

Cost of Living Indicators

By James Wilson and Brian N. Rae

At first glance, quantifying cost of living differences between localities seems an easy task. Most persons could visit a community, comparison shop for the products and services they use regularly, collect information on housing costs, and determine a cost of living differential for the two areas. Although meeting the needs of that particular person, this comparison would be less than ideal for others with different consumption patterns. Attempting to find cost of living differences for an "average" household is like stating that the average family size is 3.21 persons. The figures are defensible, but one would be hard pressed to find this average family.

This problem is amplified when comparing areas with uniquely different consumption patterns - which area is to act as a standard, to which others are compared? Rural areas have characteristics which must be taken into account when comparing them with urban areas. Subsistence activities, whether a small garden in the suburbs or whaling and hunting in rural Alaska, impact the cost of living. What monetary value is applied to these activities? As of yet, no widely accepted method of adjusting the cost of living indicators for subsistence activities has been proposed.

Some persons emphasize the living component in the cost of living index. What compensation is demanded for lack of certain amenities, whether unspoiled wilderness or live theater and gourmet restaurants? By example, Bethel and Los Angeles offer unique, but vastly different, recreational opportunities for their residents. For the person who enjoys their current surroundings, relocation to the other area would impose a cost which is not easily measured.

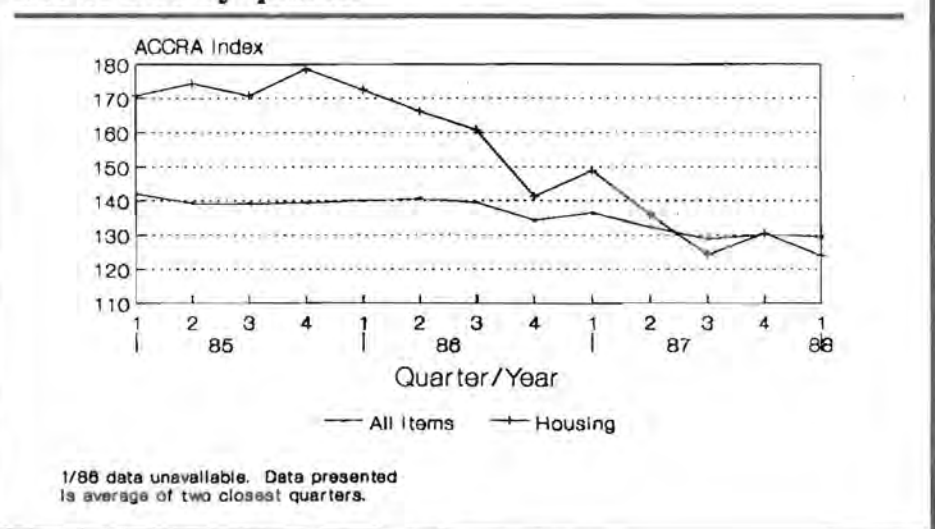
All cost of living surveys rely on the creation of a market basket of goods and services, designed to reflect the consumption patterns of the targeted population. In the opening example where one computes their personal cost of living differentials, the market basket is defined by the individual. Any deviation from this personal market basket lessens its usefulness for this person.

Because of these and other limitations, certain steps have been taken by organizations creating cost of living indexes in an attempt to alleviate these problems. Many surveys, such as the Consumer Price Index, American Chamber of Commerce Research Association, and the Runzheimer survey, look only at urban areas. Still, some areas are more urban than others, and offer different recreational opportunities and hardships. All the surveys make clear their assumptions and targeted population. The Cost of Food for a Week survey computes costs for different family sizes and at "low cost", "thrifty", "moderate", and "liberal" expenditure levels. The data presented here are the "low cost" figures.

Comparisons between communities are

Only Boston and New York have statistically significant higher indexes than the three Alaska cities.

Figure 1
ACCRA All Item & Housing Indexes - Anchorage
1/85 to 1/88 by quarter



The ACCRA housing index shows that nearly 20 cities studied have housing costs higher than Alaska.

not the only important cost of living measures. The most used cost of living indicator, the Consumer Price Index, makes no attempt to quantify differences between localities, looking instead at movements within a locality over time. The CPI is often used to adjust wage and salary payments and government disbursements. Approaching a different problem, surveys like those conducted by Runzheimer International are used to adjust payments after a geographic relocation, making a point-in-time comparison between places.

SURVEYS MAKING PLACE-TO-PLACE COMPARISONS

ACCRA Inter-city Cost of Living Index

The American Chamber of Commerce Researchers Association (ACCRA) produces a quarterly report comparing relative price levels for

goods and services for roughly 250 cities in the United States. In each city in the study, a standardized list of 59 items is priced during a set period of time. The items priced in each community are intended to represent the spending patterns of a household headed by a mid-management professional. After the pricing is finished, items are aggregated by category and the index numbers are produced. The all-cities average for the index is always 100 for each reporting period.

The ACCRA index is computed based on a standardized shopping list of goods and services. Because of the limited sample of items priced, however, differences in the index of three or less (such as 129 vs 130) are statistically insignificant. Differences in the index greater than three can be considered to show an actual cost of living difference. Percentage differences, measured by the ACCRA

**Table 1
ACCRA Inter-City Cost of Living Index
First Quarter 1988
Ranking of 20 Highest Index Cities**

City	Index	Total Grocery	Housing	Utilities	Transportation	Health	Miscellaneous
Boston, MA	157.6	114.1	288.5	129.8	111.0	147.4	119.0
New York, NY	154.6	110.6	242.2	191.7	114.8	140.0	122.4
FAIRBANKS, AK	130.9	130.6	127.7	124.5	123.9	191.4	124.7
Washington DC	130.8	108.8	186.2	104.8	114.9	150.6	114.6
JUNEAU, AK	129.7	127.4	125.3	119.7	124.1	196.4	124.9
ANCHORAGE, AK	129.5	136.7	123.9	107.8	116.7	188.4	129.4
Philadelphia, PA	126.5	113.2	139.2	164.6	109.0	139.8	115.3
Naperville, IL	125.4	106.4	171.8	111.9	116.3	113.7	113.6
Manchester, NH	123.6	101.0	169.9	127.0	109.5	113.7	109.8
Hartford, CT	123.3	108.9	147.0	129.3	109.2	134.1	115.5
San Diego, CA	121.0	100.0	180.0	78.0	125.9	119.2	103.7
Fitchburg-Leominster, MA	120.6	102.3	163.2	135.5	111.6	105.9	101.4
Orange County, CA	119.6	91.5	178.2	74.4	112.8	133.8	108.8
San Jose, CA	117.9	101.8	171.9	70.6	114.3	134.6	102.6
Los Angeles, CA	117.0	91.5	168.6	74.4	108.1	127.3	110.8
Temecula, CA	115.1	97.8	149.8	97.6	121.2	120.0	102.0
Palm Springs, CA	115.0	97.9	144.5	95.5	106.5	130.3	110.3
Wilmington, DE	113.7	109.6	134.5	111.8	106.5	102.8	107.2
Scottsdale, AZ	113.1	104.3	129.1	114.6	108.2	117.6	106.7
West Palm Beach, FL	112.4	99.9	111.9	128.9	122.1	113.6	109.2
Ranking of Alaska Cities by Category							
Fairbanks, AK	3	2	20	19	3	2	3
Juneau, AK	5	3	21	26	2	1	2
Anchorage, AK	6	1	22	68	8	3	1

Source: Inter-City Cost of Living Index, First Quarter 1988, American Chamber of Commerce Researchers Association

index, are only a reasonable indication and not a precise measure of the extent of any difference. No attempt is made to include state or local taxes in the data although it is realized that taxes are a part of the cost of living.

Three Alaskan cities are included in the quarterly ACCRA data. These are Anchorage, Fairbanks, and Juneau. According to the latest available numbers (1st quarter 1988) the three Alaska cities have the same cost of living levels (remembering that index differences less than three are insignificant). The Alaska cities' cost of living are roughly 30% higher than the all-cities average. Only Boston and New York have statistically significant higher indexes than the three Alaska cities.

Alaska's three major cities lead the nation for three components of the ACCRA index, groceries, health care, and miscellaneous goods and services

(tables 1 & 2). Only one city, San Diego, had higher transportation costs than Fairbanks or Juneau. Housing costs have always been thought to be exceptionally high in Alaska. The ACCRA housing index shows that nearly 20 cities studied have housing costs higher than Alaska. This has not always been the case. As illustrated in Figure 1, the housing index for Anchorage was much higher than the all items index until the end of 1986. At that time, housing costs came down and dropped below the all items levels during the end of 1987. The lowest rankings for Alaska's cities were in the ACCRA utilities cost index. Table 3 shows a sample of ACCRA participant cities, with surveyed costs for selected items.

The ACCRA index measures the difference in cost of living between a specific city and the all-cities average at one point in time. The ACCRA index does not measure changes within a city

The ACCRA survey shows no significant difference in the cost of living among Alaska's larger cities.

**Table 2
ACCRA Inter-City Cost of Living Index
(First Quarter 1988)**

City	All Items Index	Grocery Items	Housing	Utilities	Transportation	Health Care	Miscellaneous Goods & Services
West							
ANCHORAGE, AK	129.5	136.7	123.9	107.8	116.7	188.4	129.4
FAIRBANKS, AK	130.9	130.6	127.7	124.5	123.9	191.4	124.7
JUNEAU, AK	129.7	127.4	125.3	119.7	124.1	196.4	124.9
Salt Lake City, UT	98.3	93.5	89.4	95.8	101.4	103.1	105.9
San Diego, CA	121.0	100.0	180.0	78.0	125.9	119.2	103.7
Seattle, WA	109.1	114.8	106.9	62.4	118.2	147.3	11.8
Southwest							
Albuquerque, NM	101.1	95.2	107.5	92.2	111.4	104.6	97.7
Dallas, TX	105.8	106.9	105.0	109.8	114.3	112.7	99.0
Phoenix, AZ	103.2	100.1	105.4	88.6	102.8	124.0	104.1
Midwest							
Saint Paul, MN	104.8	96.1	110.1	112.1	114.1	108.5	98.2
Omaha, NE	92.9	91.3	93.8	78.9	100.9	91.7	95.2
Saint Louis, MO	99.4	98.1	96.7	104.3	101.0	101.9	99.3
Southeast							
Atlanta, GA	108.6	96.8	122.0	117.1	98.2	120.0	104.0
Birmingham, AL	98.7	101.0	94.9	111.0	93.5	92.1	99.3
Louisville, KY	96.1	97.0	90.9	97.3	96.0	100.6	98.0
Atlantic/New England							
Baltimore, MD	104.1	99.2	109.3	104.3	101.8	109.6	102.5
Boston, MA	157.6	114.1	288.5	129.8	111.0	147.4	119.0
New York, NY	154.6	110.6	242.2	191.7	114.8	140.0	122.4
Philadelphia, PA	126.5	113.2	139.2	164.6	109.0	139.8	115.3

Source: Inter-City Cost of Living Index.(256 Cities) 1st Quarter 1988.
American Chamber of Commerce Researchers Associations.

over time as does the Consumer Price Index. It does provide a measure of how much the cost within an individual city differs from the all-cities average. It is possible to see over time if an individual city's cost of living is becoming increasingly higher or lower than this average

The ACCRA index for Anchorage in the first quarter of 1985 was 142.0. The first quarter 1988 index is 129.5. This means that the cost of living in Anchorage three years ago was 42% higher than the all-cities average but is now roughly 30% higher. Over the last six quarters the indexes for both Fairbanks and Juneau have moved closer to the all-cities average. Figure 2 illustrates this cost of living convergence towards the average. The Fairbanks index in July 1986 was roughly 42% higher than the all-cities average but is now approximately 31% above the all-cities average. Similarly,

Juneau's index moved from 45% above the all-cities index to 30 higher. Note that, although the curves slope downward, this does not indicate a decrease in the overall cost of living in Alaska. Rather, our cost of living is increasing at a slower rate than other cities in the survey. At the same time, the differences between the curves have decreased, indicating a lessening in the cost of living differences between the three cities. For the first quarter 1988 data, any differences are statistically insignificant.

Cost of Food at Home

Comparing the cost of living between communities in Alaska is made difficult by several factors. Many goods and services available in larger cities are not readily available in some rural areas. The buying habits of urban residents vary from people in rural communities. The different consump-

Table 3
ACCRA Inter-City Cost of Living Index
(First Quarter 1988)

City	1 lb Ground Beef	½ gal Whole Milk	1 lb Coffee	House Purchase Price	Total Energy Cost	1 gal Gas	Hospital Room	Office Visit Doctor
West								
ANCHORAGE, AK	\$1.42	\$1.86	\$3.29	\$119,750	\$123.10	\$0.95	\$370.00	\$45.00
FAIRBANKS, AK	1.51	1.79	3.19	102,625	143.12	1.14	305.00	49.33
JUNEAU, AK	1.49	1.72	3.72	114,850	128.48	1.29	308.00	34.90
Salt Lake City, UT	1.11	1.05	2.79	87,982	101.66	0.96	259.00	23.20
San Diego, CA	1.47	1.02	2.41	158,500	86.48	0.92	315.00	34.00
Seattle, WA	1.12	1.18	3.29	97,061	64.80	0.94	268.36	36.40
Southwest								
Albuquerque, NM	1.10	1.24	2.45	102,860	99.36	0.96	246.20	22.20
Dallas, TX	1.46	1.37	2.39	93,936	122.55	0.87	231.20	32.80
Phoenix, AZ	1.18	0.88	2.69	99,616	96.55	0.85	261.80	31.80
Midwest								
Saint Paul, MN	1.23	1.06	2.91	89,740	122.83	0.89	312.18	25.40
Omaha, NE	1.10	1.06	2.61	84,875	82.84	0.79	184.80	27.30
Saint Louis, MO	1.20	1.24	2.95	88,170	117.65	0.92	219.40	31.80
Southeast								
Atlanta, GA	1.56	1.22	2.34	119,705	129.88	0.81	219.60	37.00
Birmingham, AL	1.26	1.35	2.38	90,400	118.39	0.83	215.40	28.60
Louisville, KY	1.41	1.36	2.55	84,020	104.43	0.81	252.20	24.40
Atlantic/New England								
Baltimore, MD	1.41	1.07	2.83	103,200	112.41	0.92	252.20	30.20
Boston, MA	1.99	1.08	2.72	272,050	144.42	0.99	390.00	43.50
New York, NY	1.59	1.15	2.71	213,800	215.46	1.06	250.00	39.00
Philadelphia, PA	1.84	1.06	2.76	119,580	191.85	0.85	397.50	38.40
ALL CITIES MEAN	1.31	1.21	2.65	94,236	110.04	0.90	216.42	26.30

All cities mean is the mean price of all 256 cities in the 1st quarter 1988 survey.

Source: Inter-City Cost of Living Index.(256 Cities) 1st Quarter 1988. American Chamber of Commerce Researchers Associations.

tion patterns in urban and rural areas complicate comparisons in the cost of living. Subsistence contributions to some households also make cost of living comparisons more difficult.

The University of Alaska, in cooperation with the U.S. Department of Agriculture, prepares a quarterly report of food prices, to measure how much it costs to feed families in different locations in Alaska. The report also contains some comparative information on some utility and fuel costs. The Cost of Food at Home survey is not a comprehensive measure of the cost of living for communities in Alaska. It does provide some comparative measure for locations not covered by any other cost of living measure.

Table 4 shows the cost of food for a week for a family of four with elementary school children, plus other selected costs, for 19 Alaska

Figure 2
ACCRA Index for Alaska Cities
Percent Above All-cities Average
3/86 through 1/88 by quarter

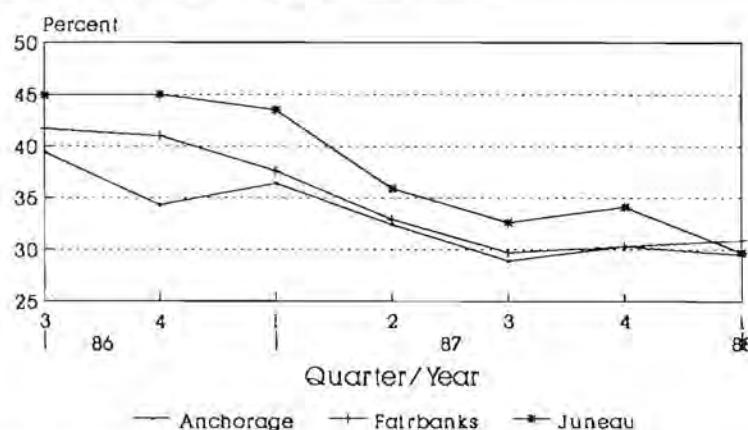


Table 4
Cost of Selected Items in Various Alaskan Communities
March 1988

Community	Percent Sales Tax	Cost of Food, 1 Week	Ratio of Food Cost to Anchorage Average (percent)	Ratio of Food Cost to U.S. Average (percent)	Electricity (1000 kwh)	Heating Oil (55 gal)	Unleaded Gasoline (1 gal)	Lumber (2x4x8)
U.S. Average	0	\$86.60	98	100	-	-	-	-
Anchorage	0	88.08	100	102	\$71.12	\$56.05	-	-
Bethel	5	139.37	158	161	176.60	67.10	\$1.54	\$3.60
Cordova	4	134.54	153	155	160.00	66.00	1.40	2.80
Delta	0	117.94	134	136	91.81	45.65	1.07	2.10
Dillingham	3	140.08	159	162	113.21	83.60	1.65	3.20
Fairbanks	0	90.14	102	104	86.43	53.63	0.96	1.96
Homer	5	108.19	123	125	86.82	-	1.13	2.06
Juneau	4	88.79	101	103	75.30	65.82	1.35	2.13
Kenai	5	94.01	107	109	70.00	53.08	1.13	2.11
Ketchikan	5	84.28	96	97	86.55	50.60	1.26	1.29
Kodiak	5	106.94	121	123	145.88	57.20	1.28	2.48
Kotzebue	3	144.96	165	167	239.46	104.76	1.80	3.29
MatSu	2	95.70	109	111	101.01	46.20	0.97	1.84
McGrath	0	134.24	152	155	331.70	92.95	2.20	4.75
Nome	4	146.99	167	170	150.00	74.25	1.72	3.90
Sitka	4	97.93	111	113	66.00	51.98	1.23	2.08
Tok	0	113.44	129	131	213.26	52.25	1.28	1.92
Unalakleet	3	145.12	165	168	-	99.00	1.85	-
Valdez	0	120.56	137	139	156.60	57.20	1.09	2.49

Family of four with elementary school children

Sales tax included in food and utility cost

- Data unavailable

Source: "Cost of Food at Home for a Week," March 1988. University of Alaska Cooperative Extension Service
U.S. Dept. of Agriculture and SEA Grant Cooperative

communities. In Anchorage, the state's largest metropolitan area, the cost of food is only 2 percent higher than the national average. The March 1988 cost figures show Ketchikan has the lowest food costs of the areas surveyed. The larger cities in Alaska have food costs which are fairly comparable to those in Anchorage.

Prior examinations of the Cost of Food data have shown that the most expensive cities are smaller, more isolated communities. This continues to be true. In places such as Bethel, Kotzebue, and McGrath food costs are 50% to 70% higher than in Anchorage.

Table 5 shows that the difference in the cost of food between Anchorage and the U.S. has narrowed since 1978. The cost in Anchorage has dropped from 48% higher than the U.S. to within 4 percent of the U.S. (in September 1987). The March 1988 figures show a further decline to within 2% of the U.S. costs.

The ACCRA index numbers indicate a greater difference in food costs between Alaska and the U.S. than the Cost of Food at Home for a Week study. For example, the ACCRA data show the cost of groceries in Anchorage to be 36% higher than the all-cities average whereas the Cost of Food data show only a two percent difference. This may be due in part to the limited

number of items priced in the ACCRA survey, and differences in the groups the two surveys measure.

Runzheimer International's Living Cost Standards

Under contract with the State of Alaska, Runzheimer International made a study of living costs in 272 areas around the country. Like all surveys, Runzheimer developed a market basket designed around an "average" family. In the Runzheimer survey, this is a family of four with an average income of \$32,000. Unlike most other surveys, Runzheimer approached price differences from an income perspective. After certain assumptions were set, such as a 1,500 square foot house and two cars driven 18,000 miles total, an income level was computed in order to maintain this standard in the location being surveyed. The data supplied shows, with these assumptions, the comparable income levels between different localities (Table 6).

Home ownership was assumed in the survey, with purchase having taken place within the last year. This component had the largest effect on the cost of living, since for all three Alaskan cities the price of a home has dropped substantially over the last couple of years. In contrast with rising costs for homes in other parts of the country,

In places such as Bethel, Kotzebue, and McGrath food costs are 50% to 70% higher than in Anchorage.

**Table 5
Cost of Food at Home for a Week
(1978-1987)**

Month/ Year	U.S.	Anchorage	Percent of U.S. Average	Fairbanks	Percent of U.S. Average	Juneau	Percent of U.S. Average	Bethel	Percent of U.S. Average	Nome	Percent of U.S. Average	Kodiak	Percent of U.S. Average	Kenai	Percent of U.S. Average	Tok	Percent of U.S. Average
9/78	\$56.90	\$76.67	134.7	\$84.15	147.9	\$73.72	129.6	\$114.05	200.4	\$118.85	208.9	-	-	\$82.48	145.0	-	-
12/79	63.70	85.80	134.7	91.92	144.3	77.55	121.7	120.44	189.1	124.62	195.6	-	-	100.41	157.6	-	-
9/80	69.20	88.44	127.8	90.54	130.8	85.92	124.2	130.87	189.1	131.14	189.5	\$99.42	143.7	120.84	174.6	\$108.82	157.3
9/81	72.90	86.69	118.9	98.47	135.1	93.95	128.9	138.66	190.2	150.27	206.1	-	-	-	-	114.80	157.5
9/82	74.60	77.30	103.6	92.09	123.4	99.98	134.0	125.50	168.2	149.04	199.8	-	-	-	-	-	-
9/83	74.80	81.66	109.2	83.79	112.0	88.62	118.5	128.30	171.5	130.14	174.0	104.94	140.3	86.98	116.3	-	-
9/84	77.60	84.22	108.5	91.26	117.6	91.66	118.1	136.54	176.0	142.07	183.1	115.97	149.4	87.97	113.4	121.66	156.8
9/85	78.30	89.06	113.7	90.08	115.0	106.61	136.2	138.13	176.4	152.41	194.6	108.17	138.1	91.47	116.8	116.19	148.4
9/86	82.00	87.25	106.4	90.61	110.5	87.65	106.9	137.96	168.2	142.04	173.2	105.49	128.6	92.78	113.1	124.18	151.4
9/87	85.30	88.90	104.2	85.12	99.8	88.24	103.4	140.81	165.1	147.96	173.5	104.39	122.4	96.95	113.7	117.51	137.8

Family of four with elementary school children

Sales tax included in food prices

- Data unavailable

Source: "Cost of Food at Home for a Week," September 1978 to September 1987. University of Alaska Cooperative Extension Service, U.S. Department of Agriculture and SEA Grant Cooperative.

this placed Anchorage, Fairbanks and Juneau in positions 53, 76, and 79, respectively among the 272 different areas in the survey. Similar housing trends can be seen in other surveys, particularly the CPI.

Federal Government Per Diem and Cost of Living Allowances

Although not intended to serve as a cost of living indicator, the Department of Defense regularly surveys areas to determine the maximum allowable per diem for employees on travel status. The survey addresses the costs for lodging, meals, and miscellaneous and incidental expenditures. As shown in Table 7, there is quite a difference between localities in the state. With the small number of items surveyed, these differences could well come from competition, or lack thereof, among service providers in the communities. Rural areas also show less of a difference in the per diem allowances than in most indexes of costs of living. Urban areas often charge as much or more for overnight accommodations and meals as do rural areas. Other expenses generally are less in urban areas, and this is reflected in the other cost of living indexes.

A second federal survey is conducted to compute adjustments for cost of living pay differentials for "overseas" military personnel. The multipliers for Alaska,

which are applied to the pay ranges applicable to duty in the lower 48 states, are also displayed in Table 7. Like other cost of living indexes, this one targets a certain group, namely uniformed military personnel. Because of this, certain areas which would normally have higher costs for the overall population might show a lower cost of living index. In Kodiak, the cost of living seems unusually low in comparison to other indexes. The major factor in this, however, is the existence of the military post exchange in Kodiak, which lessens the cost of living in this one location. Civilians living in Kodiak do not benefit from this service. This is an instance where data users must take into account the target population, and adjust their analysis of the data accordingly.

The Fourth Annual McDonalds Meal Index

When designing a cost of living survey, several important criteria need to be met. 1) The market basket should include all items normally used by the target group. 2) Prices should be collected from the same types of establishments in each of the communities. This means that convenience store prices should not be used in one area if prices from other areas are collected from large volume supermarkets. 3) Pricing should occur as close to the same time as possible. 4)

Table 6
Runzheimer Report - Living Cost Standards

City	Total Living Costs	Percent of Standard City	Trans	Percent of Standard City	Housing	Percent of Standard City	Goods & Services	Percent of Standard City	Misc. (Includes savings)	Percent of Standard City
New York, NY	\$41,699	130	\$6,782	179	\$17,259	157	\$ 9,577	103	\$2,519	120
ANCHORAGE, AK	37,404	117	4,507	119	15,771	143	10,696	115	1,926	91
Washington, D.C.	37,050	116	4,417	117	15,461	141	9,680	104	2,145	102
San Diego, CA	36,558	114	4,670	123	15,284	139	9,137	99	2,222	106
FAIRBANKS, AK	35,842	112	4,436	117	13,685	124	10,863	117	1,926	91
Boston, MA	35,262	110	4,716	125	13,074	119	9,321	101	2,005	95
JUNEAU, AK	35,240	110	4,288	113	12,883	117	11,022	119	2,076	99
STANDARD CITY, U.S.A.	32,000	--	3,782	--	10,992	--	9,272	--	2,105	--
Seattle, WA	31,746	99	4,334	115	10,460	95	9,464	102	2,390	114
Houston, TX	31,322	98	4,468	118	10,061	92	9,406	101	2,145	102
Mobile, AL	29,435	92	3,571	94	8,407	76	8,784	95	2,476	118

Source: Runzheimer International, Living Cost Division.

Since 1985, housing costs have declined in the Anchorage CPI, helping hold down the overall index

Items should be as nearly alike as possible. This is not, by any means, all the criteria which must be met for a good survey. They will help to illustrate, however, the usefulness and flaws inherent in the McDonalds Meal Index, as compiled by the Alaska Department of Labor.

The McDonalds Meal Index does not meet criteria one. This survey only answers the question, "What is the cost of a McDonalds meal in different localities?" Some of the other surveys have this problem to varying degrees. The Cost of Food at Home survey compares exactly what its title implies, food items. Although information is collected for other commodities for each locality, the experts who prepare this survey make no claim that it represents a total cost of living study for the areas.

Consistency in the types of suppliers surveyed, criterion two, is mostly met in the McDonalds Meal Index. Although prices may vary in urban areas because of location (prices in malls might, for many reasons, prove higher than those of self-contained McDonalds), most of the rural areas will have only one outlet, with the same features as outlets in other rural areas. The ACCRA survey has been faulted by some for its lack of attention to such matters. In Alaska, the three areas are surveyed by skilled researchers. This is not necessarily

the case in many other states. Lack of attention to this consistent pricing can, and will, give erroneous results.

All the surveys discussed in this article meet criterion three. The McDonalds survey was conducted over the course of two days. A decision was made to disregard promotional or sale prices, using instead the price immediately before any such reduction in price. Some surveys, with many more items in their market basket, will take the approach that such price reductions are to be expected, and will either cancel out over the course of the survey between localities or will reflect a real reduction in living costs through higher competitive pressures.

The McDonalds Meal Index fills the fourth criterion perfectly, and was one of the most important factors in selecting this item as an indicator of varying costs between communities. McDonalds places a great deal of emphasis on the consistency of its products both over time and between locations. With larger surveys, this criterion becomes harder to meet. Pricing a house and lot **exactly** the same as one in another location is impossible. As the distance between locations increases, certain brand names might not be available. Finally, certain items might have regional appeals and be unavailable in other areas surveyed.

**Table 7
Federal Per Diem Rates and Cost of Living Adjustments by Communities**

City	Per Diem	Percent of Anchorage	COLA Adjustments
Anchorage	125	--	118
Anaktuvuk Pass	140	112	
Barrow	146	117	
Bethel	127	102	
Cordova	130	104	134
Fairbanks	114	91	
Juneau	114	91	132
Ketchikan	111	89	132
Kodiak	118	94	120
Kotzebue	143	114	
Nome	129	103	
Seward	122	98	134
Tanana	129	103	
Valdez	147	118	134
Yakutat	110	88	

The results of the McDonalds Meal Index survey are presented in Table 8, as well as the data from last year's survey. The authors would like to thank the McDonalds corporation and the surveyed locations for their cooperation in compiling these data.

A SURVEY MAKING TIME SERIES COMPARISONS

The Consumer Price Index

The Consumer Price Index (CPI) has been computed by the Bureau of Labor Statistics (BLS) since the early 1900s. Results of the survey show how the cost of living has changed in a particular place over time. The survey does not

show differences in the cost of living among several different cities. This is the most confusing aspect of the CPI to most people.

A market basket is priced for the current month, and compared to the same market basket purchased during the base period. The ratio of the current price to the base period price multiplied by 100 is the new index. For consistency, all cities use the same base period, which by definition has a value of 100. Under the most current system of computing the index, an average of a city's market basket prices during the period 1984 through 1986 serves as the base price. All cities will cross over the 100 index level at some time during this period.

The market basket covers the costs of food, shelter, fuel, clothing, transportation, medical services and other goods and services used regularly by an average consumer. Because only areas defined as urban during the 1980 census are used in the CPI surveys, Alaska's only representative is Anchorage. Still the CPI serves as an important benchmark against which to compare other expenditure surveys, and illustrates changes in the Alaska economy as compared to the entire United States (Table 9).

No other measure of price movements is as widely used as the CPI, both by the public and private sectors. The concept of price movements is an important one, as the CPI measures expenditures needed to maintain a certain standard of living, and does not attempt to measure changes in income needed to maintain this lifestyle. Factors outside the scope of the CPI, such as income taxes, are not included in computations, whereas sales taxes are included since they directly affect expenditures.

Another important consideration in analyzing CPI data is the fixed sample of goods used to compute the index. A survey of the households under consideration, the Consumer Expenditure Survey, determines the "weight" of a product in the sample. Simplified, the survey attempts to peg the amount of a product consumed by the typical household. The "relative importance" of the product in the index changes as the ratio of its price to all other products changes. Since the standards of living, and the weighting of different products, change over time, the BLS regularly updates the CPI market basket and base year. For more information on the most recent CPI update, and detailed breakouts of the various expenditure groupings, refer to the June 1988 issue of *Alaska Economic Trends*.

The cost of living in the U.S. is increasing at a more rapid pace than that of Anchorage.

Table 8
Cost of a "Quarter Pounder" Meal by Location
Surveyed August, 1988

Location	Quarter pounder w/cheese	Large Fries	Medium Drink	Total Meal Cost	Percent of Anchorage	Cost August 1987	Percent Change over year
Adak	\$2.30	\$0.99	\$0.90	\$4.19	104.0	\$3.97	5.5
Anchorage	2.09	1.09	0.85	4.03	--	3.45	16.8
Eagle River	2.09	1.09	0.85	4.03	100.0	3.77	6.9
Fairbanks	1.99	0.99	0.79	3.77	93.5	3.69	2.2
Homer	1.95	0.99	0.79	3.73	92.6	3.52	6.0
Juneau	1.99	0.99	0.79	3.77	93.5	3.67	2.7
Kenai	1.99	0.99	0.82	3.80	94.3	3.61	5.3
Ketchikan	1.99	0.99	0.70	3.68	91.3	3.64	1.1
Kodiak	2.09	0.99	0.84	3.92	97.3	3.78	3.7
Sitka	1.99	0.99	0.77	3.75	93.1	3.67	2.2
Soldotna	1.99	0.99	0.82	3.80	94.3	3.61	5.3
Wasilla	2.09	0.99	0.85	3.93	97.5	3.77	4.2
Avg. Price	2.05	1.01	0.81	3.87		3.68	5.1

Analysis of the expenditure groupings, such as housing, food, fuel, and medical care, gives an indication as to their relative importance. For Alaska, the cost of housing was generally perceived to be one of the greatest factors in the state's high cost of living. Since 1985, housing costs have declined in the Anchorage CPI, helping hold down the overall index (Figure 3). With this decline, other groupings become more important to the movements of the index. Both in the Anchorage and the U.S. CPIs, medical care costs have increased in overall importance since 1985, when malpractice claims became a major topic of concern within the industry. Notice that the lines cross between 1982 and 1984. As mentioned earlier, this is the base period and will be near 100 for all localities.

As shown in Figure 4, the U.S. index has increased at a much greater rate than has the Anchorage index. It is

important to remember that the CPI is a rate of change and not a comparison between locations. For this reason, Figure 4 indicates that the cost of living in the U.S. is **increasing at a more rapid pace**, but is not higher than that of Anchorage.

CONCLUSION

There is no single comprehensive measure of the cost of living which satisfies the needs of all users of such information. Cost of living measures are designed to provide specific data about a select target group. Even then a cost of living measure is not exact, but only an approximate value for an "average" consumer. Cost of living measures which are designed to compare different geographic areas can fall short of providing a good comparison because of factors which cannot be measured. With all the built in limitations, the several cost of living

measures can provide good information, comparing different locations at a single point in time or, as with the CPI, a time series for a specific location.

The Consumer Price Index data show that the cost of living in Alaska is continuing to rise, as it is in other parts of the United States. It also shows that the cost in Anchorage is rising less sharply than the national average. Studies such as the Cost of Food at Home and ACCRA show that the cost of living is higher in Alaska than other parts of the U.S. but that the differences between the U.S. and Alaska are lessening. In major Alaska cities the differences in the cost of living have lessened during recent years. Now the costs in Anchorage, Fairbanks, and Juneau are comparable. One continuing observation is the relatively higher cost in more isolated communities than in the Alaskan urban centers.

Table 9
Consumer Price Index - Urban Consumers
U.S. and Anchorage, All Items and Components

Year	U.S.		ANCHORAGE		HOUSING		MEDICAL		FOOD & BEVERAGE	
	Annual Average	Percent Change	Annual Average	Percent Change	U.S. Annual Average	Anchorage Annual Average	U.S. Annual Average	Anchorage Annual Average	U.S. Annual Average	Anchorage Annual Average
60	29.6		34.4							
61	29.9	1.0	34.5	0.3						
62	30.2	1.0	34.7	0.6						
63	30.6	1.3	34.8	0.3						
64	31	1.3	35	0.6						
65	31.5	1.6	35.3	0.9						
66	32.4	2.9	36.3	2.8						
67	33.4	3.1	37.2	2.5						
68	34.8	4.2	38.1	2.4						
69	36.7	5.5	39.6	3.9						
70	38.8	5.7	41.1	3.8						
71	40.5	4.4	42.3	2.9						
72	41.8	3.2	43.4	2.6						
73	44.4	6.2	45.3	4.4						
74	49.3	11.0	50.2	10.8						
75	53.8	9.1	57.1	13.7						
76	56.9	5.8	61.5	7.7	53.8	62.6	52	52.6	62.1	64.2
77	60.6	6.5	65.6	6.7	57.4	65.5	57	57.9	65.8	68.9
78	65.2	7.6	70.2	7.0	62.4	69.7	61.8	63.4	72.2	75.9
79	72.6	11.3	77.6	10.5	70.1	78	67.5	69.1	79.9	84
80	82.4	13.5	85.5	10.2	81.1	85.9	74.9	78.8	86.7	89.7
81	90.9	10.3	92.4	8.1	90.4	92.5	82.9	86.9	93.5	94.3
82	96.5	6.2	97.4	5.4	96.9	98.2	92.5	94.8	97.3	97.2
83	99.6	3.2	99.2	1.8	99.5	99	100.6	99.7	99.5	99.7
84	103.9	4.3	103.3	4.1	103.6	102.7	106.8	105.5	103.2	103.2
85	107.6	3.6	105.8	2.4	107.7	103	113.5	110.9	105.6	106.2
86	109.6	1.9	107.8	1.9	110.9	102.6	122	127.8	109.1	110.8
87	113.6	3.6	108.2	0.4	114.2	97.5	130.1	137	113.5	113.1

For additional information on the surveys mentioned in this article, contact the Alaska Department of Labor, Research and Analysis Unit. Inquiries can also be made to the appropriate organizations listed below.

Mrs. Alice Klein
The American Chamber of Commerce
Researchers Association
c/o Louisville Area Chamber of
Commerce
One Riverfront Plaza
Louisville, KY 40202

The annual subscription rate for the quarterly ACCRA report is \$75.

Mr. Dennis G. Taylor
Runzheimer and Company
Living Cost Division
Runzheimer Park
Rochester, WI 53167

Runzheimer Living Cost Standards are available for purchase through the company.

For information on the Cost of Food at Home for a Week survey, contact:

Marguerite Stetson
c/o University of Alaska
Cooperative Extension Service
Fairbanks, AK 9970

Figure 3
Anchorage CPI
All Item and Selected Items 1982-1984 average equals 100

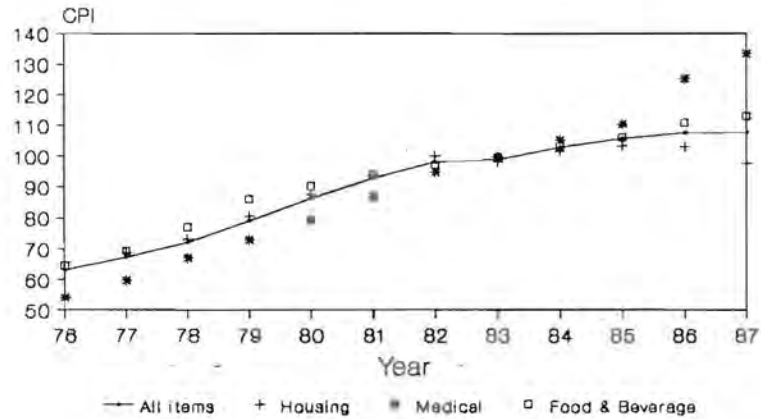


Figure 4
CPI- Urban consumers
U.S. and Anchorage 1982-1984 average equals 100

