

April 29, 2009

Mr. Dale S. Orr  
 Actuarial Services Manager  
 Oregon PERS  
 P.O. Box 23700  
 Tigard, OR 97281-3700

Via E-Mail

Subject: Request Number: 2009-003  
 2009 Purchasing Power Study

Dear Dale:

As requested, we updated the annual purchasing power study for 2009 to compare how well monthly benefits paid to retirees and beneficiaries have kept up with inflation since retirement. Since the last study, the Consumer Price Index for Portland increased 3.28 percent in 2008. With all retirees receiving a 2.0 percent annual cost-of-living adjustment, retirees experienced a decrease in purchasing power over the year.

Purchasing power in this report is defined as the cumulative post-retirement benefit increases in Tier 1/Tier 2 benefits compared to the cumulative CPI increases since the year of retirement. The chart below shows the change in purchasing power from 2008 to 2009 by year of retirement.

Year Retired	Purchasing Power		Year Retired	Purchasing Power	
	2008	2009		2008	2009
1980 & prior	76.1%	75.2%	1988	79.0%	78.0%
1981	78.8%	77.8%	1989	80.1%	79.1%
1982	80.8%	79.8%	1990	82.5%	81.4%
1983	80.9%	79.9%	1991	85.5%	84.5%
1984	78.7%	77.7%	1992	88.1%	87.0%
1985	77.7%	76.8%	1993	90.2%	89.1%
1986	78.6%	77.6%	1994	91.5%	90.4%
1987	78.6%	77.6%	1995	92.4%	91.2%

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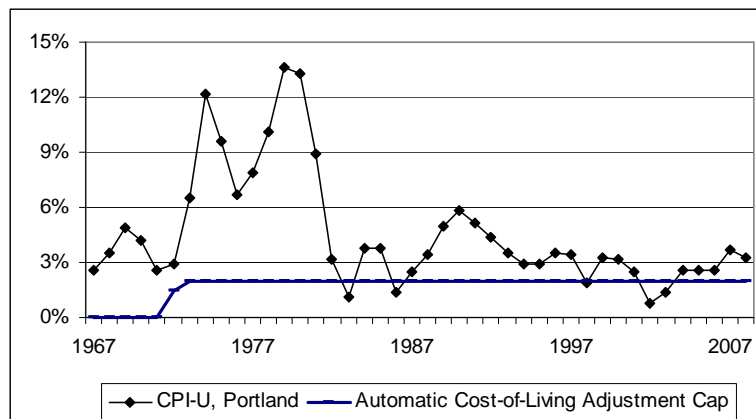
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Year Retired	Purchasing Power		Year Retired	Purchasing Power	
	2008	2009		2008	2009
1996	93.2%	92.0%	2003	96.7%	95.5%
1997	94.6%	93.4%	2004	96.7%	95.5%
1998	95.8%	94.6%	2005	97.2%	96.0%
1999	95.8%	94.6%	2006	97.8%	96.6%
2000	96.7%	95.5%	2007	98.4%	97.1%
2001	96.7%	95.5%	2008	100.0%	98.8%
2002	96.7%	95.5%	2009		100.0%

## Inflation

Cost-of-living adjustments (COLAs) are automatically granted each year to retirees and beneficiaries up to a maximum of 2 percent based on the Consumer Price Index for Portland (defined by All Items, All Urban Consumers, Portland-Salem, OR-WA, Annual Average) as released by the Department of Labor. If the Consumer Price Index for Portland (CPI – Portland) exceeds 2 percent, then the retiree receives a 2 percent COLA and the remaining percentage is carried forward in a “bank” to be used in future years when the CPI-Portland is less than 2 percent. Retirees who have recently retired, and do not have a “bank” balance, receive a COLA equal to the CPI-Portland amount if less than 2 percent, otherwise they receive 2 percent.

The graph below page shows the CPI-Portland compared to the automatic cost-of-living adjustment cap that is currently 2.0 percent.



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The automatic COLA was established in 1972, and there have only been five years (1983, 1986, 1998, 2002 and 2003) when inflation has been below the COLA cap. Consequently, retiree benefits have tended to lose their purchasing power. Attachment A shows the history of increases in CPI-Portland from 1962 through 2008.

The historical COLA amounts granted to retirees and beneficiaries are shown below:

Date	COLA	Exceptions
July 1972	1.5%	
July 1973 – present	2.0% (maximum COLA)	1.08% in 1984 if retired on or after August 1983 1.41% in 1987 if retired on or after August 1986 1.89% in 1999 if retired on or after August 1998 1.24% in 2003 if retired on or after August 2001 and prior to August 2002 0.77% in 2003 if retired on or after August 2002 1.36% in 2004 if retired on or after August 2001 and prior to August 2004 1.73% in 2004 if retired on or after August 2000 and prior to August 2001

## Benefit Increases

From April 1964 through December 1971 there were some one-time additional payments granted to retirees. These payments are not included in this analysis as they did not affect the ongoing benefit paid to the retiree. A summary of the one-time payments follows:

Effective Date	One Time Payment Amount
April 1964	Monthly Benefit
April 1965	1.5 × Monthly Benefit
April 1966, April 1967	2 × Monthly Benefit
April 1968, April 1969, April 1970, April 1971	3 × Monthly Benefit
December 1971	3.5 × Monthly Benefit

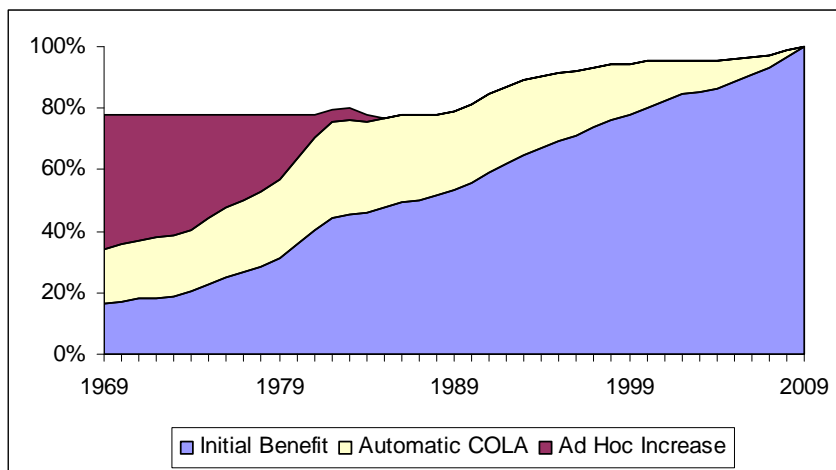
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In addition, retirees and beneficiaries have been granted ad hoc benefit increases that resulted in increased monthly benefits going forward. A summary of the ad hoc increases granted by legislation is shown below, with the graded increases shown on Attachment B.

Effective Date	Ad Hoc Increase Granted by Legislation
January 1972	25% if retired prior to January 1968 12% if retired after December 1967 and prior to January 1972
January 1974	25% if retired prior to January 1968 20% if retired after December 1967 and prior to January 1972 12% if retired after December 1971 and prior to January 1974
October 1977	25% on first \$50 of monthly benefit 15% on next \$100 10% on next \$100 5% on next \$100 and 1% on monthly benefit over \$350
July 1979	2% for all retirees
July 1980	2% for all retirees
August 1981	Graded table by year of retirement to 11.40%
July 1982	Graded table by year of retirement to 11.40%
July 1985	Graded table by year of retirement to 7.28%
July 1986	Graded table by year of retirement to 7.28%
July 1989	Graded table by year of retirement to produce a 95% replacement of original purchasing power

## Current Purchasing Power

The current purchasing power of retirees depends on both the automatic COLA increases and the ad hoc increases granted, compared to the growth in the CPI over the same time period. The graph below shows the cumulative effects of increases granted as a percentage of a benefit adjusted by CPI by year of retirement.



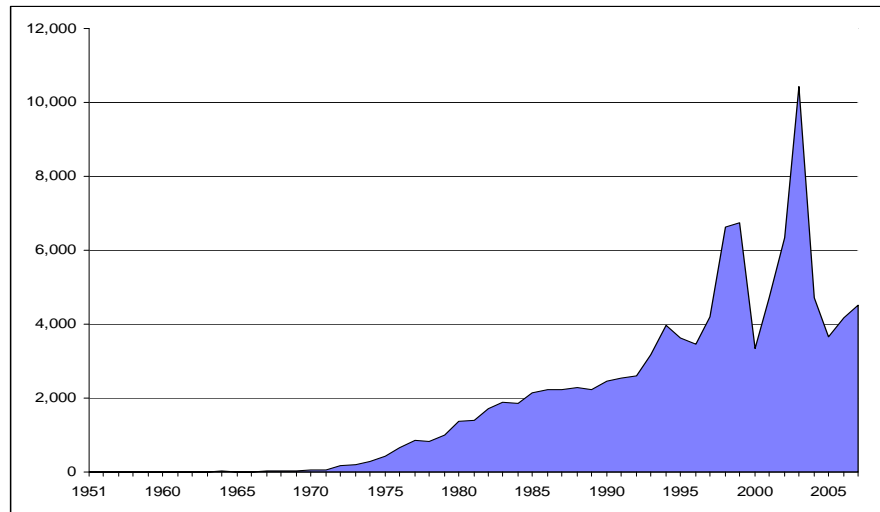
As shown in the graph above, for long-time retired members, the majority of the increases in their benefits since retirement have come from ad hoc increases. Retirees who retired within the past 24 years have not received any ad hoc increases. However, inflation has been significantly lower than in the late 1970's, and the automatic COLA increases have tracked changes in CPI more closely. Purchasing power for retirees since 1994 has remained within 90 percent of their original purchasing power.

The following graph shows the distribution of retirees and beneficiaries, from the December 31, 2007 actuarial valuation, by year of retirement. As shown in the graph below, a vast majority of retirees and beneficiaries have retired within the last 24 years and have not received any ad hoc increases. However, as their COLAs have tracked more closely with CPI, their purchasing power has remained higher than long-time retired members who have received ad hoc increases. For retirees/beneficiaries retired in the last 24 years, the average purchasing power is 89.9% compared to the average purchasing power of 75.7% for those retired more than 24 years ago.

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Attachment C compares the cumulative post-retirement benefit increases in Tier 1/Tier 2 benefits to the cumulative CPI increases for the last 40 years. The middle columns show the level an initial benefit of \$100 per month would have risen to based on CPI increases and increases granted through PERS. The columns on the right show the percentage of the original \$100 benefit and the PERS-adjusted benefit as a percentage of the CPI-adjusted benefit.

For example, a 1969 retiree with an original benefit of \$100 per month would need to be receiving \$609.30 per month now to have kept pace with inflation. Benefit increases granted through PERS increased the \$100 per month benefit to \$458.03 per month. The original benefit of \$100 per month is 16.4 percent of the CPI-adjusted benefit and the PERS-adjusted benefit of \$458.03 is 75.2 percent of the CPI-adjusted benefit.

Our analysis and conclusions are based on the data, methods and assumptions described above. Differences in the methods and assumptions may produce different results.

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If you have any questions about the purchasing power report or need any additional information, please let us know

Sincerely,

[BJM]

Brenda J. Majdic, ASA, EA, MAAA

BJM/mrl:ksb  
Enclosure

Copy:  
Bill Hallmark, Matt Larrabee

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**The information contained in this document (including any attachments) is not intended by Mercer to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**

## Attachment A

### History of Consumer Price Index — Portland

Year	CPI 1967 Basis	Annual Percentage Increase	Year	CPI 1967 Basis	CPI 1982-84 Basis	Annual Percentage Increase
1962	88.5		1985	312.4		3.79%
1963	90.2	1.92%	1986	316.8	108.2	1.41%
1964	92.2	2.22%	1987		110.9	2.50%
1965	94.6	2.60%	1988		114.7	3.43%
1966	97.5	3.07%	1989		120.4	4.97%
1967	100.0	2.56%	1990		127.4	5.81%
1968	103.5	3.50%	1991		133.9	5.10%
1969	108.6	4.93%	1992		139.8	4.41%
1970	113.2	4.24%	1993		144.7	3.51%
1971	116.1	2.56%	1994		148.9	2.90%
1972	119.5	2.93%	1995		153.2	2.89%
1973	127.3	6.53%	1996		158.6	3.52%
1974	142.8	12.18%	1997		164.0	3.40%
1975	156.5	9.59%	1998		167.1	1.89%
1976	167.0	6.71%	1999		172.6	3.29%
1977	180.2	7.90%	2000		178.0	3.13%
1978	198.4	10.10%	2001		182.4	2.47%
1979	225.4	13.61%	2002		183.8	0.77%
1980	255.4	13.31%	2003		186.3	1.36%
1981	278.2	8.93%	2004		191.1	2.58%
1982	287.0	3.16%	2005		196.0	2.56%
1983	290.1	1.08%	2006		201.1	2.60%
1984	301.0	3.76%	2007		208.6	3.71%
			2008		215.4	3.28%

Source: U.S. Department of Labor, Bureau of Labor Statistics  
 Consumer Price Index, All Items, All Urban Consumers, Portland-Salem, OR-WA, Annual Average



## Attachment B

Year Retired	Ad Hoc Adjustments by Effective Year				
	1981	1982	1985	1986	1989
1950	11.40	11.40	7.28	7.28	18.00
1951	10.64	10.64	7.28	7.28	19.00
1952	10.56	10.56	7.28	7.28	10.00
1953	10.16	10.16	7.28	7.28	8.00
1954	10.04	10.04	7.28	7.28	8.00
1955	10.00	10.00	7.25	7.25	7.00
1956	9.68	9.68	7.06	7.06	9.00
1957	9.28	9.28	6.82	6.82	9.00
1958	9.08	9.08	6.70	6.70	5.00
1959	8.96	8.96	6.62	6.62	3.00
1960	8.76	8.76	6.50	6.50	3.00
1961	8.64	8.64	6.42	6.42	2.00
1962	8.56	8.56	6.37	6.37	1.00
1963	8.32	8.32	6.22	6.22	1.00
1964	8.12	8.12	6.09	6.09	—
1965	7.88	7.88	5.94	5.94	—
1966	7.56	7.56	5.73	5.73	—
1967	7.36	7.36	5.60	5.60	—
1968	7.20	7.20	5.49	5.49	7.00
1969	6.88	6.88	5.28	5.28	4.00
1970	6.60	6.60	5.09	5.09	—
1971	6.36	6.36	4.93	4.93	—
1972	6.20	6.20	4.82	4.82	15.00
1973	5.92	5.92	4.63	4.63	14.00
1974	5.28	5.28	4.17	4.17	25.00
1975	4.92	4.92	3.92	3.92	15.00
1976	4.72	4.72	3.77	3.77	7.00
1977	4.44	4.44	3.57	3.57	3.00
1978	4.76	4.76	3.80	3.80	16.00
1979	4.32	4.32	3.48	3.48	11.00
1980	4.00	4.00	3.24	3.24	3.00
1981	—	4.00	3.09	3.09	—
1982	—	—	3.01	3.01	—
1983	—	—	3.00	3.00	—
1984	—	—	—	3.00	—
1985	—	—	—	—	—
1986	—	—	—	—	—
1987	—	—	—	—	—
1988	—	—	—	—	—
1989	—	—	—	—	—

## Attachment C

### Comparison of Tier 1/Tier 2 Benefits to CPI at August, 2009

Year Retired	Number of Years	Cumulative Increase		Purchasing Power	
		CPI	Tier 1/Tier 2	Initial	Tier 1/Tier 2
1969	40	609.30	458.03	16.4%	75.2%
1970	39	580.68	436.52	17.2%	75.2%
1971	38	557.09	418.78	18.0%	75.2%
1972	37	543.17	408.32	18.4%	75.2%
1973	36	527.72	396.71	18.9%	75.2%
1974	35	495.38	372.40	20.2%	75.2%
1975	34	441.61	331.98	22.6%	75.2%
1976	33	402.95	302.92	24.8%	75.2%
1977	32	377.62	283.87	26.5%	75.2%
1978	31	349.96	263.08	28.6%	75.2%
1979	30	317.85	238.94	31.5%	75.2%
1980	29	279.78	210.32	35.7%	75.2%
1981	28	246.92	192.06	40.5%	77.8%
1982	27	226.68	180.81	44.1%	79.8%
1983	26	219.73	175.61	45.5%	79.9%
1984	25	217.38	168.92	46.0%	77.7%
1985	24	209.51	160.81	47.7%	76.8%
1986	23	201.86	156.70	49.5%	77.6%
1987	22	199.07	154.53	50.2%	77.6%
1988	21	194.22	151.53	51.5%	78.0%
1989	20	187.78	148.59	53.3%	79.1%
1990	19	178.89	145.68	55.9%	81.4%
1991	18	169.07	142.82	59.1%	84.5%
1992	17	160.86	140.02	62.2%	87.0%
1993	16	154.07	137.28	64.9%	89.1%
1994	15	148.85	134.59	67.2%	90.4%
1995	14	144.65	131.95	69.1%	91.2%
1996	13	140.59	129.36	71.1%	92.0%
1997	12	135.81	126.82	73.6%	93.4%
1998	11	131.33	126.69	76.1%	94.6%
1999	10	128.90	121.90	77.6%	94.6%
2000	9	124.79	119.19	80.1%	95.5%
2001	8	121.01	115.56	82.6%	95.5%
2002	7	118.09	112.77	84.7%	95.5%
2003	6	117.19	111.91	85.3%	95.5%
2004	5	115.61	110.41	86.5%	95.5%
2005	4	112.71	108.24	88.7%	96.0%
2006	3	109.89	106.12	91.0%	86.6%
2007	2	107.11	104.04	93.4%	97.1%
2008	1	103.28	102.00	96.8%	98.8%
2009	0	100.00	100.00	100.00%	100.00%