Since the advent of the "war on poverty" in the current decade, the fact that poverty is a concept not easily defined has been well documented. Even where agreement can be reached in general terms on what constitutes a minimum standard of living--below which families may be defined as "poor"--there remains the problem of translating such a generalized concept into a specific list of commodities and services that can be priced, as a basis for estimating minimum living costs. Furthermore, there are two other facets of the problem, which add to the complexity of defining poverty or counting the number of families who are poor. (1) Living costs vary with the size of family and with the age and other characteristics of family members; and (2) Living costs vary from place to place-even for the same or an equivalent living standard, for the same family type, and at the same point in time.

With respect to the first of these problems, extensive analyses of consumption data dating back over more than a century have provided a variety of measures of general welfare, e.g., the relative adequacy of diets, the proportion of income spent for various categories of goods, or the proportion of income saved. These measures, either singly or in combination, have been used as the basis for determining scales of equivalent income for families of different size, age, and type. Hence, global estimates of equivalent costs of consumption for different family types can be obtained, if base cost estimates are available for at least one family type. 1/

Studies pertinent to the second problem -measuring the impact of locality differences-have been much more limited. It is frequently assumed that the BLS Consumer Price Indexes for 23 metropolitan areas can be used for this purpose, but this is not the case. These individual area indexes are not based on a uniform "market basket" of goods and services, but on the particular "market basket," or pattern of expenditures of wage-and clerical-worker families, in each area. Like the U.S. urban CPI, each city index is designed to measure changes in price levels over time; and the index weights for the city remain constant over time, except for major revision periods. In the absence of a common set of weights, however, the Consumer Price Indexes for individual cities cannot be used to measure differences in price levels among the cities.

If measurement of intercity differences in price levels were our objective, it would be a relatively simple task to compile such an index using a common set of weights, based, for example, on the U.S. urban average pattern of expenditures for wage-and clerical-worker families. For most purposes, however, interest centers on the question, "How much more does it cost to live in one community than in another?", not simply "How much lower or higher are prices in one area than in another for a theoretical market basket of goods?" Of course, where the cities included in such a comparison are homogeneous with respect to their average level of living, distribution of expenditures, and preference patterns, an intercity index of consumer price levels based on their average expenditure pattern would provide a reasonably good estimate of differences in living costs. Where the cities are heterogeneous, however, their average expenditure pattern would provide a less realistic basis for an intercity price index and, depending upon the degree of heterogenity, an increasingly poor estimate of differences in living costs.

BLS Approach to Measurement Problem

There is no single measure of intercity differences in living costs which will serve all purposes. In our judgment, however, the standard budget approach offers the best solution to a general purpose intercity index for 2 reasons. In the first place, this method of comparison makes it possible to hold constant the age, size, and composition of the family. Thus, variations in requirements associated with family needs are not confused with locality differences. Secondly, the level and manner of living represented by the standard can be held constant for each city in the comparison, even though the cities may be quite different with respect to their actual average levels of living, expenditure distributions, or preference patterns. At the same time, differences in the conditions of living in each locality over which individual families have no control, e.g., climate, transportation facilities, taxes, etc. can be reflected in the comparisons. Hence indexes based on a standard budget measure differences in living costs and not differences in prices only.

New Standard Budgets

In October of this year, BLS published the first of a series of new standard budgets which, when completed, will provide indexes of locality differences in living costs for 3 different living standards and for 2 different family types. The budget now available is for a moderate living standard for a family of 4 persons--an employed husband, age 38; a wife not employed outside the home; and two children, a girl age 8 and a boy 13. 2/ Cost estimates and intercity indexes based on autumn 1966 prices have been compiled for 39 metropolitan areas and for nonmetropolitan areas with populations from 2,500 to 50,000 in 4 regions. The U.S. urban average cost estimate has been used as the base of the intercity indexes.

A similar budget for a retired couple will be published early next year. Also underway are spring 1967 cost estimates and indexes for a lower and higher standard for both family types. Estimates of the cost of the moderate standard will also be made again as of spring 1967. Hence the 6 sets of cost estimates and indexes will be available for the same time period. It is expected that the budgets will be a continuing series, with costs and indexes for the spring of the year published periodically for the same 39 metropolitan areas and 4 regional classes of smaller cities as those included in the first study. Currently, there are no plans to extend the standard budget program to include other places or other types of families.

Locality Differences in Living Cost Components

Comparative living cost indexes based on the new City Worker's Family Budget for a Moderate Living Standard are shown in Table 1. Indexes have been shown separately for each of the budget components in which the comparison is for an equivalent, but not an identical, level of livingin other words, for those components in which both budget quantities (or weights) and prices may vary from city to city. Indexes are also shown separately for federal, and for State and local taxes. This component of the budget reflects not only variations in tax laws in different jurisdictions but also differences in the cost of all other budget components, since these costs constitute the base on which the tax allowances are calculated.

Indexes for the food-at-home component reflect both variation in prices and differences in regional food preference patterns used to calculate the cost of the nutritional standard within regions. Costs varied by as much as 30 percentage points and \$530 between Honolulu, based on the regional preference patterns for the West, and the smaller cities in the South. Omitting Honolulu from the comparison, the range in costs was still sizable, amounting to 18 points between Hartford, reflecting Northeastern preference patterns, and the small cities in the South. $\underline{3}/$

Cost differences among cities within the same region reflect only differences in prices. In the West, the range in food prices was 12 percentage points, in the Northeast and North Central regions 7 points, and among cities in the South only 3 points. A special calculation of the cost of food at home using the U.S. food preference pattern in all cities indicated that food prices were highest in Seattle and lower by 12 percentage points in Green Bay, Wisconsin. Food prices in the Southern cities were very close to the U.S. urban average level. Hence it is the use of the Southern regional food preference pattern-and not the level of food prices--which is responsible for the generally lower costs of the food budget in cities in that area.

Indexes for shelter are based on a weighted cost for homes that are rented (25 percent), and homes which families are buying with mortgages contracted for in 1960 (75 percent). These weights were held constant for all areas in the comparison sicne both types of living arrangements are available in each community. However, separate costs were calculated for homes located in the central city and the suburban portions of each community, and the weighted area averages for shelter reflect these locality distributions. On this basis, Champaign-Urbana and San Francisco ranked highest in rental housing costs, Boston and New York in homeowner costs. Hartford and Chicago were among the 5 most expensive cities for both types of shelter arrangements.

Homeowner costs include principal and interest payments, taxes, insurance, fuel, and utilities.

Fuel costs reflect variations in requirements resulting from differences in climate, as well as differences in price levels. However, no single one of these components of homeowner costs is responsible for the relative status of the area. For example, relatively high fuel requirements, coupled with high taxes, were responsible for Boston's status as the most expensive city for homeowners. In Chicago, and Cleveland, on the other hand, (6th and 7th ranking cities), costs were high because of the initial purchase price of the house and the subsequent principal and interest payments. The relative level of shelter costs for homeowners depends on a unique combination of the costs in each area for the various items included in the component.

With respect to transportation, Chicago, Philadelphia, and New York had lower costs--by 5 to 10 percentage points--than other cities because it was assumed that 1 in 5 families use public transportation exclusively in these areas. In other words, the weights for auto ownership were adjusted to reflect the greater accessibility of a mass transit system in these than in other areas. Although the same assumption was made for Boston, costs in that area were as high as U.S. urban average costs as a result of relatively higher price levels.

Indexes for clothing also reflect variations in requirements associated with difference in climate. Nevertheless, clothing costs were below the U.S. average in 3 of the 5 coldest areas, and above the U.S. average in 1 of the 5 warmest areas, as the factor of price combined with requirements to determine the level of costs in each area.

For the remaining components of family consumption--food away from home, housefurnishings, household operations, personal care, medical care, clothing materials and services, reading, recreation, education, tobacco, and alcoholic beverages, variations in costs reflect differences in price levels only. Indexes based on the sum of these components (shown in Column 7 of Table 1) indicate that price levels vary by less than 2 percent from the U.S. urban average in half (22) of the 43 areas studied. In cities on the West Coast, prices were from 5 to 10 percent higher, and the regional averages for small cities were from 5 to 10 percent lower, than the U.S. average.

In summary, then, the moderate living standard represented in the CWFB was adjusted in a number of ways to reflect an equivalent level of living in the areas in which the budget was priced. In consequence, intercity comparisons based on the total cost of the budget reflect differences in living costs, and not simply differences in prices. It should also be noted that the relative cost levels of the budget are for established families. The indexes do not reflect differences in living costs associated with moving from one area to another, or costs for recent in-migrants.

Indexes Based on Total Budget Costs

Intercity indexes based on the budget for a lower standard, when they become available, will be more appropriate for use in relation to public assistance and income maintenance programs than the indexes based on the moderate living standard. Nevertheless, analysis of total budget costs for the new CWFB provides some insights into current differentials in living costs for urban areas in all size classes.

Indexes of relative costs for the total budget (U.S. urban average cost = 100) ranged from 85 in the smaller cities in the South to 122 in Honolulu--a spread of 37 points (Table 1). However, 27 of the 43 areas fall within a range of plus or minus 5 percent, or approximately \$500, of the U.S. urban average cost of the budget (\$9,191).

Among the 7 areas in which total budget costs exceeded the U.S. averages by more than this amount. 5 were large metropolitan areas, each with a population of a million or more in 1960; the New York-Northeastern New Jersey, San Francisco-Oakland, Boston, Buffalo, and Milwaukee areas. Indexes for 14 other areas in this same size class, however, fell within the 5 percent range; and in 3 large cities with populations of a million or more (Atlanta, Dallas, and Houston) costs were lower than the U.S. average by more than 5 percent. Hence differences in living costs are not a function of area size alone. This is also confirmed by the presence of 2 medium-sized cities--Hartford and Honolulu--among the 7 "high cost" areas in the country.

As with the large cities, living costs in the majority of medium-sized cities were concentrated in a relatively narrow range. Also, the 4 cities, of the 17 in this size class (with 50,000 to 1 million population), in which costs were more than 5 percent below the U.S. average were all located in the South--Nashville, Baton Rouge, Orlando, and Austin.

Regional averages for small cities (with populations from 2,500 to 50,000), conceal substantial variations in costs for shelter and smaller variations in food costs. For other budget components, only regional average--not individual city--prices were calculated. Hence nothing is known about the variability of prices or costs among the cities in this size class. On a regional basis, costs in the small cities were below U.S. urban average costs, by 15 and 7 percent in the South and North Central Regions respectively, but only 2-3 percent in the Northeast and West.

"High-and Low-Cost" Living Areas

Why are living costs higher or lower in some cities than in others? An examination of the 7areas in which costs exceed the U.S. average by more than 5 percent reveals that no single component of family living is responsible for the relative status of the area. Honolulu is the highest ranking city because costs are higher there than in other areas for all major budget components except clothing, personal care, and medical care. But Honolulu is an exception. In other areas, the relative level of total costs results from a unique combination of component costs in each area.

For example, transportation and shelter-and particularly rental shelter costs were higher in Boston than in New York. But for the majority of budget components in which the locality differential was affected by price alone, costs were higher in the New York area than in Boston, This difference, coupled with somewhat higher State and local taxes, made New York the second-, and Boston the third-ranking area, based on total budget costs.

Hartford's price levels were also above Boston's; and food, transportation, and clothing costs were higher in the smaller than in the larger city. But lower shelter costs and the absence of State and local income taxes made total costs in Hartford lower than in Boston. The cost of food at home plus shelter in San Francisco was 12 percentage points below comparable costs in Boston, but higher price levels in the West Coast city for all other components narrowed the overall differential to 2 percentage points.

In Milwaukee, the sixth-ranking city, the costs of all components of family consumption except transportation were lower than in Chicago; but the cost of the total budget was higher in the Wisconsin city, where State and local taxes were third highest among all the areas in the study. Compared with Buffalo, the higher shelter costs in Milwaukee were more than offset by lower food costs in that mid-West city; but higher shelter in combination with higher taxes make Milwaukee slightly more expensive than Buffalo.

Among the 7 cities in which costs were below the U.S. average by more than 5 percent--all located in the South--costs were generally lower than in other areas for food at home, shelter, clothing, and State and local taxes. Transportation costs were not among the lowest in these areas, however. And for those components in which price level was the only factor affecting intercity differences, costs in 3 of the 7 cities--Houston, Dallas, and Atlanta--were approximately the same as the U.S. urban average.

Implications for the Definition of Poverty

What are the implications of these findings for the definition of poverty? Certainly the most obvious one is that a single dollar cost estimate of need, even for a narrowly defined family type, will not be equally representative of requirements in all urban places. However, there is no easy solution to the problem of reflecting actual requirements, short of adjusting the cost estimates on a city-by-city basis.

Furthermore, even if this were administratively feasible, some thought should be given to the circularity implicit in this approach. To some extent any system of living cost differentials will tend to perpetuate the relative standing of different communities. That is, so-called "high-cost" areas, which receive higher allowances, will tend to remain relatively "high-cost"; similarly "low-cost" areas receiving lower allowances will remain relatively "lower-cost". Difference in price levels is only one of a host of factors responsible for differences in living costs in different places. Among others are the long-term average income level in a community, its ethnic background, educational level, age distribution, geographical location, type of industrial development, etc. These factors, which determine the "cost of living" in a community, may also be causal in relation to the problem of poverty. Hence a family living below the poverty line established for a "low-cost" area may need relatively more--rather than less--

than a family living below the poverty line in a "high-cost" area, if the conditions that breed poverty in the "low cost" city are to be eliminated.

1/ One such scale, published by BLS in November 1960, is described in a Technical Note: Estimating Equivalent Incomes of Budget Costs by Family Type (see Technical Reference No. 8). The scale is based on the assumption that families spending the same proportion of income on food have attained equal levels of living. While the scale is useful in estimating equivalent costs of goods and services, or net income requirements after income taxes and occupational expenses, it cannot be applied to individual items or major components of budget costs. A revised equivalence scale, based on information from the Bureau's Survey of Consumer Expenditures, 1960-61, was issued in October 1967.

2/ USDL, BLS, "City Worker's Family Budget for a Moderate Living Standard, Autumn 1966," Bulletin No. 1570-1, USGPO, Washington, D.C. (40 pp.).

3/ Since Honolulu costs were significantly higher than those in the mainland cities for most categories of the budget, comparisons in the remainder of the paper have been limited to the 42 mainland areas.

TABLE 1. INDEXES OF COMPARATIVE LIVING COSTS BASED ON THE CITY WORKER'S FANTLY BUDGET 1/Autumn 1966

(U.S Urban Average Cost = 100)

	: COSTOF FAMILY CONSUMPTION :PERSONAL TAXES									
Area <u>2</u> /	:Total budget <u>3</u> /	Total4/:	Food at home	: Shelter 5/	: Transportation 6/	Clothing :	All other 7/ :	Total :	Tederal	State and local
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Nonelulu Record	1 1 2 2	110	121	120	199	67		149	197	404
New York-Mortheastern New Jarsey	111	110	109	136		105	106	125	110	104
Bester Mess	1 110	110	110	120	100	100	100	125	117	153
Hertford Conn	100	110	110	120	112	100	100	103	114	135
San Francisco-Ochland Colif	109	107	100	120	112	105	110	105	112	69
Milwaykan Win	108	107	100	111	100	100	100	121	100	341
Buffelo N V	106	105	102	100	102	105	100	117	109	201
Section Freezett Unch	105	104	105	109	113	105	100	11/	109	201
Chieron III -Northwestown Indiana	103	107	104	100	115	100	100	20	105	
Minneges Minneges Deul Minn	103	105	101	120	75	101	102	30	105	363
Les Angeles-Lens Beach Calif	103	100	9/	103	102	37	30	100	105	505
Coden Bandda Taur	103	103	95	70	107	104	110	100	104	104
Teddar wapids, jowa	103	102	97	105	103	102	101	111	104	104
Halanapolis, ind.	102	102	98	100	109	103	100	103	103	103
Wasaington, D.GMaVa.	102	101	100	106	101		100	110	103	1/0
Champaign-orbana, 111.	102	103	99	116		101	100	93	102	
Nan Hiego, Galli.	101	101	92	100	110	102	105	98	102	57
Cleveland, Unio	101	103	96	115	101	103	99	92	102	
Portland, Maine	101	102	108	98	101	108	99	92	101	3
St. Louis, 30111.	101	101	102	99	103	100	100	101	101	107
Denver, Colo.	100	100	99	99	106	104	101	102	100	116
Philadelphia, PaW.J.	100	100	107	96	91	102	100	102	100	127
Kansas City, MoKans.	100	99	100	91	107	101	101	106	104	131
Green Bay, Wis.	99	96	94	94	101	100	97	117	98	301
Wichita, Kans.	98	98	101	92	104	99	99	102	97	145
Northeast, Nonmetropolitan 8/	98	98	104	95	101	97	93	96	97	95
Detroit, Mich.	98	99	98	93	100	102	102	90	96	32
Cincinnati, Ohio-KyInd.	98	98	98	98	102	100	95	96	96	98
West, Nonmetropolitan <u>8</u> /	97	96	98	87	104	103	95	107	96	221
Bakersfield, Calif.	97	97	97	83	110	101	102	91	95	50
Pittsburgh, Pa.	97	97	103	87	97	100	99	96	95	109
Lancaster, Pa.	97	97	107	87	95	99	97	95	94	98
Baltimore, Hd.	96	94	93	86	99	96	100	104	93	208
Dayton, Ohio	95	96	97	92	101	101	94	87	91	42
Durham, N.C.	95	93	92	89	99	95	95	103	91	221
Mashville, Tenn.	93	95	92	88	102	99	98	80	88	1
Baton Rouge, La.	93	94	95	83	110	91	97	85	86	56
North Central, Nonmetropolitan 8/	93	93	97	90	97	96	89	89	89	94
Dellas, Tex.	92	94	93	82	101	93	101	79	87	3
Atlanta, Ga.	92	92	94	76	101	95	100	84	86	61
Orlando, Fla.	92	93	92	85	102	92	97	78	86	***
Houston, Tex.	91	93	94	76	106	91	101	78	86	3
Austin, Tex.	87	89	93	70	99	92	95	72	79	3
South, Nonmetropolitan <u>8</u> /	85	86	92	69	99	89	89	75	177	57
· -		1		1		1		1	1	

1/ The family consists of an employed husband, aged 38, a wife not employed outside the home, an 8-year-old girl, and a 13-year-old bey.
2/ Areas are ranked by the total budget cost level.
3/ The total includes the following components not shown separately: Gifts and contributions, life insurance, occupational expenses, social security, and disability payments.
4/ Includes cost of miscellaneous items not shown separately: Gifts and contributions, life insurance, occupational expenses, social security, and disability payments.
5/ The average costs of shelter were weighted by the following proportions: 25 percent for families living in rented dwellings, 75 percent for families living in owned homes.
6/ The average costs of succession of automobile owners and nonowners were weighted by the following proportion of families: Reston, Chicago, New York, and Philadelphia, 80 percent for automobile owners, 20 percent for automobile owners all other areas, 100 percent for automobile owners and percent for nonowners; laltimore, Cleveland, Detroit, Los Angeles, Pitteburgh, San Francisco, St. Louis, and Weshington, D.C., with pepulations of 1.4 million or more in 1960, 95 percent for automobile owners and 5 percent for nonowners.
7/ Includes food away from home, housefurnishings, household operations, personal care, medical care, clething materials and services, reading, recreation, education, tobacco, and elcoholic beverages.
8/ Places with populations in costs of these components reflect differences in price levels only.

8/ Places with populations of 2,500 to 50,000.