, 1979 have had their benefits increased to at least 50% of original purchasing power. These increases are included.

Documentation of Cumulative COLAs for Retirement Dates on or before 7/1 of Given Year

	Tacoma																			
	COLA																			
	given	Cumulative		Cumulative		Cumulative														
D 11/	on 7/1 of	COLA at	7/2015	COLA at	7/2016	COLA at	7/2017	COLA at	7/2018	COLA at	7/2019	COLA at	7/2020	COLA at	7/2021	COLA at	7/2022	COLA at	7/2023	COLA at
Ret Year	Year *	<u>7/2014</u>	COLA	<u>7/2015</u>	COLA	<u>7/2016</u>	COLA	<u>7/2017</u>	COLA	<u>7/2018</u>	COLA	<u>7/2019</u>	COLA	7/2020	COLA	<u>7/2021</u>	COLA	7/2022	COLA	<u>7/2023</u>
2024	2.1250%																			
2023	2.1250%																			
2022	2.1250%																		2.1250%	1.02125
2021	2.1250%																2.1250%	1.02125	2.1250%	1.04295
2020	2.1250%														1.9000%	1.01900	2.1250%	1.04065	2.1250%	1.06277
2019	2.1250%												2.1250%	1.02125	1.9000%	1.04065	2.1250%	1.06277	2.1250%	1.08535
2018	2.1250%										2.1250%	1.02125	2.1250%	1.04295	2.1250%		2.1250%			1.11086
2017	2.1250%								2.1250%	1.02125	2.1250%	1.04295	2.1250%	1.06511	2.1250%		2.1250%			1.13447
2016	2.1250%						2.1250%	1.02125	2.1250%	1.04295	2.1250%	1.06511	2.1250%	1.08775		1.11086	2.1250%			1.15858
2015	2.1250%		4.05000/	4.04050	0.9000%	1.00900	2.1250%	1.03044	2.1250%	1.05234	2.1250%	1.07470	2.1250%	1.09754		1.12086	2.1250%			1.16900
2014	2.1250%	4.04000	1.9500%		0.9000%	1.02868	2.1250%	1.05053	2.1250%		2.1250%	1.09566	2.1250%	1.11894		1.14272	2.1250%			1.19180
2013 2012	2.1250% 2.1250%	1.01200 1.03810	1.9500% 1.9000%	1.03173 1.05782	0.9000% 0.9000%	1.04102 1.06734	2.1250% 2.1250%	1.06314 1.09003	2.1250% 2.1250%		2.1250% 2.1250%	1.10880 1.13684	2.1250% 2.1250%	1.13237 1.16100		1.15643 1.18567	2.1250% 2.1250%			1.20610 1.23660
2012	2.1250%	1.06511	2.1250%	1.03702	1.2500%	1.10134	2.1250%	1.12475	2.1250%	1.14865	2.1250%	1.17306	2.1250%	1.19799	2.1250%		2.1250%			1.27599
2010	2.1250%	1.07364	2.1250%	1.09645	1.2500%	1.11016	2.1250%	1.13375	2.1250%		2.1250%	1.18244	2.1250%	1.20757	2.1250%		2.1250%		2.1250%	
2009	2.1250%	1.07793	2.1250%	1.10084	1.3000%	1.11515	2.1250%	1.13885	2.1250%	1.16305	2.1250%	1.18776	2.1250%	1.21300	2.1250%		2.1250%		2.1250%	
2008	2.1250%	1.12641	2.1250%	1.15035	1.2500%	1.16473	2.1250%	1.18948	2.1250%		2.1250%	1.24057	2.1250%	1.26693	2.1250%		2.1250%			1.34943
2007	2.1250%	1.15858	2.1250%	1.18320	2.1250%	1.20834	2.1250%	1.23402	2.1250%	1.26024	2.1250%	1.28702	2.1250%	1.31437	2.1250%	1.34230	2.1250%	1.37082	2.1250%	1.39995
2006	2.1250%	1.18320	2.1250%	1.20834	2.1250%	1.23402	2.1250%	1.26024	2.1250%	1.28702	2.1250%	1.31437	2.1250%	1.34230	2.1250%		2.1250%	1.39995	2.1250%	1.42970
2005	2.1250%	1.20834	2.1250%	1.23402	2.1250%	1.26024	2.1250%	1.28702	2.1250%		2.1250%	1.34230	2.1250%	1.37082	2.1250%		2.1250%		2.1250%	
2004	2.1250%	1.22707	2.1250%	1.25314	2.1250%	1.27977	2.1250%	1.30697	2.1250%		2.1250%	1.36310	2.1250%	1.39207	2.1250%		2.1250%		2.1250%	
2003	2.1250%	1.24486	2.1250%	1.27131	2.1250%	1.29833	2.1250%	1.32592	2.1250%		2.1250%	1.38287	2.1250%	1.41225	2.1250%		2.1250%			1.50421
2002 2001	2.1250%	1.26727	2.1250%	1.29420	2.1250% 2.1250%	1.32170 1.36847	2.1250%	1.34978	2.1250%	1.37847	2.1250%	1.40776	2.1250%	1.43767	2.1250%		2.1250%			1.53129
2001	2.1250% 2.0000%	1.31212 1.34230	2.1250% 2.1250%	1.34000 1.37082	2.1250%	1.39995	2.1250% 2.1250%	1.39755 1.42970	2.1250% 2.1250%	1.42725 1.46008	2.1250% 2.1250%	1.45758 1.49111	2.1250% 2.1250%	1.48855 1.52279	2.1250% 2.1250%		2.1250% 2.1250%			1.58548 1.62195
1999	2.0000%	1.34230	2.1250%	1.37002	2.1250%	1.42795	2.1250%	1.45829	2.1250%		2.1250%	1.52093	2.1250%	1.55325		1.58626	2.1250%			1.65439
1998	2.0000%	1.39653	2.1250%	1.42620	2.1250%	1.45651	2.1250%	1.48746	2.1250%		2.1250%	1.55135	2.1250%	1.58432		1.61798	2.1250%			1.68748
1997	2.0000%	1.42446	2.1250%	1.45473	2.1250%	1.48564	2.1250%	1.51721	2.1250%	1.54945	2.1250%	1.58238	2.1250%	1.61600	2.1250%		2.1250%			1.72123
1996	1.7500%	1.45295	2.1250%	1.48382	2.1250%	1.51535	2.1250%	1.54755	2.1250%	1.58044	2.1250%	1.61402	2.1250%	1.64832	2.1250%	1.68335	2.1250%	1.71912	2.1250%	1.75565
1995	1.7500%	1.47837	2.1250%	1.50979	2.1250%	1.54187	2.1250%	1.57464	2.1250%	1.60810	2.1250%	1.64227	2.1250%	1.67717	2.1250%	1.71281	2.1250%		2.1250%	1.78638
1994	1.7500%	1.50424	2.1250%	1.53621	2.1250%	1.56885	2.1250%	1.60219	2.1250%	1.63624	2.1250%	1.67101	2.1250%	1.70652		1.74278	2.1250%		2.1250%	1.81764
1993	1.7500%	1.53057	2.1250%	1.56309	2.1250%	1.59631	2.1250%	1.63023	2.1250%		2.1250%	1.70025	2.1250%	1.73638		1.77328	2.1250%			1.84945
1992	1.7500%	1.55735	2.1250%	1.59045	2.1250%	1.62424	2.1250%	1.65876	2.1250%		2.1250%	1.73001	2.1250%	1.76677		1.80431	2.1250%			1.88181
1991	1.7500%	1.58461	2.1250%	1.61828	2.1250%	1.65267	2.1250%	1.68779	2.1250%		2.1250%	1.76028	2.1250%	1.79769	2.1250%		2.1250%		2.1250%	
1990 1989	1.7500%	1.61234 1.64055	2.1250% 2.1250%	1.64660 1.67542	2.1250%	1.68159	2.1250%	1.71732	2.1250%		2.1250%	1.79109	2.1250% 2.1250%	1.82915	2.1250%		2.1250%			1.94825
1989	1.7500% 1.7500%	1.66926	2.1250%	1.67542	2.1250% 2.1250%	1.71102 1.74096	2.1250% 2.1250%	1.74738 1.77796	2.1250% 2.1250%	1.78451 1.81574	2.1250% 2.1250%	1.82243 1.85432	2.1250%	1.86116 1.89373		1.90071 1.93397	2.1250% 2.1250%			1.98234 2.01704
1987	1.7500%	1.69848	2.1250%	1.73457	2.1250%	1.77143	2.1250%	1.80907	2.1250%	1.84751	2.1250%	1.88677	2.1250%	1.92687		1.96781	2.1250%			2.05233
1986	1.7500%	1.72820	2.1250%	1.76492	2.1250%	1.80243	2.1250%	1.84073	2.1250%		2.1250%	1.91979	2.1250%	1.96059		2.00225	2.1250%			2.08825
1985	1.7500%	1.75844	2.1250%	1.79581	2.1250%	1.83397	2.1250%	1.87294	2.1250%		2.1250%	1.95339	2.1250%	1.99490		2.03729	2.1250%			2.12479
1984	1.7500%	1.78922	2.1250%	1.82724	2.1250%	1.86607	2.1250%	1.90572	2.1250%		2.1250%	1.98757	2.1250%	2.02981		2.07294	2.1250%			2.16198
1983	1.7500%	1.82053	2.1250%	1.85921	2.1250%	1.89872	2.1250%	1.93907	2.1250%	1.98027	2.1250%	2.02236	2.1250%	2.06533	2.1250%	2.10922	2.1250%	2.15404	2.1250%	2.19981
1982	1.7500%	1.85239	2.1250%	1.89175	2.1250%	1.93195	2.1250%	1.97300	2.1250%		2.1250%	2.05775	2.1250%	2.10147		2.14613	2.1250%		2.1250%	
1981	1.7500%	1.88480	2.1250%	1.92485	2.1250%	1.96576	2.1250%	2.00753	2.1250%	2.05019	2.1250%	2.09376	2.1250%	2.13825		2.18369	2.1250%			2.27748
1980	1.7500%	1.91779	2.1250%	1.95854	2.1250%	2.00016	2.1250%	2.04266	2.1250%	2.08607	2.1250%	2.13040	2.1250%	2.17567		2.22190	2.1250%		2.1250%	
1979	1.7500%	1.95135	2.1250%	1.99281	2.1250%	2.03516	2.1250%	2.07841	2.1250%		2.1250%	2.16768	2.1250%	2.21374		2.26078	2.1250%			2.35789
1978	1.7500%	1.98550	2.1250%	2.02769	2.1250%	2.07078	2.1250%	2.11478	2.1250%		2.1250%	2.20561	2.1250%	2.25248		2.30035	2.1250%			2.39915
1977 1976	1.7500% 1.7500%	2.02024 2.05560	2.1250% 2.1250%	2.06317 2.09928	2.1250% 2.1250%	2.10702 2.14389	2.1250% 2.1250%	2.15179 2.18945	2.1250% 2.1250%		2.1250% 2.1250%	2.24421 2.28349	2.1250% 2.1250%	2.29190 2.33201	2.1250%	2.34060 2.38157	2.1250% 2.1250%		2.1250%	2.44114 2.48386
1975	1.7500%	2.05560	2.1250%	2.13602	2.1250%	2.18141	2.1250%	2.22776	2.1250%		2.1250%	2.32345	2.1250%	2.37282		2.42324	2.1250%		2.1250%	
1974	1.7500%	2.12817	2.1250%	2.17340	2.1250%	2.21958	2.1250%	2.26675	2.1250%	2.31492	2.1250%	2.36411	2.1250%	2.41434		2.46565	2.1250%			2.57155
1973	6.0000%	2.16542	2.1250%	2.21143	2.1250%	2.25842	2.1250%	2.30642	2.1250%	2.35543	2.1250%	2.40548	2.1250%	2.45660		2.50880	2.1250%		2.1250%	
1972	1.5000%	2.29534	2.1250%	2.34412	2.1250%	2.39393	2.1250%	2.44480	2.1250%	2.49675	2.1250%	2.54981	2.1250%	2.60399	2.1250%		2.1250%		2.1250%	
1971	7.5000%	2.32977	2.1250%	2.37928	2.1250%	2.42984	2.1250%	2.48147	2.1250%		2.1250%	2.58806	2.1250%	2.64305		2.69922	2.1250%		2.1250%	
1970	1.5000%	2.50450	2.1250%	2.55772	2.1250%	2.61208	2.1250%	2.66758	2.1250%	2.72427	2.1250%	2.78216	2.1250%	2.84128	2.1250%	2.90166	2.1250%	2.96332	2.1250%	3.02629

^{*} Amount shown is the maximum for the year, ignoring restoration of purchasing power COLAs, which are not included. Some retirees received less based on 100% of purchasing power maximum.



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