

## Anchorage Consumer Price Index Base Period Converted

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**B**eginning with the release of Consumer Price Index (CPI) data for January of 1988, the Bureau of Labor Statistics has converted most Consumer Price Indexes, including the CPI for Anchorage, to a new reference base year. All indexes previously expressed on a base of 1967 = 100, or any other base through December of 1981, have been rebased to 1982-84 = 100. Only indexes with a base later than December 1981 have maintained their bases. The rebasing is a result of the U.S. Government's long-standing policy to update index bases periodically.

Selection of the 1982-84 period as the new reference base for the Consumer Price Index was designed to coincide with the updating of consumer expenditure weights, which were based upon Consumer Expenditure Surveys which took place in 1982, 1983 and 1984. The last time the Consumer Price Index was converted to a new base was in 1971 when the 1967 base was substituted for the 1957-59 base.

The rebasing of the Consumer Price Index is part of an ongoing five year program begun in 1984 by the Bureau of Labor Statistics to enhance the CPI. Beginning in January 1987, the CPI is now published for Anchorage on a semi-annual basis where before the Anchorage index was published every other month. The semi-annual average represents the arithmetic average of the six-month periods from January to June and July to December. The semi-annual averages are published with the release of the CPI for July and January.

Historical data for each CPI series published by the Bureau of Labor Statistics (BLS) on the new base are available through the Alaska Department of Labor, Research and Analysis or the BLS. As a convenience to users of the CPI the BLS will continue to publish the all-items indexes for the U.S. city average, and for the individual local areas for which CPI's are published on their former official reference bases. However the BLS is encouraging all users of the CPI, especially those with contractual agreements providing for escalation on the basis of the CPI, to incorporate the change in the reference base in new contracts or at the time of renegotiation.

### Method of Conversion

The historical index series has been rebased to the new reference period by dividing each index value, on the original base, by the average index value for the 1982-84 period, on the original base and multiplying the result by 100. Conversion factors for the U.S. City average and Anchorage CPI's are shown in Table 1. Multiplication by the conversion factor converts an index on the old base to the 1982-84 base. An example of how to use the conversion factor is also shown in Table 1. Conversion factors for all local areas for which a CPI is published are available from the BLS.

### Effects of the Conversion

Adoption of the new base period does not affect the measurement of percent changes in a given index series from one period to another, except for possible rounding differences. Index point changes are however usually effected. The example below illustrates the different effects of rebasing on index points and percent changes.

**Table 1**  
**Conversion Rate for the CPI, U.S. City and Anchorage, AK.**

	Former Base	CPI-U Conversion Factor	CPI-W Conversion Factor
U.S. City Average	1967 = 100	0.3338279	0.3357175
Anchorage, AK.	Oct '67 = 100	0.3746257	0.3842254

Using the Conversion Factor:

Nov. 1986 CPI-U for Anchorage = 287.8

$287.8 \times 0.3746257 = 107.8 =$  Dec. 1986 CPI-U on the new base.

Division by the conversion factor will change an index on the 1982-84 base period into the former base.

Second Half 1987 Anchorage CPI-U = 108.1

$108.1 / .3746257 = 288.5 =$  Second Half 1987 CPI-U on old base.

Base	Dec. 1985 Index	Dec. 1986 Index	Index Point Change	Index Percent Change
Oct 67 = 100	286.9	287.8	0.9	0.3
1982-84 = 100	107.5	107.8	0.3	0.3

**Table 2**  
**Consumer Price Indexes for All Urban Consumers**  
**CPI-U**  
**1982-84 = 100**

Year	All Items	Ann Avg Percent Change	All Items Less Shelter	Ann Avg Percent Change	Apparel and Upkeep	Ann Avg Percent Change	Entertainment	Ann Avg Percent Change	Food and Beverage
1960	34.4								
1961	34.5	0.3							
1962	34.7	0.6							
1963	34.8	0.3							
1964	35.0	0.6							
1965	35.3	0.9							
1966	36.3	2.8							
1967	37.2	2.5							
1968	38.1	2.4							
1969	39.6	3.9							
1970	41.1	3.8							
1971	42.3	2.9			56.5				
1972	43.4	2.6			58.3	3.2			
1973	45.3	4.4			60.7	4.1			
1974	50.2	10.8			64.7	6.6			
1975	57.1	13.7			69.8	7.9			
1976	61.5	7.7	62.1		74.1	6.2	64.4		64.2
1977	65.6	6.7	66.6	7.2	79.2	6.9	69.4	7.8	68.9
1978	70.2	7.0	71.0	6.6	79.7	0.6	72.6	4.6	75.9
1979	77.6	10.5	77.0	8.5	81.7	2.5	74.5	2.6	84.0
1980	85.5	10.2	84.7	10.0	89.7	9.8	79.0	6.0	89.7
1981	92.4	8.1	92.0	8.6	94.1	4.9	85.9	8.7	94.3
1982	97.4	5.4	96.3	4.7	96.6	2.7	94.7	10.2	97.2
1983	99.2	1.8	99.9	3.7	101.6	5.2	100.6	6.2	99.7
1984	103.3	4.1	103.8	3.9	101.7	0.1	104.6	4.0	103.2
1985	105.8	2.4	107.5	3.6	105.8	4.0	108.9	4.1	106.2
1986	107.8	1.9	111.2	3.4	109.0	3.0	112.4	3.2	110.8
1987	108.2	0.4	115.1	3.5	116.6	7.0	116.4	3.6	113.1

**Historical data for each CPI series published by the Bureau of Labor Statistics on the new base are available through the Alaska Department of Labor, Research and Analysis or the BLS.**

**Table 2**  
**Consumer Price Indexes for All Urban Consumers (continued)**  
**CPI-U**  
**1982-84 = 100**

Ann Avg Percent Change	Housing	Ann Avg Percent Change	Medical Care	Ann Avg Percent Change	Other Goods & Services	Ann Avg Percent Change	Transportation	Ann Avg Percent Change
			35.2				40.8	
			35.8	1.7			40.9	0.2
			37.3	4.2			41.4	1.2
			41.5	11.3			44.9	8.5
			46.9	13.0			49.3	9.8
	62.6		52.6	12.2	63.8		54.9	11.4
7.3	65.5	4.6	57.9	10.1	68.1	6.7	60.2	9.7
10.2	69.7	6.4	63.4	9.5	71.7	5.3	64.5	7.1
10.7	78.0	11.9	69.1	9.0	76.9	7.3	71.3	10.5
6.8	85.9	10.1	78.8	14.0	83.1	8.1	82.2	15.3
	92.5	-7.7	86.9	10.3	88.1	6.0	92.7	12.8
5.1	98.2	6.2	94.8	9.1	93.2	5.8	96.8	4.4
3.1	99.0	0.8	99.7	5.2	101.5	8.9	98.5	1.8
2.6	102.7	3.7	105.5	5.8	105.3	3.7	104.6	6.2
3.5	103.0	0.3	110.9	5.1	114.2	8.5	108.2	3.4
2.9								
	102.6	-0.4	127.8	15.2	123.2	7.9	107.8	-0.4
4.3	97.5	-5.0	137.0	7.2	132.2	7.3	111.3	3.2
2.1								

Table 2 and Table 3 (page 14) contain annual average CPI's for Anchorage on the new base. Table 2 contains the All Items CPI-U (All Urban Consumers) for Anchorage and six component indexes. A special index, the All Items less Shelter, is also included. Table 3 contains the same group of indexes as Table 2, however, they are for the CPI-W (Urban Wage Earners and Clerical Workers). The CPI-U approximates the buying habits of 80% of the civilian noninstitutionalized population. The CPI-W approximates the buying habits of 40% of the civilian noninstitutionalized population. The CPI-U was first produced in 1978, previous to that only the CPI-W was available.

**Table 3**  
**Consumer Price Indexes for Urban Wage Earners and Clerical Workers**  
**CPI-W**  
**1982-84 = 100**

Year	All Items	Ann Avg Percent Change	All Items Less Shelter	Ann Avg Percent Change	Apparel and Upkeep	Ann Avg Percent Change	Entertainment	Ann Avg Percent Change	Food and Beverage
1960	35.2								
1961	35.4	0.6							
1962	35.5	0.3							
1963	35.7	0.6							
1964	35.9	0.6							
1965	36.2	0.8							
1966	37.2	2.8							
1967	38.2	2.7							
1968	39.1	2.4							
1969	40.7	4.1							
1970	42.1	3.4							
1971	43.4	3.1			57.1				
1972	44.5	2.5			58.9	3.2			
1973	46.4	4.3			61.4	4.2			
1974	51.4	10.8			65.4	6.5			
1975	58.5	13.8			70.5	7.8			
1976	63.1	7.9	62.6		74.9	6.2	70.5		64.5
1977	67.2	6.5	67.3	7.5	80.0	6.8	76.0	7.8	69.3
1978	72.0	7.1	71.9	6.8	80.3	0.4	76.0	0.0	76.9
1979	79.0	9.7	78.2	8.8	81.6	1.6	77.0	1.3	86.1
1980	86.3	9.2	85.2	9.0	86.5	6.0	79.9	3.8	90.3
1981	92.9	7.6	92.2	8.2	92.6	7.1	86.2	7.9	94.2
1982	98.2	5.7	96.4	4.6	96.3	4.0	94.6	9.7	97.2
1983	98.9	0.7	99.8	3.5	101.6	5.5	100.5	6.2	99.7
1984	102.9	4.0	103.8	4.0	102.1	0.5	105.0	4.5	103.2
1985	105.8	2.8	107.3	3.4	105.5	3.3	108.7	3.5	106.2
1986	107.7	1.8	110.8	3.3	108.1	2.5	112.5	3.5	110.9
1987	107.9	0.2	114.4	3.2	115.9	7.2	118.1	5.0	113.2