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November 5, 2010

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

Via E-Mail

Subject: Request Number: 20010-014

2010 Purchasing Power Study

Dear Dale:

As requested, we updated the annual purchasing power study for 2010 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 0.12 percent in 2009. All participants who retired prior to August 2007 received a 2.00 percent annual cost-of-living adjustment, experiencing an increase in purchasing power over the year. Participants who retired on or after August 2007 and prior to August 2008 received a 1.40 percent annual cost-of-living adjustment, also experiencing an increase in purchasing power over the year. Participants who retired on or after August 2008 and prior to August 2010 received a 0.12 percent annual cost-of-living adjustment, maintaining their purchasing power.

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 2009 to 2010 by year of retirement.



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Year - Retired	Purchasing Power		Year	Purchasing Power	
	2009	2010	Retired	2009	2010
1980 & prior	75.2%	76.6%	1995	91.2%	92.9%
1981	77.8%	79.2%	1996	92.0%	93.7%
1982	79.8%	81.3%	1997	93.4%	95.1%
1983	79.9%	81.4%	1998	94.6%	96.3%
1984	77.7%	79.2%	1999	94.6%	96.3%
1985	76.8%	78.2%	2000	95.5%	97.3%
1986	77.6%	79.1%	2001	95.5%	97.3%
1987	77.6%	79.1%	2002	95.5%	97.3%
1988	78.0%	79.5%	2003	95.5%	97.3%
1989	79.1%	80.6%	2004	95.5%	97.3%
1990	81.4%	83.0%	2005	96.0%	97.8%
1991	84.5%	86.1%	2006	96.6%	98.4%
1992	87.0%	88.7%	2007	97.1%	98.4%
1993	89.1%	90.8%	2008	98.8%	98.8%
1994	90.4%	92.1%	2009	100.0%	100.0%
			2010		100.0%

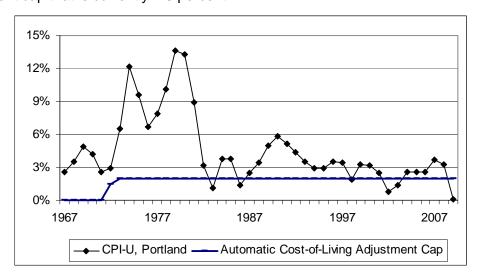
Inflation

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.



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



The automatic COLA was established in 1972, and there have only been six years (1983, 1986, 1998, 2002, 2003 and 2009) 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 2009.

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 1.40% in 2010 if retired on or after August 2007 and prior to August 2008 0.12% in 2010 if retired on or after August 2008 and prior to August 2010



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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 x Monthly Benefit		
December 1971	3.5 × Monthly Benefit		

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.

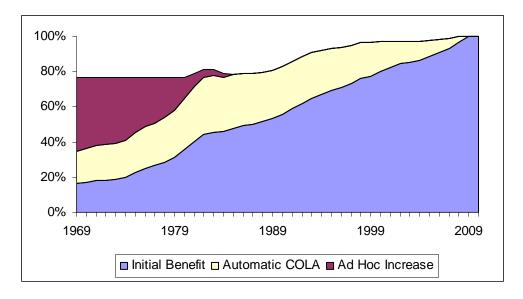
Effective Date	Ad Hoc Increase Granted by Legislation
January 1972	25% if retired prior to January 1968
	12% if retired after December 1967 and prior to January 1972
January 1974	25% if retired prior to January 1968
	20% if retired after December 1967 and prior to January 1972
	12% if retired after December 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



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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.

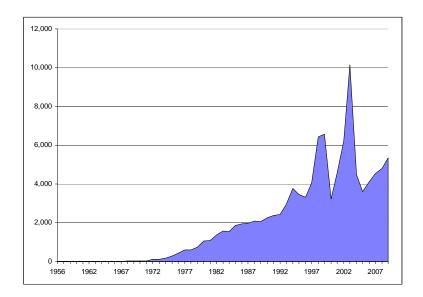


As shown in the graph above, for long-time retired members, the majority of the increases in their benefits since retirement have come from ad hoc increases. Retirees who retired within the past 25 years have not received any ad hoc increases. However, inflation has been significantly lower than in the late 1970's, and the automatic COLA increases have tracked changes in CPI more closely. Purchasing power for retirees since 1993 has remained within 90 percent of their original purchasing power.

The following graph shows the distribution of retirees and beneficiaries, from the December 31, 2009 actuarial valuation, by year of retirement. As shown in the graph below, a vast majority of retirees and beneficiaries have retired within the last 25 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 25 years, the average purchasing power is 94.1% compared to the average purchasing power of 78.7% for those retired more than 25 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 41 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 \$610.03 per month now to have kept pace with inflation. Benefit increases granted through PERS increased the \$100 per month benefit to \$467.19 per month. The original benefit of \$100 per month is 16.4 percent of the CPI-adjusted benefit and the PERS-adjusted benefit of \$467.19 is 76.6 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,

Brenda J. Majdic, ASA, EA, MAAA

Brenda J. Majdie

CRJ/BJM/sdp/bjm:ksb

Enclosure

Copy:

Matt Larrabee, Scott Preppernau

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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		1986	316.8	108.2	1.41%
1963	90.2	1.92%	1987		110.9	2.50%
1964	92.2	2.22%	1988		114.7	3.43%
1965	94.6	2.60%	1989		120.4	4.97%
1966	97.5	3.07%	1990		127.4	5.81%
1967	100.0	2.56%	1991		133.9	5.10%
1968	103.5	3.50%	1992		139.8	4.41%
1969	108.6	4.93%	1993		144.7	3.51%
1970	113.2	4.24%	1994		148.9	2.90%
1971	116.1	2.56%	1995		153.2	2.89%
1972	119.5	2.93%	1996		158.6	3.52%
1973	127.3	6.53%	1997		164.0	3.40%
1974	142.8	12.18%	1998		167.1	1.89%
1975	156.5	9.59%	1999		172.6	3.29%
1976	167.0	6.71%	2000		178.0	3.13%
1977	180.2	7.90%	2001		182.4	2.47%
1978	198.4	10.10%	2002		183.8	0.77%
1979	225.4	13.61%	2003		186.3	1.36%
1980	255.4	13.31%	2004		191.1	2.58%
1981	278.2	8.93%	2005		196.0	2.56%
1982	287.0	3.16%	2006		201.1	2.60%
1983	290.1	1.08%	2007		208.6	3.71%
1984	301.0	3.76%	2008		215.4	3.28%
1985	312.4	3.79%	2009		215.6	0.12%
-						

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	Ad Hoc Adjustments by Effective Year						
Retired	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	_		
1981			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, 2010

Year	Number of _	Cumulativ	ve Increase	Purchasing Power	
Retired	Years	СРІ	Tier 1/Tier 2	Initial	Tier 1/Tier 2
1969	41	610.03	467.19	16.4%	76.6%
1970	40	581.38	445.25	17.2%	76.6%
1971	39	557.76	427.16	17.9%	76.6%
1972	38	543.82	416.49	18.4%	76.6%
1973	37	528.35	404.64	18.9%	76.6%
1974	36	495.98	379.85	20.2%	76.6%
1975	35	442.14	338.62	22.6%	76.6%
1976	34	403.44	308.97	24.8%	76.6%
1977	33	378.07	289.55	26.5%	76.6%
1978	32	350.38	268.34	28.5%	76.6%
1979	31	318.24	243.72	31.4%	76.6%
1980	30	280.11	214.53	35.7%	76.6%
1981	29	247.21	195.91	40.5%	79.2%
1982	28	226.95	184.42	44.1%	81.3%
1983	27	219.99	179.12	45.5%	81.4%
1984	26	217.64	172.30	45.9%	79.2%
1985	25	209.76	164.03	47.7%	78.2%
1986	24	202.11	159.83	49.5%	79.1%
1987	23	199.30	157.62	50.2%	79.1%
1988	22	194.45	154.57	51.4%	79.5%
1989	21	188.01	151.57	53.2%	80.6%
1990	20	179.11	148.59	55.8%	83.0%
1991	19	169.27	145.68	59.1%	86.1%
1992	18	161.05	142.82	62.1%	88.7%
1993	17	154.25	140.02	64.8%	90.8%
1994	16	149.03	137.28	67.1%	92.1%
1995	15	144.83	134.59	69.0%	92.9%
1996	14	140.76	131.95	71.0%	93.7%
1997	13	135.97	129.36	73.5%	95.1%
1998	12	131.49	126.82	76.1%	96.3%
1999	11	129.05	124.34	77.5%	96.3%
2000	10	124.94	121.90	80.0%	97.3%
2000	9	121.15	119.51	82.5%	97.3%
2001	8	118.23	117.17	84.6%	97.3%
2002	7	117.33	114.87	85.2%	97.3% 97.3%
2003	6	115.75	112.62	86.4%	97.3% 97.3%
2004	5	112.85	110.41	88.6%	97.3% 97.8%
2005	5 4			90.9%	
		110.02	108.24		98.4%
2007	3	107.23	106.12	93.3%	98.4%
2008	2	103.40	103.40	96.7%	98.8%
2009	1	100.12	100.12	99.9%	100.0%
2010	0	100.00	100.00	100.0%	100.0%