Interim Adjustment of Consumers' Price Index

Bulletin No. 1039

UNITED STATES DEPARTMENT OF LABOR
MAURICE J. TOBIN, *Secretary*
BUREAU OF LABOR STATISTICS
EWAN CLAGUE, *Commissioner*

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Correction of New Unit Bias In Rent Component of Consumers' Price Index and Relative Importance of Items

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Letter of Transmittal

UNITED STATES DEPARTMENT OF LABOR,
BUREAU OF LABOR STATISTICS,
Washington, D. C., June 29, 1951.

The SECRETARY OF LABOR:

I have the honor to transmit herewith a bulletin presenting a detailed description of the Interim Adjustment of the Consumers' Price Index. This adjustment was undertaken when economic, military, and legislative developments during the summer of 1950 made it imperative that the index should be the best possible measure of current change in prices of goods and services usually purchased by moderate-income city families.

The interim adjustment of the index and the preparation of materials presented herein, were carried out in the Division of Prices and Cost of Living. Much of this information has appeared as special articles in the Monthly Labor Review which were prepared by George Johnson, Bruno Schiro, Doris P. Rothwell, and Donald C. Corridon of the Prices and Cost of Living Division. Important details and records have been added for this bulletin.

EWAN CLAGUE, *Commissioner.*

Hon. MAURICE J. TOBIN,
Secretary of Labor.

Preface

The adjusted index is the same as the old one in major respects. It is still defined as a measure of average price change for goods and services customarily bought by moderate-income families in large cities. Calculation procedures and price-collection methods are identical. The important differences are in the weights used to combine price changes for individual items and groups of items, and the inclusion of the new unit bias correction. In the old index the weights reflected quantities bought by wage earner-clerical workers' families whose incomes averaged $1,524 in 1934–36. In the adjusted index they reflect approximate quantities bought by the same type of families in 1949. Their 1949 income is estimated at about $3,500.

The Bureau is now concentrating on its full-scale revision of the index, which may include more basic changes in concepts or definition. The extensive survey of family expenditures through interviews with 17,000 families which will furnish the basis for final weight revisions was conducted in 91 separate cities throughout the country.* Pending completion of the comprehensive revision, the Bureau has plans to keep abreast of current changes in family spending patterns by means of a consumer panel of about 1,000 families selected from the 17,000 families and also through other independent sources. If shortages and rationing cause important changes in spending patterns, the Bureau plans to make adjustments in weights where these are necessary to prevent significant error in the United States "all items" index. In this way it is hoped that serious maladjustments in weights can be prevented in the future so that the Bureau's index will continue to be an accurate measure of current price changes.

*For details see the Monthly Labor Review, January 1951.

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Interim Adjustment of Consumers' Price Index

Introduction

Economic, military, and legislative developments during the summer of 1950 made necessary certain interim improvements in the Consumers' Price Index in advance of the comprehensive revision scheduled for completion in June 1952.[1] No major changes in procedures or weights had been made since the full scale revision of 1940.

The need for revision in a number of respects was recognized soon after World War II, and in 1949 Congress authorized a large scale 3-year program for modernization of the Index. This program is still in progress.

When this program was begun, it was not expected to make any important changes in the Index until the general revision was completed. This assumed that the period 1950–52 would be one of relatively stable economic conditions with moderate and comparatively uniform price movements. This expectation was dispelled suddenly by the military developments in Korea in June 1950 and by the steps taken toward economic mobilization of the United States. Sharp and diverse price rises for a number of commodities followed immediately upon the outbreak of hostilities as speculators, and industrial and individual consumers, with the memory of World War II scarcities still vivid, rushed to buy goods while they were still available. These sharp and diverse price changes magnified the effects of the misweighting of the components of the index.

One phase of the adjustment, namely, correction of the new unit bias in the rent index, had been planned and announced in 1949. The first section of this bulletin describes this correction to the rent component of the Consumers' Price Index. Other improvements, such as the introduction of new or substitute items, were comparatively minor and routine; but some represent departures from customary practices. Because these changes, in the aggregate, are likely to affect the trend of the index from January 1950 into the future, the Bureau of Labor Statistics announced them in advance. They are documented in detail in this bulletin.

[1] A general discussion of the shortcomings of the Index and of the Bureau's revision program will be found in "Revision of the Consumers' Price Index" in the Monthly Labor Review for July 1950.

Correction of New Unit Bias in Rent Component of Index

The understatement of the rise in rents during the past decade reflected by the rent component of the Consumers' Price Index, and by the CPI itself, has been corrected and is here described. It arose during the war and postwar years from the failure to reflect the difference between rents charged for new dwellings when they first enter the rental market and those of comparable

dwellings already in the market.[2] This difference is equivalent to a price change which properly should be reflected in an index of rents and prices.

The 3-year revision program of the CPI, authorized in the fall of 1949, included comprehensive housing studies in each of the 34 city areas covered in the CPI and made the correction possible. From surveys conducted early in 1950, the Bureau of Labor Statistics is now able to announce that the correction to the rent index for the accumulated downward bias for 10 years—from 1940 to 1950—is 5.5 percent of the January 1950 rent index and 0.8 percent of the "all items" index for the 34 cities combined. Applying this correction to the January 1950 index would raise the rent index by 6.8 *index points* and the all-items index by 1.3 *index points*. The amount of this correction is somewhat higher than the 1949 rough estimate which follows, because it takes into account the very high rate of new rental construction during 1949 and also because the measurement was more accurate.

Several rough estimates of the understatement had previously been made by the Bureau so that users of the CPI could appraise the extent of this "new unit" bias.[3] However, they were not incorporated into the CPI because of the meager data upon which they were based. In July 1949, the Bureau made its last rough estimate that, as a result of this "downward bias" from 1940 to 1949, the rent index in February 1949 was too low by something between 3½ and 5 *index points*, and that as a result the all-items index was too low by something between 0.6 and 0.9 *index points*.

Origin of New Unit Bias

The procedure used in making the correction for the "new unit" bias in the rent component of the CPI was, of course, conditioned by the basic concept of the Index and can be clarified by a brief review of how the bias originates.

The CPI measures average changes in retail prices of a bill of goods and services of constant quantities and qualities, purchased by moderate income families. It is designed to show the influence of price changes only, and to exclude the effect of changes in the quantities or qualities purchased. Because of the difficulty of determining which houses are identical in quality, the Bureau has measured changes in rents for samples of identical houses as a means of arriving at the change in rent for dwellings of identical quality. If the rent for a unit is not reported at the beginning and the ending months of the period for which rental change is measured, that unit is excluded from the tabulation.

Additions to the rental market (created by new construction or conversion) do not have an "earlier" rent when they first come onto the market, and therefore the procedures for calculating the index do not reflect the difference in rent between "new" units and comparable existing units. Consequently, the price change—between average rents for dwellings in one period and average rent for identical qualities of housing, including new dwellings, in a later period—which properly should be reflected in the index, is missed.

Normally, in a market free from rent controls there is no consistent differential in price between "new" units and comparable existing dwellings. However, during periods of rent control, those market forces which tend to equate the rents for "new" and "old" housing of identical quality are not permitted to function.

Thus, during the war and postwar years—a prolonged period of rent control and housing shortages—additions to the rental market almost always came on the market at higher rents than those for comparable dwellings already in existence.[4] It is the failure of the index to reflect this

[2] References to this problem were made in the following publications: The Cost of Living Index of the Bureau of Labor Statistics, a mimeographed report, February 25, 1944; The Report of the President's Committee on the Cost of Living, 1945; a technical note released with the September 1946 Consumers' Price Index; a technical note in the January 1948 Monthly Labor Review, Residential Rents Under the 1947 Housing and Rent Act; a technical note appearing quarterly in Construction, beginning with the March 1948 issue; a technical note in the BLS regular monthly release of the Consumers' Price Index, beginning in July 1948; The Rent Index: Part 1—Concept and Measurement, and Part 2: Methodology of Measurement, in Monthly Labor Review, December 1948 and January 1949; and Estimate of New Unit Bias in CPI Rent Index, Monthly Labor Review, July 1949.

[3] See the Rent Index: Part 2—Methodology of Measurement, Monthly Labor Review, January 1949 (pp. 66-67), also reprinted as Serial No. R. 1947; and Estimate of New Unit Bias in CPI Rent Index, Monthly Labor Review, July 1949, or Serial No. R. 1965.

[4] Federal rent controls were not in effect until 1942, but additions in 1940 and after were included as "new" units because in many cities rents were "rolled back" to their levels as of January and April 1941, and in Washington, D. C., as of January 1940. Furthermore, in many cities in which rents were frozen as of March 1942, voluntary fair rent commissions had been in operation earlier with varying degrees of effectiveness. To some extent, therefore, new units tended to come onto the market at levels higher than comparable existing dwellings in these earlier years.

New rental units were controlled by the Federal rent regulations as they came on the market, but due allowance was made for increased construction costs in setting their controlled rents. As a result the accumulated "new unit bias" remained relatively small until 1947; beginning in 1947, it increased sharply because new dwellings created by construction and conversions were removed from rent control while existing dwellings remained under control.

difference which introduced the consistent downward bias that is referred to as the "new unit bias" in the rent index.

At the same time, the Bureau has been unable to bring up to date frequently the sample of tenant dwellings from which rental data are obtained. Newly built rented dwellings are drawn into the samples only when a new sample is drawn. Since 1940, the Bureau has been able to revise its samples in 1942, in 1944–45, and again in 1950 as a result of the surveys upon which the Bureau based the present correction of the new unit bias.

Requirements for Making the Correction

Two kinds of data were required in order to correct the rent index for each city: (1) The proportion of the total number of rental dwellings which were additions to the rental housing market over the 10-year period; and (2) the average relative difference in rents between these and comparable existing dwellings. The volume of additions to the rental market and the relative importance of these additions to the total rental housing supply could only be determined by a sample survey of housing in each city area.[5] Although there were some data on average rents by cities, no source was available that could supply average rents for units created prior to 1940 and for units created in the last 10 years. Here again, to measure rents by quality classes, a specially designed survey of housing was required.[6]

Estimating Volume of New Rental Housing

In order to keep within the strict time schedule established for the Bureau's revision program, a third of the comprehensive housing surveys were conducted in December 1949, January 1950, and February 1950, respectively. In order to estimate the volume of new rental construction in the housing market area of each city, the surveys were designed to insure adequate representation of all kinds of blocks in the area to be covered, and at the same time to cover that area around the city which represented its housing market.

Survey Area. Boundaries established for the survey area determine to an important degree the accuracy of an estimate of the proportion of new and old dwellings. In large cities particularly, the proportion of new buildings in the suburbs has been greater than in the central city. It was therefore important that the Bureau should survey the area which included the city's primary housing market and yet not cover housing located beyond the direct competitive influence of housing in the central city.

The use of the Census standard metropolitan area as the survey area was rejected because it included a territory too large both from the standpoint of survey cost and housing market uniformity. The metropolitan area is defined as the entire county in which the central city is located as well as adjacent counties which are closely related economically to the central city. As a result, the area takes in much rural housing, as well as communities with housing markets comparatively unrelated to that of the central city.

The new Census designation of the urbanized area, designed to separate urban and rural population more efficiently in the vicinity of large cities for the 1950 Census, was found to parallel closely the primary housing market for most cities.[7]

Accordingly, these urbanized areas were adopted in establishing the outer limits to be covered by the dwelling unit surveys in 28 of the 34 cities. In Boston, Chicago, Philadelphia, Pittsburgh, and San Francisco, the urbanized areas were too extensive to be analyzed economically and were considered to cover much more than the city's primary housing market area. After consultation with staff members of the Housing and Home Finance Agency and the Federal Housing Agency, those portions of the urbanized areas not considered a part of the primary housing market for the five

[5] In its previous estimate of the extent of the "new unit bias," the Bureau relied on building permit data published by its Construction Division. Several assumptions had to be made in using these data. First, for individual cities, no information was available on starts or completions; so it was assumed that the number of dwelling units authorized equalled the number of dwelling units built. Secondly, it was assumed that all dwelling units in two-family and multifamily structures were built for rent, and that all single-family structures were built for sale. No information on conversions was available for individual cities. See Estimate of New Unit Bias in CPI Rent Index, Serial No. R. 1965.

[6] In the earlier estimate of the new unit bias, the Bureau estimated the differentials on the basis of general economic data, with the help of opinion surveys conducted by the price control agencies. No attempt was made to estimate differentials separately for each city. See Serial No. R. 1965.

[7] The urbanized area was determined primarily by housing density and by transportation ties to the central city. The districts outside the city limits which were defined by the Census as a part of the urbanized area in 1949, included those areas contiguous to the central city with a density of at least 500 dwelling units per square mile. Also included were noncontiguous areas with a similar density within 1½ miles of the central contiguous area by the shortest route. Farther outlying areas within a half mile of the secondary urban core and meeting the density requirement were also included.

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cities were dropped. The New York City survey was confined to the five boroughs.[8]

Sample Design. To insure an accurate representation of all types of housing in the area in the selection of the sample of blocks, separate treatment was given to blocks that were densely populated, to blocks occupied largely by a racial minority, and to blocks and areas where housing development was considered to have been likely since 1940. On the basis of data available from the 1940 Census Bulletin of Block Statistics, the blocks in each city were separated into these strata and sampled separately. All areas in the city which in 1940 were geographically large and sparsely developed or entirely undeveloped, and the survey areas beyond the city limits were investigated by a special field survey team. This was done in order to identify areas of new construction and blocks containing apartment developments. These strata of newly developed areas (built in 1940 and after) and old developed areas were then sampled separately to insure a full representation of blocks containing new housing.

Densely populated blocks or blocks containing apartment developments were sampled relatively more heavily than small blocks or nonapartment blocks. However, within the large blocks the dwelling units were sampled at a less intensive ratio than in the small blocks. The product of the "block" ratio and the "within block" ratio in both cases equaled the over-all sampling ratio.[9]

This procedure increased the chances of properly representing new apartment developments, particularly in those cities containing a relatively small number of such developments. It also insured a smaller sampling error on the average rent. The in-block ratios in both the small and large blocks were selected so as to yield approximately eight dwelling units (owned and rented) per block (and in most cities about four rented units per block). Analysis of the variability of rents within blocks and between blocks and the relative costs of sampling blocks and sampling dwellings within blocks, showed that, by obtaining approximately four rental units per block, about the optimum expenditure of the funds available for the survey would be achieved.

The size of the sample in each city was fixed in order to achieve two standard errors of $1.40 on the average rent. Considerably larger samples were required to achieve the stated degree of accuracy in cities with a high variance in rent than in those with more uniform rents.

The total number of blocks and the total number of dwelling units included in the sample for each of the 34 cities are shown in table 1.

TABLE 1.—*Number of blocks and dwelling units sampled in the December 1949–February 1950 surveys*

City	Total number sampled		City	Total number sampled	
	Blocks	Units		Blocks	Units
Atlanta	446	4,300	Milwaukee	431	2,800
Baltimore	1,105	5,900	Minneapolis	510	3,700
Birmingham	566	4,100	Mobile	639	6,100
Boston	793	4,500	New Orleans	370	3,100
Buffalo	400	3,100	New York	1,302	9,800
Chicago	836	5,500	Norfolk	488	3,800
Cincinnati	434	4,000	Philadelphia	790	5,100
Cleveland	482	3,900	Pittsburgh	748	4,300
Denver	453	3,200	Portland, Maine	325	2,000
Detroit	785	5,500	Portland, Oreg	602	3,800
Houston	656	5,000	Richmond	466	3,200
Indianapolis	505	4,500	St. Louis	1,134	8,400
Jacksonville	448	2,700	San Francisco	474	3,500
Kansas City	413	3,200	Savannah	339	2,700
Los Angeles	745	5,900	Scranton	518	3,300
Manchester	393	2,300	Seattle	745	4,700
Memphis	644	4,900	Washington	1,367	9,800

Classifying Units as "Old" and "New." Descriptive information for each dwelling in the sample was obtained by personal visit of a Bureau field representative to the dwelling. The representatives were instructed to classify each structure by whether it was built before 1920, between 1920 and 1939, or the exact year if "new," i. e., built in 1940 and after. If the occupant could not state the year the structure was built, agents attempted to get the information from long-time residents in the block. In addition, each unit in the sample was classified by whether it was created when the structure was built, or by subsequent conversion of the structure. This included structures converted from a nonresidential to a resi-

[8] There is some evidence to indicate that had the Bureau surveyed the Census standard metropolitan area, rather than the smaller Census urbanized area, the relative importance of all newly created dwellings (both tenant- and owner-occupied, built in 1940 or later) might have been somewhat higher. Rough calculations from Census preliminary April 1950 housing counts for the metropolitan areas showed that for most of the 34 cities this proportion was higher for the standard metropolitan area than for the urbanized area, but for only 10 cities was the difference greater than 5 percentage points. Much of this difference resulted from the considerably larger proportion of owner-occupied dwellings constructed in the outlying portions of the standard metropolitan area. These differences would therefore not have been as great for rental dwellings only, which alone affected the calculation of the new unit bias correction.

[9] For example, in San Francisco, every ninth large or apartment block was included in the sample, but only every seventeenth unit was sampled within these blocks; and every fifty-first small block was included in the sample, but every third dwelling was included in the sample within these small blocks.

dential use, as well as units created by internal structural changes to already existing residential dwellings. Typical of structural conversions were the tearing out or building of partitions, doors, or walls; or the installation of a sink, toilet, bathtub, or shower. Regardless of when the structure was originally built, units created by structural changes in 1940 or after were considered as "new" additions to the rental market.

For each of the 34 city areas surveyed, the proportion of all existing dwellings in 1949–50 which were created in 1940 and after is shown in table 2. In 24 of the 34 cities, the proportions built in the last 10 years were greater for owner-occupied dwellings than for rented dwellings, confirming other evidences of the substantial shift to home ownership since 1940. Among the cities where a higher proportion of rental units were built since 1939, are localities where substantial public and private war-housing developments were initiated; for example, Mobile, Norfolk, Portland, Oreg., and Washington, D. C.

In general, the greatest proportion of new rented dwellings were in southern cities; the smallest proportion in the northeastern and midwestern cities. New tenant-occupied dwelling units range from 44 percent of the total rental market in Norfolk to 4 percent in Chicago, St. Louis, and Scranton.

TABLE 2.—*Relative proportions of all rented and all owner-occupied dwellings built or created by structural conversion in 1940 or after, December 1949–February 1950*

[In percent]

Area	Tenant-occupied		Owner-occupied	
	New [1]	Old [2]	New [1]	Old [2]
Atlanta	19	81	26	74
Baltimore	30	70	22	78
Birmingham	18	82	25	75
Boston	5	95	6	94
Buffalo	16	84	16	84
Chicago	4	96	15	85
Cincinnati	8	92	15	85
Cleveland	7	93	21	79
Denver	19	81	28	72
Detroit	9	91	31	69
Houston	33	67	53	47
Indianapolis	13	87	20	80
Jacksonville	16	84	35	65
Kansas City	18	82	11	89
Los Angeles	27	73	38	62
Manchester	8	92	15	85
Memphis	20	80	31	69
Milwaukee	9	91	16	84
Minneapolis	9	91	20	80
Mobile	42	58	36	64
New Orleans	15	85	30	70
New York City	10	90	11	89
Norfolk	44	56	35	65
Philadelphia	14	86	15	85
Pittsburgh	10	90	16	84
Portland, Maine	11	89	15	85
Portland, Oreg	31	69	22	78
Richmond	17	83	28	72
St. Louis	4	96	17	83
San Francisco	20	80	22	78
Savannah	22	78	31	69
Scranton	4	96	4	96
Seattle	29	71	30	70
Washington	40	60	33	67

[1] Not in existence prior to 1940. [2] In existence prior to 1940.

Estimating Rent Differentials

The second step in the computation of the correction for the new unit bias required the separation of the sample of tenant-occupied dwelling units into groups having the same characteristics. Within each of these groupings—or cells of comparable quality—the average rent for the new and old units could then be compared to determine the difference in rent for each quality grouping on the survey date. These group or cell differences were combined with weights based on the number of new units in each quality group (quality cell) to obtain for each city the average differential in rent between new and old units of comparable quality.

Measuring Housing Quality. Any precise measure of housing quality would necessitate an expert individual appraisal of both structure and location of each old and new house. However, the size of the Bureau surveys, involving the sampling of 153,000 dwellings in 34 areas within a short period, limited the selection of quality characteristics to those that were susceptible to collection in mass surveys: namely, to those characteristics which could be ascertained by field representatives from a visual inspection of the neighborhood and the structure, and by objective and easily understood questions to be asked of the occupants of the dwelling. By collecting simple and objective data, it was possible to obtain samples of sufficient size to reduce the sampling error to a reasonable limit. The data obtained included descriptions of the dwelling unit, the structure containing the unit, and the neighborhood.[10]

The description of the dwelling unit consisted of such items as the number of rooms and bathroom and plumbing facilities (ranging from no running water to two or more private bathrooms). Number

[10] It might have been desirable to include among the quality characteristics such items as dimensions of rooms, window area, size of closet space, degree of maintenance, and location within structure. However, this would have required the services of housing experts rather than the part-time enumerators employed. The alternative of accepting tenants' opinions on the value of such characteristics would have introduced substantial error.

of rooms is of primary importance in differentiating quality levels among living units in similar neighborhoods and structures; the type of bathroom facilities is highly correlated with over-all housing quality.[11] Additional information obtained on the kind of facilities available in the dwellings consisted of type of cooking fuel, kind of heating equipment, kind of refrigeration, and utilities and furniture included in the rent. Quality is generally indicated in most urban housing by the use of gas or electricity for cooking and by mechanical refrigeration. A dwelling having a furnace is symptomatic of a higher housing quality than a corresponding dwelling having an old-fashioned installed heating stove.

Structural characteristics taken into account included the type of exterior building material and whether the dwelling was a single-family home, flat, or apartment. Each dwelling in the sample was classified as "dilapidated" or "not dilapidated." [12] A dwelling was classified as dilapidated if it had one major defect, a combination of minor defects, or inadequate original construction.

The neighborhood where each dwelling unit was located was described by the presence of such hazards as a railroad or an inter-city truck route. The extent of commercial or industrial development and the accessibility of play space and schools were also reported. At the same time, each enumerator was required to rate the neighborhood by general appearance (whether it was well kept, average, run down, very poor) and to enter his subjective rating of the quality of the neighborhood.

Because the appearance and over-all quality ratings were subjective, an effort was made to clarify and standardize the basis for each possible rating in the training sessions held in the cities prior to each survey. During the field work, supervisors made frequent checks of the interviewers' evaluations of all of the items. Post-audit showed that the correlations between the over-all ratings and the objective characteristics reported were good, indicating that the ratings on over-all quality were consistent and reasonable and consequently could be used in the comparisons.

Construction of Quality Cells. Although the number of characteristics obtained in the surveys was limited, the total number of theoretically possible quality cells was enormous—more than 1.5 million. Of course, most of them would never occur since the descriptive characteristics for a dwelling are highly correlated. For example, a dwelling which contains two or more complete private bathrooms never consists of one to three rooms; and an urban dwelling with one complete private bathroom usually has modern cooking facilities. Such correlation among housing characteristics indicated the possibility of eliminating certain of the descriptive items in the construction of the quality cells. In turn, any reduction in the amount of descriptive material needed for matching new and old units accurately would correspondingly reduce the complexity and cost of the operation.

To test the practicability of simplifying the comparisons, various levels of progressively more detailed specifications were used in an experimental classification of the units into quality cells. If there was little change in the average differences in rent between new and old units, regardless of whether the units were classified by a few characteristics or by many, naturally the smaller number of characteristics could be used. In this experiment with three cities, however, it became apparent that all of the characteristics were needed.[13]

Imputing Cell Differentials. The decision to compare units using the most exact descriptions available created a further problem. In the cities covered experimentally, it was observed that as the number of characteristics used in describing the quality cells was increased, there was a greater number of quality cells of new units into which the old units failed to fit.

In dealing with these "incomplete" cells, several alternatives were considered. The problem was finally handled by assigning to each incomplete cell the differential in rent from that "complete" cell *nearest* to it in quality. When two or more complete cells were equally near in quality, that cell having the nearest average rent (based only

[11] As an example of the prevalence in many cities of substandard bathroom facilities the percentages of rental dwelling units not having a minimum of one complete private bathroom are given for six cities: Birmingham 64 percent; Savannah 53 percent; Memphis 53 percent; Mobile 44 percent; Atlanta 39 percent; and St. Louis 35 percent.

[12] According to the definition of dilapidation developed for the 1950 Census by the Technical Advisory Committee on Housing Statistics.

[13] Although 11 main descriptive characteristics are mentioned, each was subdivided to provide further detail. As an example, 10 combinations of plumbing and bathroom facilities were possible, 2 descriptive items for cooking equipment, 2 for refrigeration, 3 descriptive items for heating equipment, 6 kinds of exterior building material, etc., to describe a dwelling unit. In the final comparison, 48 descriptive characteristics were available to describe the dwelling units, providing a theoretical maximum of 1.6 million quality cells, or combinations of characteristics, to describe the housing in a given city.

on its new units) was assigned to that of the incomplete cell. This imputation procedure was required for each of the 34 cities. It raised the differentials for 15 cities, lowered them for 18 cities, and made no change in 1 city. Typical comparisons between the differences computed from complete cells only, and differences computed from complete cells plus imputed incomplete cells follow for five cities:

	Differentials based on—	
	Complete cells	*Complete cells and imputed incomplete cells*
	[Old units=100]	
Atlanta	158	166
Buffalo	152	150
Chicago	131	137
Kansas City	156	152
Milwaukee	143	142

A further refinement of the procedure was necessary to avoid possible bias resulting from over-representing any single cell, i. e., assigning its rent differential to a disproportionate number of incomplete cells. If one cell difference was imputed to many incomplete cells the total of which contained 10 percent or more of the total number of new units in the sample, the average differential of the *three* complete cells nearest in quality was substituted to provide a more dependable imputation.

Rent Differences by Cities. The final average difference in rent between new and old rental dwellings of comparable quality obtained for each of the 34 areas is given in table 3.

TABLE 3.—*Percentage difference between rentals of units coming on the market in 1940 and later, and rentals of similar older units, as of December 1949–February 1950*

[Old units=100]

City	Percent new unit rentals are of comparable old unit rentals	City	Percent new unit rentals are of comparable old unit rentals
Atlanta	166	Milwaukee	142
Baltimore	140	Minneapolis	126
Birmingham	152	Mobile	114
Boston	166	New Orleans	199
Buffalo	150	New York	145
Chicago	137	Norfolk	138
Cincinnati	153	Philadelphia	118
Cleveland	199	Pittsburgh	104
Denver	205	Portland, Maine	107
Detroit	149	Portland, Oreg	121
Houston	137	Richmond	185
Indianapolis	122	St. Louis	156
Jacksonville	115	San Francisco	124
Kansas City	152	Savannah	181
Los Angeles	143	Scranton	114
Manchester	176	Seattle	150
Memphis	163	Washington	123

There is some indication of a regional pattern, with southern cities as a whole showing a greater difference than northern cities. Outstanding exceptions to the pattern in the South are Jacksonville, Mobile, and Houston. In these cities, either public war housing was substantial or rents were decontrolled.

Index Correction Factor. The relative volume of new rental housing in relation to total rental housing (table 2) and the percentage rent differences of new units over old units (table 3) were combined for each city to estimate the amount of the new unit bias and to obtain a correction factor which can be applied directly to the rent component of the CPI for each city. The actual procedure is illustrated by the calculation of the correction factor for Buffalo (rounded figures used for illustrative purposes):

	Percent
Rental units built or converted 1940 or after	16
Rental units built before 1940	84
Total	100
Rent difference for new units (relative to old units)[1]	150
Rent difference for old units [2]	100

[1] As estimated.
[2] By definition.

Computation of the rent index correction factor:

	Percent of total units		*Relative rent difference*
New units	16×150	=	24.00
Old units	84×100	=	84.00
	100		108.00

Thus, the correction factor for the rent index is +8.0 percent.

This correction factor can then be applied directly to the rent index for Buffalo to obtain the adjusted rent index as follows:

Rent index		*Correction factor*		*Index points to be added*
126	×	8%	=	10

The correction factor to be applied to the "all items" index in each city was the product of the rent-index correction factor and the relative importance of rent to "all items."

The correction factors for the combined 34-city indexes were obtained by weighting the correction factors for each city according to the proportion of population in that city compared with total population of all 34 cities.

Correction factors for each city and the effect of the correction factors on the January 1950 rent and all-items indexes by *index points* to be added are shown in table 4.

TABLE 4.—*Correction to the rent index and the "all items" Consumers' Price Index for accumulated new unit bias, 1940 to January 1950*

City	Month	Effect, for month indicated, on—			
		Rent index "Old series"		"All items" index "Old series"	
		Percentage adjustment [1]	Index points to be added	Percentage adjustment [1]	Index points to be added
34 cities combined	Jan. 1950 [2]	5.5	6.8	0.8	1.3
Atlanta	Nov. 1949	12.3	15.5	1.4	2.5
Baltimore	Dec. 1949	12.0	14.3	1.6	2.7
Birmingham	Jan. 1950	9.6	13.7	1.3	2.1
Boston	Jan. 1950	3.6	4.2	.6	.9
Buffalo	Jan. 1950	7.8	9.7	1.1	1.8
Chicago	Jan. 1950	1.7	2.3	.3	.5
Cincinnati	Jan. 1950	4.4	5.2	.5	.8
Cleveland	Nov. 1949	7.1	9.1	.9	1.6
Denver	Jan. 1950	19.7	24.8	2.6	4.3
Detroit	Jan. 1950	4.5	5.9	.7	1.2
Houston	Jan. 1950	12.2	17.2	1.6	2.7
Indianapolis	Jan. 1950	2.8	3.8	.4	.6
Jacksonville	Dec. 1949	2.3	3.3	.3	.5
Kansas City	Jan. 1950	9.3	11.8	1.2	1.9
Los Angeles	Jan. 1950	11.7	14.8	1.5	2.5
Manchester	Jan. 1950	5.9	6.9	.5	.9
Memphis	Dec. 1949	12.8	16.8	1.6	2.7
Milwaukee	Nov. 1949	3.9	5.1	.5	.9
Minneapolis	Dec. 1949	2.3	3.2	.4	.6
Mobile	Dec. 1949	6.1	7.8	.6	1.0
New Orleans	Nov. 1949	14.5	16.7	1.6	2.7
New York	Jan. 1950	4.6	5.0	.7	1.1
Norfolk	Nov. 1949	17.1	19.9	1.8	3.1
Philadelphia	Jan. 1950	2.5	3.0	.3	.5
Pittsburgh	Jan. 1950	.4	.4	.1	.1
Portland, Maine	Dec. 1949	.7	.8	.1	.1
Portland, Oreg.	Jan. 1950	6.4	8.3	.6	1.1
Richmond	Jan. 1950	14.7	17.0	1.7	2.8
St. Louis	Dec. 1949	2.5	3.0	.3	.5
San Francisco	Dec. 1949	4.6	5.4	.5	.9
Savannah	Jan. 1950	17.6	20.9	1.9	3.2
Scranton	Nov. 1949	.6	.7	.1	.1
Seattle	Nov. 1949	14.7	18.4	1.7	2.9
Washington	Nov. 1949	9.1	9.7	1.4	2.3

[1] Small rounding differences may occur when the figures in this column are computed from the revised and old indexes for a city.

[2] Based on the October 1950 "old series" index the percentage adjustment in the rent index would be 5.7 percent or 7.1 index points, and for the "all items" index the percentage adjustment would be 0.7 percent or 1.3 index points. These percentages were reported with the October 1950 Consumers' Price Index release.

Sampling Error of Index Multiplier. As indicated, the index multiplier for each city's rent index is determined by the relative importance of new rental housing to all existing rental housing, and of the average difference in rent between new units and comparable old units. Since both of these figures were obtained from a survey of a sample of dwellings in each city area, the survey results may differ from those which would have been obtained from a complete enumeration of all dwellings in each city area.

It is possible to estimate the error in the index multiplier caused by sampling variability. Strictly, the index multiplier is determined by the proportion of new rental units to all existing rental units multiplied by the difference in rent for new units, plus the proportion of old rental units to all existing rental units multiplied by the difference in rent for old units. The difference for old units is always zero by definition and therefore cannot contribute any error to the index multiplier. Since the old units are proportionately more important than the new units (in 23 cities, old rental units comprised more than four-fifths of all the rental dwellings) and since there is no error contributed by the difference for old units, it was possible to calculate the index multiplier without resort to extremely large (and costly) samples.

Thus, the index multiplier is subject to only two types of sampling error: (1) the sampling error of the proportion of new rental units to all

TABLE 5.—*Estimated accumulation of the new unit bias for the periods 1940–46 and 1947–49*

City	Percentage adjustment 1940–46 [1]		Percentage adjustment 1947–49 [1]	
	Rent index	All items index	Rent index	All items index
34 cities combined	1.4	0.2	4.0	0.6
Atlanta	1.9	.2	10.2	1.2
Baltimore	3.4	.4	8.3	1.2
Birmingham	1.7	.4	7.8	1.1
Boston	.7	.1	2.9	.5
Buffalo	2.5	.3	5.2	.8
Chicago	.5	.1	1.4	.2
Cincinnati	.7	.1	3.7	.4
Cleveland	2.5	.3	4.5	.6
Denver	3.0	.4	16.2	2.2
Detroit	2.1	.3	2.4	.4
Houston	2.3	.3	9.7	1.3
Indianapolis	.9	.1	1.9	.3
Jacksonville	1.0	.1	1.3	.2
Kansas City	1.4	.2	7.8	1.0
Los Angeles	2.1	.2	9.4	1.3
Manchester	1.3	.1	4.5	.4
Memphis	2.2	.3	10.4	1.3
Milwaukee	.7	.1	3.2	.4
Minneapolis	.7	.1	1.6	.3
Mobile	4.0	.4	2.0	.2
New Orleans	4.0	.4	10.1	1.2
New York	.7	.1	3.9	.6
Norfolk	10.6	1.1	5.9	.7
Philadelphia	.7	.1	1.8	.2
Pittsburgh	.1	(2)	.3	.1
Portland, Maine	.4	.1	.3	(2)
Portland, Oreg.	3.4	.3	2.9	.3
Richmond	2.1	.2	12.3	1.5
St. Louis	.8	.1	1.7	.2
San Francisco	2.6	.3	2.0	.2
Savannah	8.8	.9	8.1	1.0
Scranton	.1	(2)	.5	.1
Seattle	6.7	.7	7.5	1.0
Washington	3.2	.5	5.7	.9

[1] When the adjustments for the 2 periods are multiplied together (after adding 100.0 to each figure) the total adjustment in table 4 can be obtained.

[2] Less than 0.05 percent.

rental units, as well as the proportion of new rental units in each quality cell to all new rental units; and (2) the sampling error in the rent difference for new units within each quality cell containing new units.

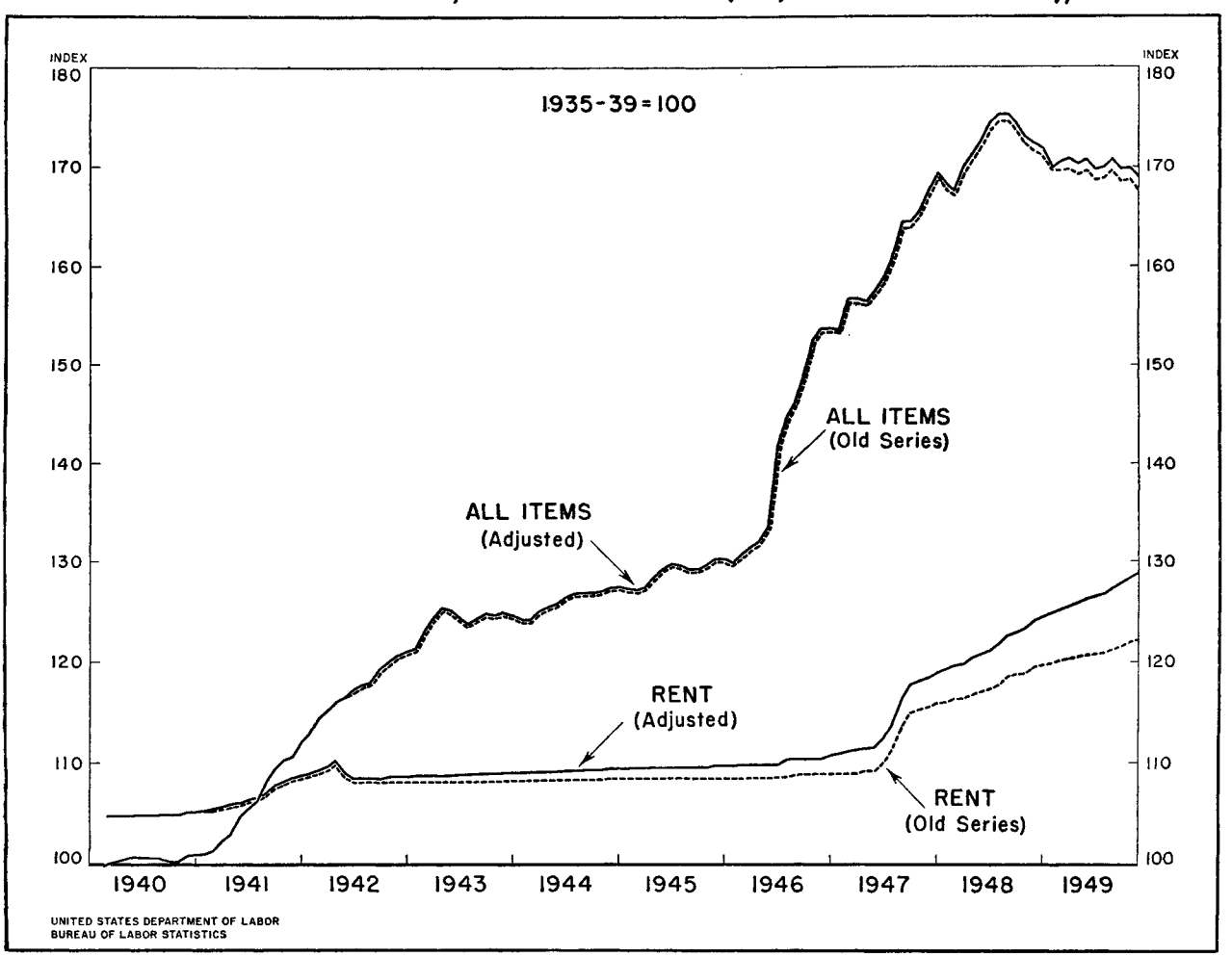
Because of the lengthy and costly tabulations involved, the calculation of the sampling error of the index multiplier was limited to six cities. The cities selected include those with small and large correction factors, as well as some of the most heavily populated cities:

	Rent index		*All items*	
	Correction factor	*Maximum difference 66 times out of 100*	*Correction factor*	*Maximum difference 66 times out of 100*
Chicago	1.7	±0.5	0.3	±0.1
Boston	3.6	±.5	.6	±.1
New York	4.6	±.5	.7	±.1
Washington	9.2	±1.3	1.4	±.2
Los Angeles	11.7	±1.6	1.5	±.2
Houston	12.2	±1.6	1.6	±.2

Figures for the six cities show a strong tendency for the size of the error to correlate with the size of the correction factor. On the basis of this correlation the *sampling* error for the 34 large cities combined can be estimated. The chances are 19 in 20 that the 5.5 percent correction factor for the 34 large city rent index in January 1950 is within the range of 5.1 to 5.9 percent; and the chances are 19 in 20 that the 0.8 percent correction factor for the 34 large city "all items" index in January 1950 is within the range of 0.7 to 0.9 percent.

Yearly Accumulation of New Unit Bias. Most of the understatement in the rent index accumulated during the period from 1947 through 1949. The indexes have now been revised for 1940–49, despite the lack of precise information on the difference in rent between the new units and the old units of

Chart 1.—Consumers' Price Index, All Items and Rent (Adjusted and Old Series), 1940–49



comparable quality at the *time* the new units *entered* the market. The present correction was necessarily based on the difference in rent (between new and old units) existing at the time the comprehensive housing surveys were made. By utilizing the research work involved in making the Bureau's earlier estimate of the new unit bias,[14] it is possible to estimate the yearly fluctuations in the differentials. Using these estimates in conjunction with the known volume of new construction by year, the indexes were adjusted over the 10-year period. Table 5 shows the distribution of the correction before 1947, and for the years 1947 and after. Appendix A shows the revised indexes by month for the 34 cities combined from 1940 to 1949. (See chart 1). The corrections for most of the cities in the early years were too small to affect the over-all index. The revised "all items" and rent indexes by year from 1940 to 1949 and by month from 1947 to 1949 for individual cities appear in appendix B, p. 23.

It must be emphasized that the revised indexes from 1940 to 1949 are subject to error but give the approximate magnitude of the correction in each year. Greater accuracy is obtained by using these revised indexes for the years 1940–49, than would be possible by comparing the old series indexes with the adjusted series for 1950 and after.

[14] See Estimate of New Unit Bias in CPI Rent Index, Monthly Labor Review, July 1949 (p. 44).

Interim Adjustment of Index

The Interim Adjustment of the Consumers' Price Index came about as a result of inflationary aspects of the economy following the outbreak of hostilities in Korea in June 1950. Working quickly, Congress, on September 8, 1950, passed the Defense Production Act giving the President broad authority designed to curb inflation, stabilize the economy, and increase production for defense. The terms of the Act dealing with wage and price stabilization pointed up the necessity for making the interim adjustment of the index. The Act established the period from May 25, 1950, to June 24, 1950, as a reference point to which consideration was to be given in determining price and wage stabilization. The Bureau's indexes and price records, as in World War II, were expected to play an important role in such determinations. It was particularly urgent, therefore, that the Bureau calculate its indexes so as to give the best possible measure of price changes from month to month beginning from a period before the outbreak of hostilities in Korea.

With these considerations in mind, the Bureau during the summer and fall consulted its advisory committees—the Technical Advisory Committee of the American Statistical Association, the Business Research Advisory Committee, the Labor Research Advisory Committee and the Budget Bureau Interagency Committee on Price Statistics. Public announcement of the Bureau's plans was made simultaneously with the issuance of the September 1950 index in October. The announcement explained that indexes already published would be revised back to an early month of 1950, to provide a pre-Korean comparison. This was a departure from the usual practice of publishing the Consumers' Price Index as final at the time of issuance.

This decision had important implications for users, particularly for those employers, unions, and agencies of government which use the index in adjusting wages. To provide a means for equitable adjustment of such contracts, the Bureau made arrangements for parallel calculation of indexes on the old and adjusted bases for an overlapping period extending at least through 1951.

Plans for Interim Adjustment

Three major considerations underlie the general planning of the interim adjustment, which should be considered an *improvement* of the 34-city index *as previously constructed and defined:* (1) not to make adjustments of basic concepts or methodology prior to the comprehensive revision, (2) to make the adjustments quickly, and (3) to make only such changes as would result in demonstrable improvements.

The first consideration precluded departure from the basic definition of the index as a measure of price change. This also meant no change in the characteristics of the population covered or the city coverage; or in basic formula or procedures, price collection methods and pricing cycle; or in the general plan for allocation of weights of unpriced items to priced items. The second con-

sideration dictated concentration on correction of major shortcomings in the index and those for which adequate data were available as a basis for adjustment. The third consideration underlay the choice of data, methodology, and statistical tests.

The scope of the adjustment embraced four major parts:

1. Revision of city population weights.
2. Correction of new unit bias in rent index.
3. Addition of new items.
4. Revision of commodity weights.

Revision of Population Weights

Publication of the 1950 decennial census population data by city and county made possible the calculation of revised population weights for combining 34-city data into a national index for all items, and 56-city data into a national food index. Previous city weights in the index were based on Bureau of the Census estimated population counts for 1942 derived from May 1942 registrations for sugar rationing.[15] In the index weights, each city bears a weight based on its own population and that of other metropolitan areas in the same region.

In calculating revised 1950 weights, the population of standard "metropolitan areas" as defined by the Census was used. The metropolitan area, or entire county in which the central city is located, as well as adjacent counties which are closely related to it economically, has replaced "metropolitan districts" as used in 1940.[16] Essentially the same combination of nearby cities with index cities was maintained in calculating the city weights. A tabulation of the 1942 and 1950 population weights is presented in appendix D, p. 33.

Correction of the Rent Index

As part of the interim adjustment of the Consumers' Price Index, the corrections to the rent index and the "all items" index for the "new unit bias" have been incorporated into the index numbers from 1940 to date. The nature of this correction is described in detail in this bulletin, pp. 1–10.

The amount of the rent corrections, as applicable to the October 1950 indexes, was carried as a footnote to all index releases from October through December 1950. The ultimate incorporation of this rent correction into the index had the effect of raising the national rent index by January 1950 by 6.8 index points, and the national "all items" index by January 1950 by 1.3 index points.

Addition of New Items

No general review of the sample of items priced for the index was feasible for the interim adjustment. However, a few items which had greatly increased in importance in family spending since the mid-thirties were added. A few additional items were included to improve the measurement of average price movements for groups or subgroups of similar items. Frozen peas, strawberries, and orange juice concentrate, canned baby food, group hospitalization payments, home permanent wave refills, television sets, and beer were added because of their increased importance; layer cake, frankfurters, ice cream, cola drinks, grape jelly, men's rayon suits, men's work gloves, women's rayon blouses, boys' jeans, cotton rugs, chrome dinette sets, electric toasters, aluminum pans, velocipedes, and gas for space heating were added to improve the measurement of price change.

These items were introduced into the index calculations at the first period for which reliable prices were available. For the January 1951 index, prices were available in most cities for all new items except beer.

Most of these items had already been priced in some cities as part of the Bureau's experimental pricing project, which is a major part of the comprehensive index revision program. On the basis of this information prices of some new items were estimated for each city back to January 1950. Where prices were lacking, the weights of the items were distributed proportionately to priced items within the group until actual prices became available.

Revision of Commodity Weights

The unrepresentativeness of current index value weights as related to current spending patterns was the most compelling reason for making the interim adjustment. Table 6 indicates the extent

[15] See Bureau of Labor Statistics Cost of Living Index in Wartime, Monthly Labor Review, July 1943; reprinted as Serial No. R. 1545.

[16] See 1950 Census of Population, Preliminary Counts, Series PC-3, No. 3.

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of the weight dislocation in the January 1950 index.

To understand why the weight structure of the index became unrepresentative, the reader should review the mechanics of the index calculation.[17] Since food prices have increased more than other groups, the value weight of food in the national index has increased as a percent of the total value of the market basket—from 35 percent in 1934–36 to more than 40 percent before the adjustment.

Only if people had continued to buy the same quantities of all goods and services, would foods actually represent 40 percent of family expenditures. The Bureau's postwar studies indicate, on the contrary, that foods continue to take about one-third of the consumer's dollar. This shows that consumers have adjusted their spending patterns to increased income and higher prices by purchasing different things in different quantities. The index procedure necessarily holds quantity weights constant from month to month. It cannot take continuous account of changes in spending patterns. That is why, periodically, the Bureau must conduct new family expenditure surveys and adjust weights accordingly.

Since actual data had to be estimated for some cities, the interim adjustment of weights served only to bring the index weight diagrams *closer* to current patterns of family spending. Data necessary to adjust the "all items value aggregate" in the index to actual total expenditures in each city were not available. Therefore, the total current index value aggregate for each city was redistributed percentage-wise according to the estimated current spending patterns.

Throughout the rest of this section the term "weights" will refer to the percentage distribution of value weights in a current period and not to physical quantity weights. The term "current index weight" will refer to the weights in the January 1950 index before adjustment.

An explanation of the meaning of relative importance, or percentage distribution of value weights, is included in appendix E, p. 34, together with a complete tabulation of revised relative importances for groups and individual items in the national index for January 1950.

The adjustment of weights for the 7 cities for which recent actual expenditure data are available will be discussed separately from those where they are not.

Adjustments of Weights in Seven Cities

Basic data for adjustment of weights were obtained from special tabulations of the survey results for each of seven cities recently surveyed. Average dollar and percentage expenditures for major groups of commodities were calculated for white and Negro families of wage earners and clerical workers. Since it was desired that index weights be adjusted to the most recent period possible, the survey data which referred to different time periods—1947, 1948, or 1949—were adjusted by estimated changes both in quantity consumption and in price to a common date,

[17] See Construction of Consumers' Price Index, Monthly Labor Review, September 1949.

TABLE 6.—*Comparison of percentage distribution of groups of expenditures by all families of wage earners and clerical workers and unadjusted index weights as of January 1950*

Commodity group	Denver		Detroit		Houston		Manchester		Memphis		Richmond		Washington	
	Unadjusted	Adjusted	Unadjusted	Adjusted[1]	Unadjusted	Adjusted[1]	Unadjusted	Adjusted	Unadjusted	Adjusted[1]	Unadjusted	Adjusted[1]	Unadjusted	Adjusted[1]
Food	41.6	29.3	37.8	31.2	36.7	30.1	44.2	30.4	38.7	30.2	37.9	32.8	35.7	30.0
Apparel	11.9	12.2	12.2	12.2	12.7	13.6	13.3	15.8	13.5	13.8	13.7	14.0	15.7	13.7
Housing	13.2	12.1	15.3	11.1	13.3	11.1	9.1	10.2	12.6	10.9	11.6	10.9	15.4	13.5
Fuel, light, and refrigeration	4.6	3.6	6.0	4.2	3.1	2.0	9.1	6.5	6.8	2.8	7.7	5.4	4.6	3.3
Household operation	3.7	4.2	2.4	3.6	4.7	5.3	3.0	4.4	4.3	4.5	4.7	6.0	4.9	4.9
Housefurnishings	4.7	6.9	5.1	6.8	7.4	7.8	6.0	7.2	6.8	9.0	5.8	5.6	5.6	4.8
Automobile transportation	7.1	12.5	8.1	11.5	10.1	9.9	4.8	7.0	6.1	10.0	5.6	6.5	5.7	9.2
Other transportation	1.3	2.3	2.0	2.3	1.3	2.0	.8	2.3	1.6	1.9	2.0	2.5	2.4	3.5
Personal care	3.2	2.5	3.0	2.1	2.7	2.6	2.0	2.3	2.1	2.3	2.1	2.3	2.7	2.4
Medical care	4.3	5.9	3.3	5.4	3.8	6.3	3.0	4.5	3.5	5.6	4.4	6.3	3.6	5.3
Recreation and reading	2.5	4.7	2.8	5.9	2.5	6.1	2.4	5.2	2.4	5.4	2.5	5.0	2.4	5.9
Tobacco and alcoholic beverages	1.9	3.8	2.0	3.7	1.7	3.2	2.3	4.2	1.6	3.6	2.0	2.7	1.3	3.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

[1] Weighted by Negro-white population weights from dwelling unit survey.

approximately January 1950. The 12 commodity groups for which expenditure data were summarized and adjusted, corresponded to the present index groups (and subgroups of miscellaneous goods and services): Food; Clothing; Housing; Fuel, light, and refrigeration; Furnishings and equipment; Household operation; Auto purchase and operation; Other transportation; Personal care; Medical care; Reading and recreation; Alcoholic beverages and tobacco.

Quantity adjustments to survey results were made to 1949 by item—the latest year for which information was available—on the basis of data from independent sources. Department of Commerce national estimates of personal consumption expenditures, retail sales data of the Department of Commerce and Federal Reserve Banks, Internal Revenue tax collection data, annual food consumption data of the Department of Agriculture, automobile registrations, and similar data from other sources were used. In some cases, city data were available; in others, national figures were used. If for any given item or group of items, reliable information on consumption was not available, no quantity adjustment to the survey data was made. Adjustments for price change to 1950, were based on the Bureau's regularly collected retail price data.

After adjustments of the survey data were made, white and Negro expenditures were weighted together for each city to obtain adjusted index weights. The distribution of the total population by race was determined from a count of occupied dwelling units with kitchen facilities, obtained in the Bureau's dwelling unit surveys of late 1949 and early 1950.

The general validity of the adjustment is corroborated by comparison with Department of Commerce annual national estimates of personal consumption expenditures adjusted for comparability with the Bureau's definition of family expenditures. The adjustments did not materially change the percentage distribution of expenditures from the survey data.

The percentage distribution of groups of expenditures shown below are for Detroit as of the survey date, 1948, and as adjusted to 1950. The data are for white wage-earner and clerical-worker families of two or more persons.

	1948	*1950*
Food	32.3	32.5
Apparel	12.8	11.5
Housing	10.7	10.6
Fuel, light, and refrigeration	4.0	4.1
Household operation	3.4	3.5
Housefurnishings	6.7	6.6
Automobile transportation	11.2	11.9
Other transportation	2.0	2.4
Personal care	2.1	2.1
Medical care	5.2	5.5
Reading and recreation	5.8	5.7
Tobacco and alcoholic beverages	3.8	3.6
Total	100.0	100.0

Similar data for the other six cities recently surveyed are included in appendix F, p. 40.

Using the adjusted data, a complete revision of group and item index weights was made for each of the seven cities. Expenditures for individual foods, available from the survey for a single week, were adjusted to annual totals, using seasonal adjustment factors. Expenditures for individual items were allocated in the usual manner to the sample of items priced for the index. Two exceptions were radios, transferred from the "housefurnishings" group to the "reading and recreation" subgroup, and alcoholic beverages, shifted from food to the miscellaneous group.

Appendix H, p. 44, shows in detail the groupings of family expenditure data to obtain index weights.

Estimation of Weights for Other Cities

Reasonable assumptions about the economic factors affecting the behavior of consumer expenditures were tested against 1934–36 expenditure data available for 32 of the 34 cities, and against the later adjusted survey data for 7 cities.

Coefficients of rank correlation of 1934–36 group percentage expenditures with city population size, population density, community income, relative temperature, and percent of homes owned were calculated, where appropriate, for all cities, or for different city size groups. Since scatter diagrams of the relationships did not indicate a significant degree of correlation this approach was abandoned.

A second approach was through analysis of the adjustment of index weights for the 7 cities, based on the adjusted survey data. The general

city-to-city consistency in the direction of and, for some groups, the size of adjustment supported the validity and applicability of the data for weight estimations. (See table 6.)

In the main, the weight revision in these cities resulted in a decreased weight for food, shelter, and fuel, little change in the apparel weights, and increased weight for the less urgent categories of consumption.

Comparison of the adjusted survey data with the current index weights in 6 of these cities[18] not only pointed up the exact nature of the weight dislocations, but through the technique of mean square deviations provided a statistical standard with which to measure the validity of estimates resulting from various methods. The mean square, or variance around the mean, is the sum of the squares of the deviations of each value from the mean, divided by the number of observations corrected for degrees of freedom. An adaptation of this technique was used to compare estimated index weights with observed weights in the 6 cities. Table 7 gives a summary of some of the mean square tests. A complete summary of the mean square tests is given in appendix G, p.41.

It is clear at once that the mean square deviations of the adjusted percentage expenditures from current index weights are in total very much larger than the deviations from 1934–36 weights or the variance around the 6-city average. For food, the mean square of deviations of adjusted percentage expenditures from current index weights was 92.9, compared with 7.5 from the 1934–36 weights and 6.1 for the variance around their average corrected for the difference between the mean of the 6 cities and the mean of the 32 cities in 1934–36. It was evident, therefore, that a method of estimation could be found which would improve the current index weights for all cities. A guiding principle of estimation was that, to be acceptable, estimated weights must give a lower mean square than the current index weights when tested against adjusted survey data for the 6 cities.

The general procedure of estimating weights for cities not surveyed in recent years was (1) to develop estimating methods based on reasonable assumptions about the economic behavior of consumer expenditure distributions, (2) to calculate estimates based on several different estimating methods, (3) to test these estimates against the observed data for the 6 cities, and (4) to select the method which gave the smallest mean square of the deviations estimated from actual data in the 6 cities. If one of several methods appeared clearly superior on logical grounds to the others, it might be used in preference to one showing a lower mean square, provided its mean square was not more than twice the smallest.

The mean square test was not used as a measure of the probable error of estimate in other cities, but rather as a means of choosing statistically the best among several logical methods of estimation.

General Estimating Methods

Two estimating methods proved to give the best results for most group estimates.

Method A is based on the assumption that the change in expenditures from 1934–36 to 1950 has been consistent in magnitude and direction in all cities; and also that the intercity differences in expenditure distributions existing in the earlier period still persist. This method, therefore, uses the ratio of the 6-city average ($\overline{p_{50}q_{49}}^{6}$) adjusted percentage expenditure from the recent surveys to the average percentage expenditure in 1934-36 ($\overline{p_{34}q_{34}}^{6}$) as an adjustment factor applied to the 1934-36 data ($p_{34}q_{34}$) for each city. This calculation gives the estimated index weight and for any given city (i) can be expressed as follows:

$$\text{Method A: } \frac{\overline{p_{50}q_{49}}^{6}}{\overline{p_{34}q_{34}}^{6}} \times (p_{34}q_{34})_i = (p_{50}q_{49})_i$$

Method A was used to estimate index weights for the food group and for automobile purchase and other transportation in the miscellaneous group.

Method B is based on the assumption that the change in quantity and quality consumption from 1934–36 to 1950 has been consistent in all cities both in magnitude and direction; and that the average relationship between current index weights and current expenditures measures the necessary correction for the dislocation of weights in the index. It preserves the intercity differences that exist in current index weights. This method, therefore, uses the ratio of the average adjusted percentage expenditures from the recent

[18] Because the survey from which Washington base index weights were obtained was not strictly comparable with other cities, Washington was not used in most of the estimating processes. Hence, the varying references to "6-" and "7-city" surveys.

6-city surveys ($\overline{p_{50}q_{49}}^{6}$) to the 6-city average of current index weights ($\overline{p_{50}q_{34}}^{6}$) as an adjustment factor applied to the current index weights for each city $(p_{50}q_{34})_i$. This calculation gives the estimated index weight and can be expressed as follows:

$$\text{Method B: } \frac{\overline{p_{50}q_{49}}^{6}}{\overline{p_{50}q_{34}}^{6}} \times (p_{50}q_{34})_i = (p_{50}q)_{49i}$$

Method B was used to estimate index weights for the following groups of items: clothing; fuel, light, and refrigeration; housefurnishings and equipment; household operation; medical care; reading and recreation; and tobacco and alcoholic beverages.

A good deal of economic logic supports the assumption on which these methods are based. Many of the factors affecting expenditure patterns were still much the same in each city as they were in 1934–36—such as climate, general geographic environment, industry, racial characteristics, etc.—or had changed in about the same way since 1934–36—such as income, population, and the like. However, there have been some changes in intercity relationships with respect to these factors, and the estimates based on these methods are more or less accurate to the extent that such changes have taken place.

Estimates based on methods A and B were calculated for all other groups of items, and mean square tests of 6-city estimates were made for use in evaluating results of other estimating methods. The total mean square deviation for all group estimates by Method A was 17, and by Method B, 22. Both of these values were very much less than the total mean square deviation of 131 when the current index weights were tested against the survey data for the 6 cities. (See table 7.)

TABLE 7.—*Summary of mean square tests*

Commodity group	Mean square deviations of adjusted percentage expenditures in 6 cities from—					
	Final weights [1]	Current index weights	1934–36 weights	Average [2] expenditures, 6 cities	Weights estimated by— Method A	Weights estimated by— Method B
All groups	15.62	131.10	64.38	21.95	16.98	21.94
Food	7.81	92.92	7.46	6.14	*6.47*	8.59
Apparel	1.15	1.11	2.88	2.20	1.33	*1.22*
Housing		4.09	21.52	.55	.89	2.31
Rent [3]	.40			.24		
Home owner cost [3]	.33			.36	.79	
Fuel, light, and refrigeration	.77	5.10	14.40	2.66	1.14	*.78*
Household operations	.46	.97	.69	.95	.84	*.60*
Housefurnishings	.66	3.64	5.56	1.18	1.24	*.84*
Automobile		10.42	5.69	5.46	3.44	6.24
Purchase	2.19				*2.90*	
Operation [3]	.52					
Other transportation	.32	.60	.34	.89	*.10*	.40
Personal care	.03	.33	.04	[4] *.02*	.04	.27
Medical care	.37	4.54	.84	1.30	.30	*.23*
Reading and recreation	.18	4.88	3.43	.22	.62	*.11*
Tobacco and alcoholic beverages	.43	2.50	1.53	.38	.57	*.55*

[1] Based on estimated weights adjusted to total 100.
[2] Adjusted for significant differences between mean of 6 cities and mean of 32 cities in 1934–36.
[3] Mean square deviations of estimated weights for:
Rent by Method H, *.37*; Home owner costs by Method J, *.29*;
Auto operations by Method R, *.55*.
[4] Based on average of 7 cities.
Italics indicate selected method.

Other Estimating Methods

Still other estimating methods were used for personal care, housing, and automobile operation.

Analysis of family expenditure data reveals that personal care takes a fairly constant proportion of expenditures from time to time and from place to place. For the 7 cities, the percentage expenditures for white families varied from 2.1 to 2.4 percent and for Negro families from 2.6 to 3.6 percent. For other cities, therefore, current index weights were adjusted by weighting together the simple averages for white and Negro families in 7 cities by white-Negro population weights obtained from the dwelling unit survey for the city to be estimated.

Intercity differences in housing and automobile operation are known to be large, and the index weight adjustments for these groups in the 7 cities were not entirely consistent as to direction or magnitude. Average annual dollar expenditures for rent were calculated directly from a 1949–50 BLS dwelling unit survey for each of the 34 cities for white and Negro families separately. These data were adjusted for comparability with expenditure survey data in the 7 cities.

For index weights it was necessary to convert these dollar estimates to a percentage of estimated dollar expenditures on all items. A fairly constant ratio was found between adjusted total expenditures and total index value weights, in the 6 surveyed cities, when analyzed separately by race. Total expenditures, therefore, were estimated by applying these average ratios by race to corresponding index value weights for the city to be estimated (as for Method B). Estimated dollar expenditures for rent divided by these estimated total expenditures gave the percentage weight for rent. This method is referred to as Method H.

Estimated dollar expenditures for owned housing were computed by multiplying the 7-city average expenditure per home owner by the percentage of homes owned in each city. This estimated dollar expenditure was converted to a percentage weight as in the rent estimating procedure. This is referred to as Method J.

A simple regression equation of dollar expenditures for automobile operation on percent of families owning cars as shown by the survey data for 6 cities was calculated (Method R). The percent of families owning cars was estimated for each city by dividing total passenger car registrations by the number of dwelling units in the city as reported in the 1950 Census of Housing. R. L. Polk & Co. automobile registration data,[19] adjusted to the survey level, were used in estimating car ownership for the regression equation. Estimated dollar expenditures for automobile operation were calculated for each city and converted to a percent of estimated total dollar expenditures in the same way as was done for housing.

Many estimating methods were tried for use in adjusting weights; some were carried through the mean square tests; others were discarded on the basis of scatter diagrams.

Methods of estimation similar to that used for automobile operation were attempted for car purchase but dubious results finally led to selection of Method A.

Because of the importance of food and the size of the index weight adjustment required in the 7 cities, special attention was given to the possibility of developing estimates by regression or other methods from independent data available for the 34 cities. All estimating methods were, after test, finally discarded in favor of Method A.

For clothing and public transportation, regression equations of the 6-city percentage expenditures on population were calculated; and for fuel, the 6-city percentage expenditures on climate, and on climate and percent of homes owned. When tested for 6 cities, none of these yielded as low a mean square as Method A or Method B.

For the remaining groups—furnishings and equipment, household operation, medical care, reading and recreation, and alcoholic beverages and tobacco—mean squares of estimates by Method A or Method B were considerably below those of current index weights and no further tests were considered necessary.

The selection of an estimating method was ultimately made separately for each group. In a final step, it was necessary to adjust these independently estimated weights to total 100. This adjustment did not greatly change the unadjusted estimates. The total mean square deviations, using selective methods for each commodity group, were lower than those obtained by sole use of either Method A or Method B. A comparison of the combined 34-city index weights of major groups and subgroups of food and miscellaneous for January 1950 before and after adjustment is included in appendix E, p. 35.

In general, item weights and subgroup weights, except for food subgroups, were adjusted only where data for the 7 cities showed a consistent and usually a substantial difference between current index weights and actual expenditures. After such adjustments were made, the estimated percentage weights were adjusted to 100 within each group.

Food Subgroups

The changes made to food subgroup weights were comparatively small. Use of the 1948 food consumption surveys for Birmingham, Buffalo, Minneapolis-St. Paul, and San Francisco by the Bureau of Human Nutrition and Home Economics of the Department of Agriculture (adjusted for comparability with BLS 7-city survey data) provided data for 11 cities altogether which were used for adjustments in weights for all 56 food cities.

For most subgroups, the ratio of the adjusted survey percentage expenditures to the current index weights in 11 cities was fairly consistent and was used to adjust index weights for other cities as in Method B. For two groups—meats, poultry and fish, and beverages—variation in the adjusted percentage expenditures in the 11 cities was very small, and no acceptable relationships between these expenditures and other factors could be established. For these groups, and for frozen fruits and vegetables, a new subgroup, the average of 11 cities was used as the estimate for all cities. For the remaining group, fresh fruits and vegetables, a good correlation was found between

[19] Published by the Automobile Manufacturers Association in *Automobile Facts and Figures.*

percentage expenditures and population density, apparently reflecting the influence of home gardens in less heavily populated areas. This relationship was used in estimating index weights for this subgroup. As a final step, separate subgroup estimates were adjusted to 100 within the food group.

Weights for food items which showed a consistent difference between current index weights and adjusted percentage expenditures in the 11 cities were adjusted by Method B. These adjustments resulted in the following weight shifts within subgroups besides addition of new items: increased—vanilla cookies and layer cake, hamburger, poultry, fresh milk, shortening, margarine; decreased—corn meal, rolled oats, rib roast, veal cutlet, butter, apples, canned tomatoes, coffee, sugar, lard, salad dressing.

Fuel, Light, and Refrigeration

Sizable shifts since 1934–36 in types of fuel used were observed in the 7 cities surveyed, and were known to have taken place in other cities. Gas for space heating and fuel oil were added for cities in which they had become important. Adjusted index weights for Birmingham, Indianapolis, and Portland, Oreg., surveyed by BLS for 1945, and Milwaukee, Savannah, and Scranton, surveyed by BLS for 1946, were based on the survey data, adjusted for changes in prices and consumption in the same way as were the 1947–49 surveys.

For the remaining 21 cities, varying sources of information were used for each city. Adjusted index weight subtotals were calculated for heating fuels and nonheating fuel items within the group by Method B. The relative expenditures for heating fuel items in wide use in the 7 cities were generally proportional to the percentage of families using each item, and this relationship was used in distributing the total weight on heating fuels to the individual items.

Apparel, Housefurnishings, and Miscellaneous

Method B was used to adjust subgroup weights within the apparel group for 26 cities. Additional survey data available from a 1948 BHNHE survey were used for Minneapolis. The subgroup weight adjustments resulted in decreased weights for men's, boys' and girls' apparel, and increased weights for women's and infants' apparel and yard goods. No important adjustments of item weights were required in this group.

The housefurnishings group includes textile housefurnishings, furniture, heavy durable goods, and smaller household equipment. Because the items in the group are heterogeneous and because the direction of adjustments of index weights in the 7 cities was generally uniform for all items within the group, each item was adjusted by Method B. Weight adjustment within this group resulted in increased weight on washing machines and curtains and decreased weight on brooms, furniture, wool rugs, and cook stoves.

As already indicated, index weights were adjusted separately for each subgroup of items in the miscellaneous group. The adjustment of item weights within these subgroups was limited for the most part to a redistribution of weights within subgroups after introduction of new items.

In the personal care subgroup home permanent wave kits were added with weights based on average expenditures in the 7 survey cities.

Automobile repairs were added to the index pricing list for 21 of the 34 cities and their weight within the automobile operation subgroup was based on the average index weight in the other 13 cities. Domestic service was added to the index pricing list in 22 cities and its weight within household operation was based on the average index weights in the other 12 cities. Cleanser, matches, and laundry starch were deleted from all city lists.

Two new items, television sets in 27 cities and velocipedes, were added to the index pricing list for reading and recreation. The average percentage expenditure in 7 cities was used for velocipedes. Because the television industry has grown rapidly, the 7-city survey data for this item were unrealistic for index weights even for the survey cities. Average family expenditures for television, representing 1949 quantities at 1950 prices, were estimated for each of the 27 cities having TV stations, based on number of sets sold multiplied by an estimated average price calculated as a weighted average of prices of 3 leading manufacturers. Estimated family expenditures varied widely—from $19.45 in one city to $110.31 in another. Because of this and because it was impossible to anticipate changes in television expenditures in the near future, it was decided to use for each of the 27

cities the average of the 27 city estimates, reduced by 50 percent and converted to a percent of estimated family expenditures for reading and recreation.

Group hospitalization was added to the index pricing list of medical care items. Estimated family expenditures were calculated by multiplying the percentage of population enrolled in Blue Cross plans in each city by family hospitalization rates, both reported by the Blue Cross Commission of the American Hospital Association. Since these estimates were based on total population they were adjusted to represent family expenditures on the basis of observed survey data in 6 cities.

The introduction of new items in the miscellaneous group and the adjustment of weights on items showing consistent differences between index weights and adjusted percentage expenditures in the 7 cities, resulted in the following important shifts in weights within the group: weights were increased on automobile repairs and train fare and decreased on hospital rooms and doctors' fees, men's haircuts, and radios.

Recalculation of Indexes

The final step preparatory to recalculation of adjusted indexes was to distribute current index values (aggregates) for all items according to adjusted percentage weights for groups and items for each city. Since the food index is calculated with physical quantity weights, it was also necessary to calculate revised quantity multipliers reflecting both revised value weights and revised city population weights.

After extensive consideration of three alternative link dates for the new index series—January 1950, June 1950, and January 1951—January 1950 was finally chosen and published indexes back to January 1950 were recalculated. The new unit bias correction was applicable to January 1950, and the adjusted quantity weights were more appropriate to this date than to June 1950 or January 1951.

Index aggregates were recalculated from January 1950 forward, using the same price relatives as in the old index (for items included in both series) and adjusted weights. The originally published January 1950 all-city indexes for rent and all items and January, February, or March 1950 city indexes (depending on frequency and schedule of price collection) were corrected for the new unit bias in the rent index. Indexes for the first month of the completely adjusted series, January 1950, are the originally published January 1950 indexes except for rent and all items which had been corrected for new unit bias. Price changes from January 1950 forward, calculated with adjusted group and item weights were linked to these adjusted January 1950 indexes to complete the adjusted series.

Comparison of Index Series

The movement of the adjusted 34-city index series for all items since January 1950 has not been very different from the old series; the adjusted series rose 1 percent less in a year. The difference in movement of the two series is due chiefly to the downward adjustment of the weight on foods which increased sharply in price during the year, and to the increased weight on items in the miscellaneous group. (See chart 2.)

The difference in the level of the two indexes at the start is due solely to the correction of the rent index which was incorporated entirely in the month of January 1950.

The variation in the measurement of average price changes for all items reflects not only the

Chart 2.—Consumers' Price Index, All Items (Adjusted and Old Series), January 1950–April 1951

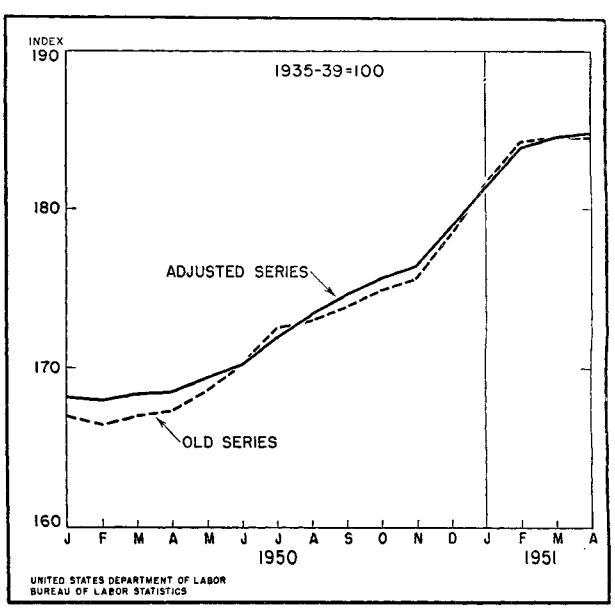
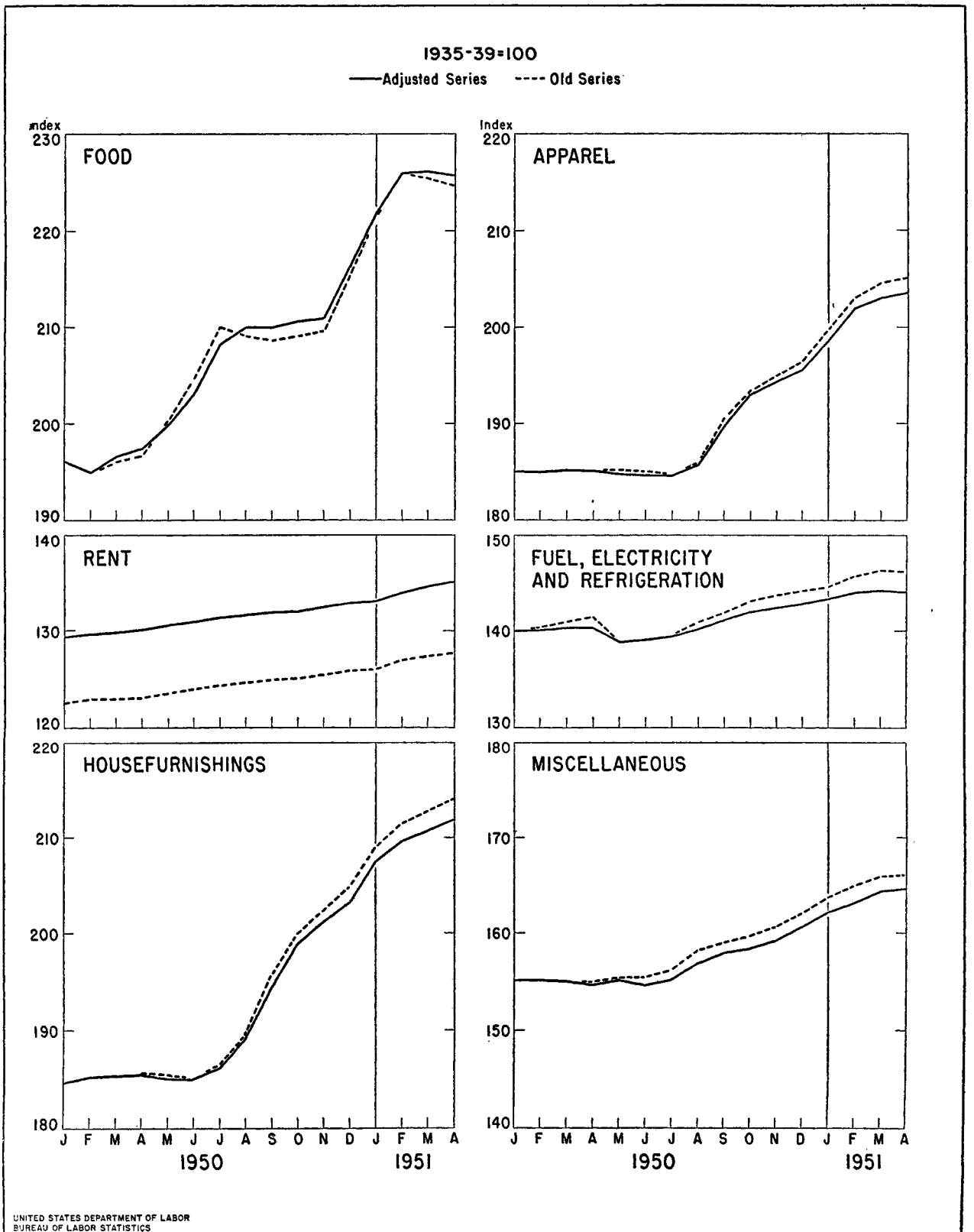


Chart 3.—Consumers' Price Index, Commodity Groups (Adjusted and Old Series), January 1950–April 1951



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group-weight adjustments but also the internal adjustments which are reflected in different changes for commodity group indexes. About one-half of the difference between the two indexes in their movement from January 1950 to January 1951 is accounted for by changes in the group weight; about three-eighths by changes in internal weights within groups; and the remainder by the interaction of the two kinds of changes.

Item	Percent increase in indexes: Average of 34 cities			
	January 1950 to January 1951		January 1950 to June 1950	
	Adjusted series	Old series	Adjusted series	Old series
All items	7.9	8.8	1.2	2.0
Food	13.2	13.1	3.6	4.4
Apparel	7.3	7.9	−.2	0
Rent	2.9	2.8	1.2	1.1
Fuel, electricity, and refrigeration	2.4	3.2	−.6	−.8
Housefurnishings	12.3	13.1	.1	.3
Miscellaneous	4.5	5.5	−.3	.1

The combined effect of differences in weights and price movements for each major group on the measurement of average price change for all items from January 1950 to January 1951 is illustrated below mathematically. This table shows how the various groups account for a net difference of 0.9 in the price change on the two series over the year, and indicates the decreased influence of food and the increased influence of the miscellaneous group.

Item	Old index				Adjusted index			
	(1) Price relative, Jan. 1950 to Jan. 1951		(2) Weight, Jan. 1950	(3) Product, (1) × (2)	(4) Price relative, Jan. 1950 to Jan. 1951		(5) Adjusted weight, Jan. 1950	(6) Product, (4) × (5)
All items	108.8	×	100.0	= 108.8	107.9	×	100.0	= 107.9
Food	113.1	×	41.6	= 47.0	113.2	×	33.3	= 37.7
Apparel	107.9	×	12.2	= 13.2	107.3	×	12.8	= 13.7
Rent	102.8	×	13.8	= 14.2	102.9	×	11.6	= 11.9
Fuel	103.2	×	5.6	= 5.8	102.4	×	3.7	= 3.8
Housefurnishings	113.1	×	4.7	= 5.3	112.3	×	5.7	= 6.4
Miscellaneous	105.5	×	22.1	= 23.3	104.5	×	32.9	= 34.4

City Indexes

There are greater differences between the two index series for individual cities than for the 34-city average. The amount of the correction for new unit bias and consequently in the adjustment of index level at January 1950 for all items and rent varies widely. Moreover some of the weight adjustments, particularly for the 7 cities recently surveyed, have varied from the average adjustment, thus exerting different effects on group price movements. Tabulations of indexes for all items and for major groups from January 1950 through April 1951, are shown for each city in appendix C. A tabulation of relative importances of major groups by city is shown in appendix E.

Food

The measurement of average change in United States food prices over the whole period from January 1950 to January 1951 was almost the same by the two series. However, adjustment of the food subgroup and item weights dampened the sharp rise from April to July 1950 and the sharp advance in the 2 months from November 1950 to January 1951. It also eliminated the decline from July to September 1950, previously reported on the old series. (See chart 3.)

Other Groups

The result of weight adjustments for the fuel, light, and refrigeration group, has been both a smaller average rise and less sharp fluctuations of the index. This is because more weight has been given to more stable items, particularly gas and electricity, and less weight to coal.

Average price changes over the year for the apparel, housefurnishings, and miscellaneous groups have been lower, according to the adjusted series for these groups, reflecting the net effect of internal weight adjustments and addition of new items already mentioned. For housefurnishings, the difference seems to be due chiefly to the shift in weights from furniture and rugs to durable goods, prices for which had been more stable. For the miscellaneous group the differences seem to arise from the addition of television sets which decreased in price in the middle of the year; the shift in weight from doctors' and hospital fees to group hospitalization which had been more stable; and weight adjustments for men's haircuts, soaps, and other items.

Although the level of the United States rent index has been raised by the new unit bias correction, the movement of the rent indexes over the year is almost identical. The only differences arise from the slight effect of changes in city population weights on the average change for all cities.

APPENDIXES

Appendix A

TABLE A–1: *Consumers' price index for moderate-income families: Adjusted all-items and rent indexes for 34 large cities combined, by year and month, 1940–49*

[1935–39=100]

Period	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949
	All items									
Average	100.2	105.2	116.6	123.7	125.7	128.6	139.5	159.6	171.9	170.2
January	(1)	100.8	112.0	120.8	124.4	127.3	130.1	153.6	169.3	171.7
February	(1)	100.8	112.9	121.1	124.0	127.1	129.8	153.5	168.0	169.9
March	99.8	101.2	114.3	122.9	124.0	127.0	130.4	156.7	167.5	170.4
April	(1)	102.2	115.1	124.2	124.8	127.3	131.3	156.6	169.9	170.7
May	(1)	102.9	116.0	125.2	125.3	128.3	131.9	156.4	171.1	170.2
June	100.5	104.6	116.4	124.9	125.6	129.2	133.5	157.5	172.4	170.6
July	(1)	105.3	117.1	124.1	126.3	129.6	141.5	158.8	174.4	169.6
August	(1)	106.2	117.6	123.6	126.6	129.5	144.4	160.7	175.2	169.9
September	100.4	108.1	117.9	124.1	126.7	129.1	146.2	164.3	175.2	170.7
October	100.2	109.3	119.1	124.6	126.7	129.1	148.9	164.3	174.4	169.7
November	100.1	110.2	119.9	124.4	126.8	129.5	152.5	165.4	173.0	169.8
December	100.7	110.5	120.5	124.6	127.2	130.1	153.6	167.5	172.2	168.8
	Rent									
Average	104.6	106.4	108.8	108.7	109.1	109.5	110.1	113.6	121.2	126.4
January	(1)	105.0	108.6	108.5	108.9	(1)	(1)	110.7	118.9	124.4
February	(1)	105.1	108.8	108.6	108.9	(1)	(1)	110.9	119.2	124.8
March	104.5	105.2	109.2	108.6	109.0	109.4	109.8	111.1	119.6	125.1
April	(1)	105.5	109.5	108.6	109.0	(1)	(1)	111.2	119.7	125.5
May	(1)	105.8	110.2	108.6	109.0	(1)	(1)	111.4	120.3	125.8
June	104.6	105.9	108.8	108.6	109.0	109.4	109.9	111.5	120.7	126.2
July	(1)	106.2	108.4	108.7	109.1	(1)	(1)	112.4	121.1	126.4
August	(1)	106.4	108.4	108.7	109.1	(1)	110.2	113.7	121.7	126.7
September	104.7	107.0	108.4	108.7	109.2	109.5	110.3	116.2	122.6	127.3
October	104.7	107.7	108.4	108.8	(1)	(1)	(1)	117.6	122.9	127.8
November	104.7	108.0	108.5	108.8	(1)	(1)	(1)	118.0	123.2	128.4
December	104.9	108.4	108.5	108.9	109.3	109.6	(1)	118.3	124.0	128.8

[1] Data not available.

Appendix B

TABLE B–1: *Consumers' price index for moderate-income families: Adjusted all-items and rent indexes, United States and 34 cities, by year, 1940–49, and by month, 1947–49*

[1935–39=100]

Period	34 cities combined		Atlanta		Baltimore		Birmingham		Boston		Buffalo		Chicago	
	All items	Rent	All items	Rent	All items	Rent	All items	Rent	All items	Rent	All items	Rent	All items	Rent
1940	100.2	104.6	99.1	104.3	99.9	104.2	99.8	113.9	99.3	100.5	101.0	106.2	100.6	108.6
1941	105.2	106.4	104.6	105.1	106.2	109.1	106.7	121.5	103.5	101.5	107.5	110.8	105.7	110.6
1942	116.6	108.8	115.8	106.8	118.5	111.1	118.3	125.1	114.5	104.9	120.1	116.0	116.3	114.2
1943	123.7	108.7	123.9	107.3	126.0	108.4	125.6	122.4	120.7	105.1	126.6	116.4	122.8	114.6
1944	125.7	109.1	126.0	107.9	127.9	108.9	129.3	123.4	122.0	105.1	126.5	117.2	124.8	114.9
1945	128.6	109.5	130.4	108.4	132.0	109.8	132.4	123.7	124.4	105.4	129.0	117.7	127.4	115.2
1946	139.5	110.1	140.2	109.5	142.1	110.5	142.7	124.7	134.7	106.0	138.8	118.1	138.6	116.1
1947	159.6	113.6	162.5	114.2	164.0	115.3	165.3	132.7	153.3	109.9	159.2	119.7	161.0	122.7
1948	171.9	121.2	173.4	126.1	176.1	121.6	176.0	144.1	165.9	115.8	171.2	126.3	175.1	134.1
1949	170.2	126.4	173.0	138.1	175.6	128.9	172.9	152.8	163.9	120.3	169.8	132.6	174.9	141.5
1947: January	153.6	110.7	(1)	(1)	156.8	111.6	159.0	(1)	148.8	(1)	153.2	(1)	153.2	(1)
February	153.5	110.9	(1)	(1)	156.6	(1)	158.4	(1)	147.6	(1)	152.9	(1)	153.0	(1)
March	156.7	111.1	161.3	(1)	160.3	(1)	162.4	(1)	150.5	106.9	155.8	(1)	156.4	(1)
April	156.6	111.2	(1)	(1)	160.5	(1)	162.1	127.8	149.6	(1)	155.8	(1)	155.9	(1)
May	156.4	111.4	(1)	111.1	160.2	(1)	161.1	(1)	148.8	(1)	156.8	118.7	157.0	117.3
June	157.5	111.5	159.5	(1)	161.4	(1)	162.6	(1)	150.6	(1)	158.3	(1)	158.5	(1)
July	158.8	112.4	(1)	(1)	(1)	(1)	164.6	(1)	152.2	(1)	159.7	(1)	160.3	(1)
August	160.7	113.7	162.6	(1)	(1)	(1)	167.1	135.1	154.8	(1)	(1)	(1)	162.9	(1)
September	164.3	116.2	(1)	(1)	168.8	117.1	169.6	(1)	158.9	112.1	(1)	(1)	168.5	128.6
October	164.3	117.6	(1)	(1)	(1)	(1)	170.2	(1)	157.8	(1)	163.2	120.7	167.5	(1)
November	165.4	118.0	168.0	119.7	(1)	(1)	172.2	139.4	158.7	(1)	(1)	(1)	168.5	(1)
December	167.5	118.3	(1)	(1)	172.4	118.7	174.4	(1)	160.8	113.5	(1)	(1)	170.3	130.3
1948: January	169.3	118.9	(1)	(1)	(1)	(1)	175.0	(1)	163.5	(1)	168.1	123.3	171.7	(1)
February	168.0	119.2	169.9	121.7	(1)	(1)	173.5	140.7	161.7	(1)	(1)	(1)	169.0	(1)
March	167.5	119.6	(1)	(1)	172.1	120.3	172.7	(1)	161.3	114.4	(1)	(1)	169.2	131.8
April	169.9	119.7	(1)	(1)	(1)	(1)	173.5	(1)	164.1	(1)	168.1	124.5	172.3	(1)
May	171.1	120.3	171.8	124.0	(1)	(1)	174.5	143.1	164.6	115.0	(1)	(1)	175.1	(1)
June	172.4	120.7	(1)	(1)	177.3	121.2	175.6	(1)	166.6	(1)	(1)	(1)	176.4	132.9
July	174.4	121.1	(1)	(1)	(1)	(1)	177.9	(1)	169.1	(1)	174.1	126.8	178.9	(1)
August	175.2	121.7	177.4	127.9	(1)	(1)	180.2	145.3	169.2	(1)	(1)	(1)	179.1	(1)
September	175.2	122.6	(1)	(1)	180.5	122.6	179.6	(1)	169.6	117.2	(1)	(1)	179.7	135.2
October	174.4	122.9	(1)	(1)	(1)	(1)	177.9	(1)	168.4	(1)	173.8	128.2	178.4	(1)
November	173.0	123.2	175.1	130.8	(1)	(1)	176.1	146.9	167.3	(1)	(1)	(1)	176.2	(1)
December	172.2	124.0	(1)	(1)	175.3	123.8	175.9	(1)	165.3	118.0	(1)	(1)	175.7	139.9
1949: January	171.7	124.4	(1)	(1)	(1)	(1)	174.9	(1)	164.5	(1)	171.0	130.8	175.2	(1)
February	169.9	124.8	171.8	134.1	(1)	(1)	173.0	149.9	162.0	(1)	(1)	(1)	173.2	(1)
March	170.4	125.1	(1)	(1)	175.6	126.1	173.1	(1)	163.2	119.5	(1)	(1)	174.8	140.8
April	170.7	125.5	(1)	(1)	(1)	(1)	173.0	(1)	163.1	(1)	169.7	131.8	175.4	(1)
May	170.2	125.8	172.5	137.3	(1)	(1)	172.9	152.1	162.9	119.8	(1)	(1)	174.6	(1)
June	170.6	126.2	(1)	(1)	176.2	128.6	173.7	(1)	164.0	120.3	(1)	(1)	176.3	141.2
July	169.6	126.4	(1)	(1)	(1)	(1)	172.6	(1)	163.4	(1)	170.9	132.9	174.3	(1)
August	169.9	126.7	174.5	139.4	(1)	(1)	172.8	154.2	164.6	(1)	(1)	(1)	174.8	(1)
September	170.7	127.3	(1)	(1)	176.4	130.9	173.6	154.6	166.2	121.3	(1)	(1)	176.2	141.8
October	169.7	127.8	(1)	(1)	(1)	(1)	172.2	155.1	164.9	121.5	169.1	133.5	174.8	142.7
November	169.8	128.4	173.0	141.7	(1)	(1)	172.4	155.9	164.9	121.8	(1)	(1)	175.8	143.4
December	168.8	128.8	(1)	(1)	173.6	133.4	170.4	156.4	163.6	122.2	(1)	(1)	173.7	143.5

[1] Not available.

TABLE B–1: *Consumers' price index for moderate-income families: Adjusted all-items and rent indexes, United States and 34 cities, by year 1940–49, and by month, 1947–49*—Continued

[1935-39=100]

Period	Cincinnati		Cleveland		Denver		Detroit		Houston		Indianapolis		Jacksonville	
	All Items	Rent	All Items	Rent	All Items	Rent	All Items	Rent	All Items	Rent	All Items	Rent	All Items	Rent
1940	99.0	102.2	101.3	107.9	99.3	106.7	100.3	107.9	101.2	106.7	100.3	110.1	100.1	104.1
1941	104.8	103.1	107.2	111.2	103.9	107.4	106.6	112.5	105.7	107.4	106.7	114.6	107.4	111.8
1942	116.5	105.0	119.0	116.7	115.7	109.4	118.4	116.8	116.7	109.0	118.4	117.7	120.1	115.3
1943	123.1	105.6	127.2	116.4	122.2	109.7	124.8	115.1	122.8	109.9	124.5	115.8	129.4	112.6
1944	125.6	105.9	129.5	117.4	124.7	110.3	126.6	116.0	124.0	110.6	126.3	116.1	132.1	113.3
1945	128.5	106.2	131.6	118.2	127.4	111.3	130.0	117.0	126.7	111.0	129.1	116.5	136.0	114.3
1946	138.7	107.0	141.8	118.9	137.5	114.0	141.4	117.8	136.7	112.9	138.7	117.1	144.2	114.4
1947	161.1	110.0	162.4	123.3	158.9	125.4	161.0	121.3	160.5	117.5	161.7	121.4	166.3	116.8
1948	173.7	116.5	175.9	129.8	172.9	139.5	173.8	129.7	174.0	128.4	175.3	130.8	176.7	126.9
1949	170.4	120.5	172.9	134.7	171.5	147.0	171.6	133.5	173.5	139.9	172.4	134.5	175.8	136.8
1947: January	152.8	(1)	156.6	(1)	152.2	(1)	153.5	(1)	154.4	(1)	(1)	(1)	(1)	(1)
February	153.4	(1)	156.5	(1)	153.2	(1)	153.6	(1)	154.6	(1)	(1)	117.5	(1)	(1)
March	157.3	(1)	159.8	(1)	155.9	(1)	157.1	(1)	157.7	(1)	157.7	(1)	163.6	114.2
April	157.5	(1)	159.8	120.0	157.1	(1)	157.3	(1)	159.2	114.5	(1)	(1)	(1)	(1)
May	157.1	(1)	159.7	(1)	157.3	121.2	157.4	(1)	158.2	(1)	(1)	(1)	(1)	(1)
June	158.8	108.5	161.0	(1)	157.6	(1)	159.3	118.8	158.2	(1)	158.3	(1)	163.7	(1)
July	160.8	(1)	(1)	(1)	157.6	(1)	160.8	(1)	159.1	(1)	159.8	118.7	(1)	(1)
August	162.6	(1)	163.8	(1)	(1)	(1)	163.4	(1)	160.4	(1)	(1)	(1)	(1)	(1)
September	166.7	111.8	(1)	(1)	(1)	(1)	164.9	(1)	162.8	(1)	(1)	(1)	168.8	118.2
October	167.6	(1)	(1)	(1)	162.8	132.3	167.4	125.1	164.2	(1)	168.1	127.6	(1)	(1)
November	167.6	(1)	167.8	128.0	(1)	(1)	167.3	(1)	166.6	121.6	(1)	(1)	(1)	(1)
December	170.8	113.8	(1)	(1)	(1)	(1)	169.7	(1)	170.1	(1)	(1)	(1)	174.2	120.4
1948: January	171.7	(1)	(1)	(1)	169.6	135.1	171.3	127.8	171.7	(1)	172.6	129.0	(1)	(1)
February	170.6	(1)	172.5	128.8	(1)	(1)	169.7	(1)	171.3	124.4	(1)	(1)	(1)	(1)
March	169.9	114.8	(1)	(1)	(1)	(1)	169.5	(1)	171.0	(1)	(1)	(1)	173.1	125.0
April	171.4	(1)	(1)	(1)	171.2	137.6	172.6	128.6	172.5	(1)	172.8	129.7	(1)	(1)
May	172.9	(1)	174.6	129.3	(1)	(1)	174.0	(1)	172.6	127.2	(1)	(1)	(1)	(1)
June	174.1	115.8	(1)	(1)	(1)	(1)	175.3	(1)	173.7	(1)	(1)	(1)	178.6	126.5
July	176.5	(1)	(1)	(1)	175.4	140.2	176.7	129.7	175.0	(1)	176.9	131.2	(1)	(1)
August	176.3	(1)	180.3	129.8	(1)	(1)	176.9	(1)	176.5	130.2	(1)	(1)	(1)	(1)
September	177.0	118.0	(1)	(1)	(1)	(1)	176.3	(1)	176.8	(1)	(1)	(1)	179.5	129.4
October	176.2	(1)	(1)	(1)	174.0	142.0	175.5	131.1	176.2	(1)	178.4	132.0	(1)	(1)
November	174.5	(1)	177.2	131.3	(1)	(1)	174.0	(1)	175.4	132.0	(1)	(1)	(1)	(1)
December	172.9	119.3	(1)	(1)	(1)	(1)	173.7	(1)	175.4	(1)	(1)	(1)	176.6	130.2
1949: January	172.7	(1)	(1)	(1)	174.3	144.0	172.5	132.3	174.3	(1)	174.0	132.8	(1)	(1)
February	170.4	(1)	173.6	133.1	(1)	(1)	171.6	(1)	172.0	134.2	(1)	(1)	(1)	(1)
March	171.4	120.1	(1)	(1)	(1)	(1)	171.8	(1)	172.1	(1)	(1)	(1)	174.7	130.8
April	171.4	(1)	(1)	(1)	173.4	145.6	172.1	133.0	172.9	(1)	172.4	133.5	(1)	(1)
May	169.8	(1)	172.8	134.1	(1)	(1)	172.6	(1)	172.6	136.5	(1)	(1)	(1)	(1)
June	171.2	120.8	(1)	(1)	(1)	(1)	173.0	(1)	172.6	(1)	(1)	(1)	175.3	131.6
July	169.5	(1)	(1)	(1)	171.6	147.1	171.5	133.6	172.6	(1)	171.5	134.2	(1)	(1)
August	169.6	(1)	173.0	135.0	(1)	(1)	171.0	(1)	172.7	138.8	(1)	(1)	(1)	(1)
September	171.6	121.1	(1)	(1)	(1)	(1)	171.5	134.1	173.8	142.3	(1)	(1)	177.0	143.8
October	169.5	120.9	(1)	(1)	168.6	148.9	169.8	134.4	174.4	146.4	172.7	136.0	(1)	(1)
November	169.1	120.5	171.9	136.9	(1)	(1)	171.0	134.9	175.8	153.8	(1)	(1)	(1)	(1)
December	168.6	120.7	(1)	(1)	(1)	(1)	170.3	135.2	175.8	155.4	(1)	(1)	176.0	146.7

[1] Not available.

TABLE B–1: *Consumers' price index for moderate-income families: Adjusted all-items and rent indexes, United States and 34 cities, by year 1940–49, and by month, 1947–49*—Continued

[1935–39=100]

Period	Kansas City		Los Angeles		Manchester		Memphis		Milwaukee		Minneapolis		Mobile	
	All items	Rent	All items	Rent	All items	Rent	All items	Rent	All items	Rent	All items	Rent	All items	Rent
1940	98.4	102.8	101.1	106.8	100.1	102.3	98.9	105.7	98.7	102.3	100.8	108.0	99.2	106.6
1941	102.8	104.5	106.2	107.2	105.2	104.5	104.9	110.4	103.9	104.1	106.0	108.5	107.2	116.0
1942	114.2	109.0	119.4	110.3	118.4	107.6	117.6	115.7	114.7	108.7	115.9	109.8	120.7	122.3
1943	121.2	109.5	125.4	110.9	126.4	108.1	126.9	116.6	121.3	108.4	121.0	110.2	127.1	117.6
1944	123.5	110.4	127.4	111.6	127.7	108.5	129.1	117.2	123.4	108.7	122.3	110.7	128.3	118.6
1945	126.7	110.7	131.1	112.2	130.3	108.5	131.7	117.3	126.1	109.1	124.5	110.7	130.2	119.1
1946	135.6	111.4	141.3	113.6	140.3	109.6	140.9	117.7	136.1	109.6	135.6	111.6	139.5	119.0
1947	153.3	116.7	159.5	119.0	162.5	111.3	164.7	123.8	158.2	112.4	156.6	117.7	162.5	123.4
1948	165.7	126.3	171.1	129.8	175.3	115.5	175.7	134.9	171.2	118.9	170.9	127.9	174.1	129.8
1949	163.9	133.8	170.6	138.0	170.9	119.9	175.0	144.4	169.1	126.4	169.3	135.2	171.0	133.7
1947: January	148.0	111.9	155.6	114.9	(1)	(1)	(1)	(1)	(1)	(1)	148.4	(1)	(1)	(1)
February	149.0	(1)	156.3	(1)	(1)	(1)	(1)	119.0	(1)	(1)	149.1	(1)	(1)	(1)
March	151.1	(1)	157.3	(1)	158.3	(1)	159.4	(1)	154.7	(1)	151.8	112.6	159.8	121.5
April	151.3	(1)	157.9	(1)	(1)	(1)	(1)	(1)	(1)	(1)	151.6	(1)	(1)	(1)
May	150.8	(1)	158.1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	151.7	(1)	(1)	(1)
June	149.9	(1)	156.9	(1)	160.7	110.8	161.2	(1)	156.8	110.5	153.1	(1)	159.9	(1)
July	150.9	115.4	157.8	118.1	162.4	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
August	(1)	(1)	158.4	(1)	(1)	(1)	(1)	125.1	159.2	(1)	(1)	(1)	(1)	(1)
September	(1)	(1)	162.3	(1)	(1)	(1)	169.7	(1)	(1)	(1)	162.4	121.1	165.0	124.9
October	158.3	121.8	162.0	(1)	166.4	112.1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
November	(1)	(1)	164.9	124.0	(1)	(1)	(1)	(1)	164.3	116.3	(1)	(1)	(1)	(1)
December	(1)	(1)	166.8	(1)	(1)	(1)	174.3	129.8	(1)	(1)	166.5	124.1	171.0	125.9
1948: January	162.9	123.9	168.4	(1)	172.9	113.2	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
February	(1)	(1)	169.0	126.2	(1)	(1)	(1)	(1)	167.3	117.5	(1)	(1)	(1)	(1)
March	(1)	(1)	168.4	(1)	(1)	(1)	173.4	132.5	(1)	(1)	168.0	125.0	170.7	126.7
April	163.8	124.6	170.3	(1)	172.5	114.1	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
May	(1)	(1)	170.2	127.8	(1)	(1)	(1)	(1)	171.5	118.4	(1)	(1)	(1)	(1)
June	(1)	(1)	169.9	(1)	(1)	(1)	175.8	134.3	(1)	(1)	171.7	128.0	174.3	130.2
July	166.9	126.3	171.4	(1)	178.7	115.9	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
August	(1)	(1)	172.2	131.7	(1)	(1)	(1)	(1)	175.0	119.4	(1)	(1)	(1)	(1)
September	(1)	(1)	172.2	(1)	(1)	(1)	178.4	136.6	(1)	(1)	174.2	129.0	178.2	132.0
October	168.2	128.3	173.1	(1)	177.2	116.8	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
November	(1)	(1)	173.6	133.5	(1)	(1)	(1)	(1)	171.7	120.4	(1)	(1)	(1)	(1)
December	(1)	(1)	174.1	(1)	(1)	(1)	175.8	139.2	(1)	(1)	171.2	132.4	174.4	132.8
1949: January	166.0	130.2	174.2	(1)	173.0	118.8	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
February	(1)	(1)	172.9	136.2	(1)	(1)	(1)	(1)	169.3	121.8	(1)	(1)	(1)	(1)
March	(1)	(1)	172.7	(1)	(1)	(1)	175.1	141.8	(1)	(1)	169.8	133.8	172.0	133.3
April	164.5	131.9	172.9	(1)	171.4	119.2	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
May	(1)	(1)	171.4	137.3	(1)	(1)	(1)	(1)	170.0	122.8	(1)	(1)	(1)	(1)
June	(1)	(1)	170.6	(1)	(1)	(1)	175.6	144.1	(1)	(1)	169.6	134.6	171.2	133.8
July	163.5	133.9	169.2	(1)	170.8	120.2	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
August	(1)	(1)	168.9	139.0	(1)	(1)	(1)	(1)	167.7	123.8	(1)	(1)	(1)	(1)
September	(1)	(1)	169.3	139.3	(1)	(1)	175.1	146.2	(1)	(1)	168.9	136.4	170.2	133.9
October	162.8	136.3	168.8	139.7	170.2	120.5	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
November	(1)	(1)	168.9	140.3	(1)	(1)	(1)	(1)	169.3	137.0	(1)	(1)	(1)	(1)
December	(1)	(1)	167.8	140.9	(1)	(1)	173.5	148.4	(1)	(1)	168.0	137.6	168.4	134.5

[1] Not available.

TABLE B–1: *Consumers' price index for moderate-income families: Adjusted all-items and rent indexes, United States and 34 cities, by year 1940–49, and by month, 1947–49*—Continued

[1935–39=100]

Period	New Orleans		New York		Norfolk		Philadelphia		Pittsburgh		Portland, Maine		Portland, Oreg.	
	All items	Rent	All items	Rent	All items	Rent	All items	Rent	All items	Rent	All items	Rent	All items	Rent
1940	101.4	103.4	100.8	102.7	98.9	102.9	98.7	103.2	100.1	105.5	98.2	100.6	100.9	106.5
1941	107.1	104.8	104.7	102.9	107.8	111.6	103.6	104.7	105.5	106.5	103.3	101.2	107.4	109.4
1942	119.8	107.7	114.8	103.4	121.8	117.4	115.3	106.8	116.2	107.6	116.0	105.5	122.3	116.8
1943	129.7	108.9	123.2	103.7	131.2	117.8	122.7	107.2	123.7	107.4	122.9	106.6	129.7	118.3
1944	130.5	109.4	126.2	103.9	132.0	119.1	124.5	107.4	126.3	107.6	124.4	107.0	131.2	118.9
1945	133.1	110.3	129.2	103.9	134.1	119.9	127.5	107.6	129.4	107.6	126.0	106.8	135.5	118.3
1946	145.4	111.1	141.8	104.2	143.5	120.7	138.5	108.1	140.6	107.7	134.7	106.7	145.0	118.1
1947	168.3	113.6	158.9	105.9	164.9	123.4	158.6	112.6	162.8	111.4	155.8	107.9	164.0	122.0
1948	178.9	122.4	169.8	109.6	175.2	130.2	171.2	120.7	174.8	117.9	166.6	112.2	178.8	129.9
1949	175.7	129.8	167.8	112.6	172.8	135.0	169.3	123.3	172.4	121.1	165.1	114.7	176.8	134.5
1947: January	(1)	(1)	154.8	104.5	(1)	(1)	152.5	(1)	156.0	(1)	(1)	(1)	(1)	(1)
February	(1)	111.9	154.4	(1)	(1)	(1)	151.8	108.8	156.5	(1)	(1)	(1)	(1)	(1)
March	165.2	(1)	157.6	(1)	162.7	(1)	156.3	(1)	159.2	(1)	152.6	(1)	161.2	(1)
April	(1)	(1)	157.0	(1)	(1)	(1)	155.1	(1)	159.0	108.7	(1)	106.6	(1)	118.4
May	(1)	(1)	155.8	(1)	(1)	121.7	155.3	(1)	159.6	(1)	(1)	(1)	(1)	(1)
June	165.4	(1)	157.1	(1)	162.7	(1)	157.3	(1)	161.1	(1)	153.4	(1)	162.1	(1)
July	(1)	(1)	157.8	105.6	(1)	(1)	158.5	111.9	162.7	(1)	(1)	(1)	162.7	(1)
August	169.3	113.6	158.9	(1)	165.4	(1)	159.7	(1)	165.0	112.4	(1)	(1)	(1)	(1)
September	(1)	(1)	162.2	(1)	(1)	(1)	163.4	(1)	168.3	(1)	159.3	108.6	(1)	(1)
October	(1)	(1)	162.0	107.3	(1)	(1)	162.4	(1)	167.9	114.8	(1)	(1)	167.2	125.9
November	174.0	115.8	163.6	(1)	170.1	126.4	164.4	117.9	168.2	(1)	(1)	(1)	(1)	(1)
December	(1)	(1)	165.2	(1)	(1)	(1)	166.5	(1)	170.3	(1)	162.1	110.3	(1)	(1)
1948: January	(1)	(1)	167.4	108.5	(1)	(1)	168.6	(1)	172.4	116.1	(1)	(1)	175.2	127.7
February	178.2	118.3	166.8	(1)	172.2	127.6	166.8	119.1	170.2	(1)	(1)	(1)	(1)	(1)
March	(1)	(1)	164.7	(1)	(1)	(1)	165.8	(1)	170.2	(1)	162.8	110.5	(1)	(1)
April	(1)	(1)	167.4	108.9	(1)	(1)	169.6	(1)	172.0	116.1	(1)	(1)	176.6	128.6
May	177.9	120.8	167.9	(1)	174.1	129.2	170.7	120.1	173.6	(1)	(1)	(1)	(1)	(1)
June	(1)	(1)	169.6	(1)	(1)	(1)	172.4	(1)	175.8	(1)	167.5	112.3	(1)	(1)
July	(1)	(1)	173.1	109.7	(1)	(1)	173.2	(1)	177.9	118.8	(1)	(1)	181.2	129.8
August	181.6	123.7	173.8	(1)	178.6	131.4	175.1	121.4	178.4	(1)	(1)	(1)	(1)	(1)
September	(1)	(1)	173.8	(1)	(1)	(1)	175.2	(1)	178.4	(1)	170.8	113.1	(1)	(1)
October	(1)	(1)	172.2	110.4	(1)	(1)	174.5	(1)	177.2	119.3	(1)	(1)	181.0	131.6
November	178.7	126.9	171.6	(1)	176.6	132.7	172.1	122.2	176.0	(1)	(1)	(1)	(1)	(1)
December	(1)	(1)	169.8	(1)	(1)	(1)	171.0	(1)	175.0	(1)	167.2	114.0	(1)	(1)
1949: January	(1)	(1)	169.8	111.1	(1)	(1)	170.8	(1)	174.7	120.4	(1)	(1)	179.5	133.1
February	175.4	128.0	167.5	(1)	173.3	133.8	168.9	122.7	172.2	(1)	(1)	(1)	(1)	(1)
March	(1)	(1)	168.1	(1)	(1)	(1)	169.4	(1)	172.8	(1)	165.1	114.1	(1)	(1)
April	(1)	(1)	168.9	112.2	(1)	(1)	169.4	(1)	173.1	120.7	(1)	(1)	178.6	133.5
May	174.9	129.2	167.6	(1)	173.2	134.5	170.3	123.0	173.0	(1)	(1)	(1)	(1)	(1)
June	(1)	(1)	167.8	(1)	(1)	(1)	169.6	(1)	173.2	(1)	165.9	114.6	(1)	(1)
July	(1)	(1)	168.0	113.1	(1)	(1)	168.0	(1)	172.0	121.3	(1)	(1)	176.1	134.1
August	176.4	130.4	167.7	(1)	173.2	135.6	169.2	123.7	172.5	(1)	(1)	(1)	(1)	(1)
September	(1)	(1)	168.4	113.3	(1)	(1)	170.1	123.9	172.4	121.5	165.0	115.0	(1)	(1)
October	(1)	(1)	166.9	113.5	(1)	(1)	169.4	124.0	171.2	121.8	(1)	(1)	174.7	135.9
November	176.0	131.7	166.8	113.6	171.3	136.3	169.1	124.1	171.4	121.8	(1)	(1)	(1)	(1)
December	(1)	(1)	166.0	113.8	(1)	(1)	167.8	124.3	170.4	121.8	162.9	115.8	(1)	(1)

[1] Not available.

TABLE B–1: *Consumers' price index for moderate-income families: Adjusted all-items and rent indexes, United States and 34 cities, by year 1940–49, and by month, 1947–49*—Continued

[1935-39=100]

Period	Richmond		St. Louis		San Francisco		Savannah		Scranton		Seattle		Washington, D. C.	
	All items	Rent	All items	Rent	All items	Rent	All items	Rent	All items	Rent	All items	Rent	All items	Rent
1940	99.0	102.9	99.6	101.5	100.4	103.7	100.6	104.7	98.6	98.1	101.7	106.7	99.7	100.2
1941	104.2	103.5	104.8	102.1	105.9	104.4	106.9	108.4	103.3	98.3	107.8	111.6	104.4	101.0
1942	115.7	104.6	116.1	106.4	118.7	106.2	120.9	116.6	114.1	98.1	121.3	116.1	115.7	101.5
1943	121.7	104.1	122.5	106.4	126.6	107.3	131.5	120.4	121.4	97.4	128.2	114.8	123.0	102.0
1944	122.7	104.1	124.3	106.5	129.8	108.6	135.2	124.3	123.2	97.2	130.1	117.6	124.8	102.6
1945	125.4	104.5	126.6	106.5	133.3	109.0	138.1	125.5	126.6	97.9	133.2	118.1	128.6	102.9
1946	134.2	106.0	137.5	107.0	144.1	109.4	148.8	125.6	138.2	102.0	143.4	119.5	139.7	103.4
1947	156.4	110.7	159.5	110.9	163.3	112.7	169.2	127.2	160.7	103.2	162.1	124.1	157.9	104.6
1948	168.4	122.6	171.5	119.3	174.9	118.8	180.4	133.3	170.1	107.8	175.6	134.2	167.5	108.1
1949	167.0	129.8	169.6	122.6	174.5	121.6	176.9	137.7	167.9	111.8	174.9	141.0	167.3	113.1
1947: January	(1)	(1)	151.3	(1)	159.8	(1)	163.8	125.8	(1)	(1)	156.8	(1)	152.9	(1)
February	(1)	(1)	152.0	(1)	158.9	110.0	164.0	(1)	(1)	(1)	156.6	(1)	152.3	104.0
March	153.3	(1)	156.0	(1)	160.8	(1)	168.2	(1)	157.3	101.6	159.4	120.9	155.5	(1)
April	(1)	(1)	155.3	(1)	161.8	(1)	167.8	(1)	(1)	(1)	160.3	(1)	155.6	(1)
May	(1)	(1)	154.8	(1)	161.0	(1)	167.1	(1)	(1)	(1)	159.8	(1)	155.4	(1)
June	153.1	107.9	155.8	107.7	159.8	(1)	167.4	(1)	159.9	(1)	159.6	(1)	156.8	(1)
July	154.3	(1)	(1)	(1)	(1)	(1)	167.5	127.0	(1)	(1)	(1)	(1)	(1)	(1)
August	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	162.8	103.6	163.2	124.1	159.9	104.6
September	(1)	(1)	165.7	114.6	166 3	114.0	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
October	162.3	115.2	(1)	(1)	(1)	(1)	173.2	128.3	(1)	(1)	(1)	(1)	(1)	(1)
November	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	165.2	150.3	167.7	129.2	162.5	105.4
December	(1)	(1)	168.2	117.0	169.5	116.0	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
1948: January	166.0	117.8	(1)	(1)	(1)	(1)	177.5	130.2	(1)	(1)	(1)	(1)	(1)	(1)
February	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	166.5	106.3	172.3	131.8	164.1	106.6
March	(1)	(1)	168.1	117.4	172.1	117.4	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
April	164.6	120.2	(1)	(1)	(1)	(1)	179.8	131.7	(1)	(1)	(1)	(1)	(1)	(1)
May	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	170.2	107.0	176.1	133.2	167.7	107.5
June	(1)	(1)	172.4	118.2	174.9	118.9	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
July	170.5	123.3	(1)	(1)	(1)	(1)	182.6	133.4	(1)	(1)	(1)	(1)	(1)	(1)
August	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	174.8	108.5	178.1	135.0	170.3	108.5
September	(1)	(1)	175.3	121.5	177.9	119.9	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
October	171.9	125.9	(1)	(1)	(1)	(1)	181.1	135.8	(1)	(1)	(1)	(1)	(1)	(1)
November	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	169.5	109.4	176.3	136.9	168.3	109.6
December	(1)	(1)	171.4	121.7	177.5	120.8	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
1949: January	168.6	127.8	(1)	(1)	(1)	(1)	179.5	136.7	(1)	(1)	(1)	(1)	(1)	(1)
February	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	166.9	110.8	176.5	138.9	165.6	110.9
March	(1)	(1)	169.4	122.0	175.4	121.2	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
April	166.5	129.0	(1)	(1)	(1)	(1)	177.8	137.1	(1)	(1)	(1)	(1)	(1)	(1)
May	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	168.5	111.8	175.0	140.1	167.1	112.2
June	(1)	(1)	170.2	122.4	174.5	121.6	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
July	166.8	130.0	(1)	(1)	(1)	(1)	176.3	137.7	(1)	(1)	(1)	(1)	(1)	(1)
August	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	169.6	112.2	173.5	141.8	168.0	113.4
September	(1)	(1)	169.4	122.9	173.9	121.8	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
October	167.5	131.0	(1)	(1)	(1)	(1)	176.5	138.3	(1)	(1)	(1)	(1)	(1)	(1)
November	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	166.4	112.5	174.5	143.3	168.5	116.1
December	(1)	(1)	168.3	123.6	172.4	122.3	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)

[1] Not available.

Appendix C

TABLE C–1: *Consumers' price index for moderate-income families: Adjusted all-items and group indexes, United States and 34 cities, by month, 1950–April 1951*

[1935–39=100]

Period	All items	Food	Apparel	Rent	Fuel, electricity, and refrigeration	House-furnishings	Miscellaneous
LARGE CITIES (NATIONAL AVERAGE)							
1950: Average	171.9	204.4	187.7	131.0	140.6	190.2	156.5
Jan. 15	168.2	196.0	185.0	129.4	140.0	184.7	155.1
Feb. 15	167.9	194.9	184.9	129.7	140.1	185.2	155.1
Mar. 15	168.4	196.6	185.1	129.8	140.3	185.3	155.0
Apr. 15	168.5	197.3	184.9	130.1	140.3	185.4	154.7
May 15	169.3	199.8	184.7	130.6	138.8	185.0	155.1
June 15	170.2	203.1	184.6	130.9	139.1	184.8	154.6
July 15	172.0	208.2	184.5	131.3	139.4	186.1	155.2
Aug. 15	173.4	209.9	185.7	131.6	140.2	189.1	156.8
Sept. 15	174.6	210.0	189.8	131.8	141.2	194.2	157.8
Oct. 15	175.6	210.6	193.0	132.0	142.0	198.7	158.3
Nov. 15	176.4	210.8	194.3	132.5	142.5	201.1	159.2
Dec. 15	178.8	216.3	195.5	132.9	142.8	203.2	160.6
1951: Jan. 15	181.5	221.9	198.5	133.2	143.3	207.4	162.1
Feb. 15	183.8	226.0	202.0	134.0	143.9	209.7	163.2
Mar. 15	184.5	226.2	203.1	134.7	144.2	210.7	164.3
Apr. 15	184.6	225.7	203.6	135.1	144.0	211.8	164.6
ATLANTA, GA.							
1950: Average	175.5	201.4	196.0	143.3	154.2	193.3	161.7
Jan. 15	(1)	192.5	(1)	(1)	155.4	(1)	(1)
Feb. 15	170.8	190.1	191.9	142.8	155.3	186.5	159.7
Mar. 15	(1)	195.6	(1)	(1)	155.4	(1)	(1)
Apr. 15	(1)	194.1	(1)	(1)	155.3	(1)	(1)
May 15	171.7	193.2	191.3	143.6	153.1	187.2	159.7
June 15	(1)	195.4	(1)	(1)	153.0	(1)	(1)
July 15	(1)	202.0	(1)	(1)	153.1	(1)	(1)
Aug. 15	177.9	210.1	195.6	143.7	153.6	194.6	161.5
Sept. 15	(1)	210.2	(1)	(1)	153.4	(1)	(1)
Oct. 15	(1)	208.6	(1)	(1)	154.3	(1)	(1)
Nov. 15	180.7	208.3	204.3	144.8	154.4	204.0	165.6
Dec. 15	(1)	217.0	(1)	(1)	154.6	(1)	(1)
1951: Jan. 15	(1)	223.4	(1)	(1)	154.4	(1)	(1)
Feb. 15	187.5	224.0	211.2	146.4	155.9	210.0	168.5
Mar. 15	(1)	224.1	(1)	(1)	156.1	(1)	(1)
Apr. 15	(1)	228.5	(1)	(1)	155.5	(1)	(1)
BALTIMORE, MD.							
1950: Average	176.8	215.3	182.4	133.3	149.4	192.5	155.7
Jan. 15	(1)	206.6	(1)	(1)	151.5	(1)	(1)
Feb. 15	(1)	205.0	(1)	(1)	151.1	(1)	(1)
Mar. 15	172.9	207.1	179.4	134.0	151.1	189.3	152.9
Apr. 15	(1)	207.0	(1)	(1)	150.0	(1)	(1)
May 15	(1)	210.0	(1)	(1)	148.2	(1)	(1)
June 15	174.7	215.6	179.0	134.4	149.0	185.6	152.1
July 15	(1)	220.4	(1)	(1)	149.7	(1)	(1)
Aug. 15	(1)	222.0	(1)	(1)	150.7	(1)	(1)
Sept. 15	180.6	221.8	185.0	135.1	152.5	196.0	159.3
Oct. 15	(1)	221.2	(1)	(1)	145.4	(1)	(1)
Nov. 15	(1)	220.5	(1)	(1)	146.4	(1)	(1)
Dec. 15	183.1	226.4	188.6	135.5	146.8	202.0	161.3
1951: Jan. 15	(1)	231.8	(1)	(1)	146.8	(1)	(1)
Feb. 15	(1)	237.1	(1)	(1)	147.6	(1)	(1)
Mar. 15	188.6	236.8	197.6	135.9	148.8	211.7	163.8
Apr. 15	(1)	236.2	(1)	(1)	148.8	(1)	(1)
BIRMINGHAM, ALA.							
1950: Average	174.6	196.5	196.8	171.6	135.3	182.7	151.2
Jan. 15	169.0	186.4	194.8	156.8	135.5	177.8	150.0
Feb. 15	168.2	183.0	194.9	157.5	135.5	178.8	150.0
Mar. 15	170.0	189.2	194.4	157.5	136.8	178.9	150.0
Apr. 15	169.9	189.9	194.5	157.6	133.2	179.0	149.7
May 15	170.5	191.8	194.1	157.6	133.3	178.5	150.1
June 15	171.6	192.2	193.5	168.8	133.5	177.3	149.8
July 15	175.4	199.8	193.8	183.1	133.6	179.1	149.5
Aug. 15	176.8	201.5	195.0	184.4	135.1	181.1	150.8
Sept. 15	179.7	206.4	198.3	(1)	135.1	188.9	152.3
Oct. 15	179.3	202.7	200.7	(1)	137.3	189.2	152.9
Nov. 15	180.8	203.0	202.7	188.2	137.3	190.4	154.5
Dec. 15	183.9	212.3	204.3	(1)	137.6	193.1	154.8
1951: Jan. 15	188.2	219.8	210.7	(1)	137.6	196.6	157.8
Feb. 15	189.8	220.8	213.3	192.8	138.6	198.4	158.7
Mar. 15	190.6	220.5	215.0	(1)	138.6	200.3	160.2
Apr. 15	189.9	218.3	215.1	(1)	137.9	200.2	160.2
BOSTON, MASS.							
1950: Average	166.1	195.6	177.2	123.6	154.7	181.6	154.1
Jan. 15	162.4	186.6	174.9	122.4	155.1	177.7	153.3
Feb. 15	161.9	185.4	175.0	122.7	153.3	177.5	153.0
Mar. 15	162.9	187.9	175.3	123.2	153.4	178.4	153.3
Apr. 15	163.0	188.6	174.9	123.2	152.7	176.9	153.2
May 15	163.6	190.6	175.2	123.6	149.9	176.4	153.5
June 15	165.5	196.1	176.1	123.9	151.8	175.9	153.2
July 15	167.1	202.0	174.6	123.9	152.7	177.0	152.9
Aug. 15	168.1	202.9	175.7	124.2	153.5	181.7	153.9
Sept. 15	168.2	200.1	180.2	124.4	156.4	181.9	154.5
Oct. 15	169.5	201.9	180.6	(1)	158.1	191.4	155.4
Nov. 15	169.7	201.5	181.2	(1)	159.5	191.8	155.9
Dec. 15	171.2	204.1	182.3	125.6	159.7	192.5	156.8
1951: Jan. 15	173.5	209.1	184.4	(1)	159.7	197.7	157.7
Feb. 15	175.5	213.8	187.1	(1)	160.0	199.5	158.3
Mar. 15	175.8	213.3	187.2	126.3	161.1	199.3	159.0
Apr. 15	175.5	212.8	186.4	(1)	161.1	201.8	158.6
BUFFALO, N. Y.							
1950: Average	171.1	198.7	181.1	135.5	148.2	189.8	159.6
Jan. 15	166.6	189.8	179.8	134.8	146.5	183.0	157.1
Feb. 15	(1)	189.4	(1)	(1)	146.5	(1)	(1)
Mar. 15	(1)	191.6	(1)	(1)	147.3	(1)	(1)
Apr. 15	167.4	192.3	177.0	135.1	147.4	184.1	157.8
May 15	(1)	193.9	(1)	(1)	146.7	(1)	(1)
June 15	(1)	199.0	(1)	(1)	147.5	(1)	(1)
July 15	171.5	204.9	175.8	135.7	147.7	185.4	159.0
Aug. 15	(1)	203.5	(1)	(1)	148.1	(1)	(1)
Sept. 15	(1)	202.6	(1)	(1)	149.2	(1)	(1)
Oct. 15	174.1	204.0	187.0	135.9	149.8	198.8	161.1
Nov. 15	(1)	205.7	(1)	(1)	150.3	(1)	(1)
Dec. 15	(1)	207.5	(1)	(1)	150.8	(1)	(1)
1951: Jan. 15	180.8	215.5	193.2	136.9	152.1	206.1	166.8
Feb. 15	(1)	217.9	(1)	(1)	153.8	(1)	(1)
Mar. 15	(1)	219.6	(1)	(1)	153.8	(1)	(1)
Apr. 15	183.3	218.0	200.1	137.2	153.5	211.3	168.5

[1] Not available.

TABLE C–1: *Consumers' price index for moderate-income families: Adjusted all-items and group indexes, United States and 34 cities, by month, 1950–April 1951*—Continued

[1935–39=100]

Period	All items	Food	Apparel	Rent	Fuel, electricity, and refrigeration	House-furnishings	Miscellaneous
CHICAGO, ILL.							
1950: Average	176.7	209.4	192.4	145.0	135.1	175.1	159.4
Jan. 15	172.8	199.9	190.0	144.0	134.3	169.4	159.0
Feb. 15	172.4	198.6	189.3	144.5	135.0	169.7	159.0
Mar. 15	173.0	201.1	189.1	144.6	135.3	169.1	158.4
Apr. 15	172.9	201.1	188.6	144.7	135.5	170.6	157.8
May 15	174.5	206.0	189.4	144.6	134.0	170.6	157.9
June 15	175.1	208.4	189.7	144.7	134.0	169.3	157.5
July 15	177.3	214.8	190.1	145.3	134.0	170.6	157.4
Aug. 15	179.0	217.0	191.8	145.6	134.9	173.1	159.0
Sept. 15	179.5	214.7	195.3	145.9	135.0	181.2	160.6
Oct. 15	180.3	215.0	197.4	(1)	136.3	184.8	161.4
Nov. 15	180.6	214.8	198.9	(1)	136.3	185.0	161.9
Dec. 15	183.4	221.6	199.0	146.6	136.5	187.3	163.0
1951: Jan. 15	185.4	225.1	202.3	(1)	137.5	194.0	163.6
Feb. 15	188.5	232.9	204.6	(1)	138.2	195.7	164.1
Mar. 15	189.1	231.6	205.2	148.4	138.3	197.3	166.2
Apr. 15	189.1	231.1	206.0	(1)	138.4	198.7	166.3
CINCINNATI, OHIO							
1950: Average	172.2	206.2	186.6	121.2	149.4	180.2	156.6
Jan. 15	168.5	197.4	185.1	120.9	149.5	177.1	154.8
Feb. 15	168.1	197.0	183.3	121.0	150.2	175.7	154.7
Mar. 15	168.6	198.2	183.6	121.1	151.6	177.3	154.6
Apr. 15	168.1	197.7	182.8	120.9	150.7	175.5	154.4
May 15	169.7	202.0	182.3	121.0	146.9	176.1	155.9
June 15	170.5	205.1	182.1	121.4	146.8	175.5	155.6
July 15	172.0	210.2	182.0	121.4	146.8	176.1	155.4
Aug. 15	173.9	213.2	183.1	121.7	149.1	179.7	156.9
Sept. 15	175.9	214.2	193.5	121.9	149.1	183.1	157.6
Oct. 15	176.1	212.6	192.4	(1)	150.5	186.6	159.0
Nov. 15	176.1	210.7	193.3	(1)	150.5	189.7	159.8
Dec. 15	178.4	215.9	195.1	122.9	150.7	190.6	160.7
1951: Jan. 15	182.3	223.7	200.9	(1)	150.8	194.1	162.8
Feb. 15	183.9	226.9	203.6	(1)	150.8	198.4	162.9
Mar. 15	184.4	225.8	204.8	124.3	151.2	200.5	164.0
Apr. 15	184.6	226.0	204.6	(1)	151.1	200.8	164.2
CLEVELAND, OHIO							
1950: Average	174.6	211.4	187.4	138.8	148.5	173.0	153.3
Jan. 15	(1)	202.6	(1)	(1)	148.2	(1)	(1)
Feb. 15	170.3	201.7	183.4	137.7	148.4	168.4	151.4
Mar. 15	(1)	201.8	(1)	(1)	148.9	(1)	(1)
Apr. 15	(1)	203.1	(1)	(1)	149.0	(1)	(1)
May 15	171.1	205.7	182.5	138.6	147.4	167.9	151.0
June 15	(1)	211.2	(1)	(1)	147.4	(1)	(1)
July 15	(1)	216.6	(1)	(1)	147.4	(1)	(1)
Aug. 15	176.5	218.3	186.3	139.0	147.7	170.8	154.1
Sept. 15	(1)	217.5	(1)	(1)	148.4	(1)	(1)
Oct. 15	(1)	219.1	(1)	(1)	149.1	(1)	(1)
Nov. 15	179.6	217.8	196.4	140.6	150.0	183.8	156.2
Dec. 15	(1)	220.9	(1)	(1)	150.0	(1)	(1)
1951: Jan. 15	(1)	227.4	(1)	(1)	150.0	(1)	(1)
Feb. 15	186.2	232.7	203.2	143.3	150.0	190.9	158.6
Mar. 15	(1)	233.3	(1)	(1)	150.0	(1)	(1)
Apr. 15	(1)	231.8	(1)	(1)	150.0	(1)	(1)
DENVER, COLO.							
1950: Average	173.7	207.6	185.8	152.5	112.5	215.0	152.0
Jan. 15	168.8	196.8	181.3	150.8	112.2	205.3	149.9
Feb. 15	(1)	196.6	(1)	(1)	112.2	(1)	(1)
Mar. 15	(1)	199.0	(1)	(1)	112.5	(1)	(1)
Apr. 15	169.7	199.0	179.2	151.7	112.4	206.7	151.0
May 15	(1)	203.0	(1)	(1)	112.4	(1)	(1)
June 15	(1)	205.9	(1)	(1)	112.4	(1)	(1)
July 15	172.6	209.6	179.7	152.4	112.4	206.1	151.2
Aug. 15	(1)	214.8	(1)	(1)	112.4	(1)	(1)
Sept. 15	(1)	212.2	(1)	(1)	112.4	(1)	(1)
Oct. 15	178.1	215.1	196.2	152.7	112.5	229.5	153.4
Nov. 15	(1)	216.0	(1)	(1)	113.1	(1)	(1)
Dec. 15	(1)	223.6	(1)	(1)	113.1	(1)	(1)
1951: Jan. 15	184.9	227.8	200.9	159.2	113.3	241.5	156.9
Feb. 15	(1)	229.0	(1)	(1)	113.7	(1)	(1)
Mar. 15	(1)	230.5	(1)	(1)	113.7	(1)	(1)
Apr. 15	187.0	229.9	203.1	161.2	113.8	245.5	158.9
DETROIT, MICH.							
1950: Average	174.5	203.5	183.5	136.3	150.6	205.5	168.1
Jan. 15	169.7	191.8	181.3	135.7	149.4	195.5	166.3
Feb. 15	169.5	190.8	180.9	135.8	150.0	196.9	166.3
Mar. 15	170.1	192.8	181.1	135.6	151.1	197.3	166.2
Apr. 15	170.7	194.9	181.0	135.7	151.4	198.2	166.2
May 15	172.1	198.7	181.4	135.7	148.5	197.7	167.4
June 15	173.5	202.9	181.3	135.7	148.1	198.2	168.0
July 15	175.0	208.0	180.8	136.3	148.2	202.3	167.7
Aug. 15	175.9	208.8	181.5	136.4	149.5	209.2	167.8
Sept. 15	177.5	209.7	185.3	(1)	150.8	217.0	169.1
Oct. 15	179.1	212.5	187.7	137.0	152.8	216.9	170.1
Nov. 15	179.8	213.5	189.3	(1)	153.6	218.1	170.5
Dec. 15	181.3	217.2	190.0	(1)	153.9	218.5	171.5
1951: Jan. 15	184.2	223.7	192.6	137.8	154.1	223.4	172.6
Feb. 15	186.2	228.3	195.5	(1)	154.1	225.9	173.3
Mar. 15	187.0	228.8	196.1	(1)	153.9	227.8	174.8
Apr. 15	186.7	227.3	196.0	138.2	154.8	228.6	174.7
HOUSTON, TEX.							
1950: Average	178.7	214.5	200.0	162.6	98.6	186.6	159.0
Jan. 15	175.5	207.7	196.7	159.2	98.9	186.3	157.6
Feb. 15	175.0	206.0	196.2	160.2	98.9	184.6	157.5
Mar. 15	175.9	209.2	196.1	160.2	98.6	184.3	157.8
Apr. 15	175.1	206.6	195.8	160.6	98.6	182.4	157.8
May 15	175.3	206.3	195.2	162.0	98.6	183.4	158.2
June 15	175.8	208.1	194.8	163.5	98.6	183.3	157.9
July 15	177.5	212.8	195.2	165.0	98.6	184.0	158.4
Aug. 15	180.6	221.9	197.8	165.0	98.6	187.0	159.0
Sept. 15	182.2	223.3	205.5	(1)	98.6	188.7	159.5
Oct. 15	182.3	222.3	206.8	(1)	98.6	189.8	159.7
Nov. 15	183.0	222.1	208.5	165.7	98.6	192.3	160.6
Dec. 15	186.1	227.5	211.0	(1)	98.6	193.0	164.1
1951: Jan. 15	190.1	236.0	216.8	(1)	98.6	200.1	165.6
Feb. 15	191.0	235.6	218.6	167.4	98.6	202.9	166.5
Mar. 15	192.4	238.5	219.8	(1)	98.6	205.3	167.2
Apr. 15	192.5	238.3	220.5	(1)	98.6	206.3	167.3

[1] Not available.

TABLE C–1: *Consumers' price index for moderate-income families: Adjusted all-items and group indexes, United States and 34 cities, by month, 1950–April 1951*—Continued

[1935–39=100]

Period	All items	Food	Apparel	Rent	Fuel, electricity, and refrigeration	House-furnishings	Miscellaneous
INDIANAPOLIS, IND.							
1950: Average	175.1	201.5	184.7	138.7	162.3	180.8	163.0
Jan. 15	171.2	192.3	181.9	136.8	162.8	174.4	161.9
Feb. 15	(1)	191.2	(1)	(1)	163.7	(1)	(1)
Mar. 15	(1)	192.7	(1)	(1)	164.6	(1)	(1)
Apr. 15	171.4	193.3	181.4	137.9	163.2	177.6	160.7
May 15	(1)	196.1	(1)	(1)	160.1	(1)	(1)
June 15	(1)	198.1	(1)	(1)	159.9	(1)	(1)
July 15	174.4	203.4	180.1	138.7	159.9	179.3	162.1
Aug. 15	(1)	208.8	(1)	(1)	161.1	(1)	(1)
Sept. 15	(1)	210.3	(1)	(1)	160.9	(1)	(1)
Oct. 15	178.9	208.6	190.4	140.0	163.8	184.7	165.1
Nov. 15	(1)	208.8	(1)	(1)	163.8	(1)	(1)
Dec. 15	(1)	214.9	(1)	(1)	163.8	(1)	(1)
1951: Jan. 15	184.4	218.6	196.2	141.1	163.9	195.2	168.4
Feb. 15	(1)	220.6	(1)	(1)	163.9	(1)	(1)
Mar. 15	(1)	222.1	(1)	(1)	162.0	(1)	(1)
Apr. 15	187.7	222.4	198.7	142.1	162.0	198.2	173.3
JACKSONVILLE, FLA.							
1950: Average	179.0	209.5	187.8	147.4	148.6	188.0	163.9
Jan. 15	(1)	200.7	(1)	(1)	148.2	(1)	(1)
Feb. 15	(1)	199.0	(1)	(1)	148.4	(1)	(1)
Mar. 15	175.6	202.3	185.1	146.8	148.6	181.9	162.9
Apr. 15	(1)	201.5	(1)	(1)	148.0	(1)	(1)
May 15	(1)	202.8	(1)	(1)	148.0	(1)	(1)
June 15	176.3	205.8	184.0	147.3	147.9	181.9	162.6
July 15	(1)	211.4	(1)	(1)	147.9	(1)	(1)
Aug. 15	(1)	218.1	(1)	(1)	147.9	(1)	(1)
Sept. 15	181.7	219.1	190.8	148.1	148.8	191.1	163.8
Oct. 15	(1)	215.2	(1)	(1)	148.8	(1)	(1)
Nov. 15	(1)	215.3	(1)	(1)	149.5	(1)	(1)
Dec. 15	185.6	223.1	193.9	149.3	151.2	204.0	167.5
1951: Jan. 15	(1)	229.0	(1)	(1)	153.0	(1)	(1)
Feb. 15	(1)	231.5	(1)	(1)	153.4	(1)	(1)
Mar. 15	190.4	234.8	197.8	151.6	143.4	208.0	170.2
Apr. 15	(1)	234.3	(1)	(1)	143.4	(1)	(1)
KANSAS CITY, MO.							
1950: Average	166.5	191.2	182.1	141.0	127.9	180.7	156.8
Jan. 15	162.5	183.6	178.2	138.7	126.2	176.1	155.0
Feb. 15	(1)	182.8	(1)	(1)	125.9	(1)	(1)
Mar. 15	(1)	183.5	(1)	(1)	126.0	(1)	(1)
Apr. 15	163.2	184.7	178.3	140.5	126.9	178.2	154.9
May 15	(1)	187.2	(1)	(1)	127.1	(1)	(1)
June 15	(1)	189.2	(1)	(1)	127.3	(1)	(1)
July 15	166.9	195.0	178.9	141.5	130.2	178.0	156.8
Aug. 15	(1)	194.9	(1)	(1)	128.6	(1)	(1)
Sept. 15	(1)	195.8	(1)	(1)	129.3	(1)	(1)
Oct. 15	169.0	196.2	187.8	142.3	129.4	185.3	157.5
Nov. 15	(1)	198.1	(1)	(1)	128.8	(1)	(1)
Dec. 15	(1)	203.2	(1)	(1)	128.6	(1)	(1)
1951: Jan. 15	175.6	208.5	194.0	142.5	129.4	191.1	163.9
Feb. 15	(1)	210.5	(1)	(1)	128.9	(1)	(1)
Mar. 15	(1)	211.6	(1)	(1)	130.4	(1)	(1)
Apr. 15	178.5	212.4	198.9	144.0	130.1	197.2	165.7
LOS ANGELES, CALIF.							
1950: Average	171.7	205.5	183.8	146.9	98.5	186.8	154.2
Jan. 15	169.4	201.4	180.7	141.8	95.1	183.6	154.4
Feb. 15	168.9	198.9	182.3	142.7	98.8	184.6	153.6
Mar. 15	169.1	199.5	183.5	143.6	98.8	184.3	153.1
Apr. 15	169.5	201.6	183.1	145.3	98.8	184.1	152.4
May 15	169.5	201.3	182.2	146.7	98.8	183.6	152.3
June 15	169.3	201.6	182.0	146.9	98.8	182.1	151.8
July 15	170.1	204.4	182.0	147.9	98.8	181.7	151.6
Aug. 15	172.1	208.6	182.2	149.0	98.8	183.6	153.3
Sept. 15	173.2	207.8	184.1	(1)	98.8	188.3	155.3
Oct. 15	174.8	210.9	185.7	(1)	98.7	191.9	156.2
Nov. 15	176.2	212.1	187.8	150.2	98.7	195.9	157.5
Dec. 15	178.5	218.0	189.5	(1)	98.7	197.6	158.5
1951: Jan. 15	181.3	226.3	191.3	(1)	98.7	199.9	159.5
Feb. 15	184.1	226.9	196.9	159.4	98.7	201.6	160.7
Mar. 15	185.6	229.8	201.0	(1)	98.7	202.3	161.5
Apr. 15	185.6	228.9	201.1	(1)	98.7	203.8	161.7
MANCHESTER, N. H.							
1950: Average	172.2	200.9	179.9	123.7	154.3	197.6	150.4
Jan. 15	168.0	191.6	176.2	122.1	154.8	192.8	149.1
Feb. 15	(1)	190.4	(1)	(1)	152.5	(1)	(1)
Mar. 15	(1)	193.3	(1)	(1)	152.3	(1)	(1)
Apr. 15	168.0	192.6	174.9	122.5	151.3	195.0	149.2
May 15	(1)	196.2	(1)	(1)	150.4	(1)	(1)
June 15	(1)	200.6	(1)	(1)	151.9	(1)	(1)
July 15	172.1	206.3	175.1	123.9	152.2	194.0	149.6
Aug. 15	(1)	207.3	(1)	(1)	152.1	(1)	(1)
Sept. 15	(1)	206.2	(1)	(1)	156.0	(1)	(1)
Oct. 15	176.6	208.8	189.2	124.7	156.6	202.4	151.8
Nov. 15	(1)	207.4	(1)	(1)	160.0	(1)	(1)
Dec. 15	(1)	210.1	(1)	(1)	161.3	(1)	(1)
1951: Jan. 15	180.6	215.1	188.9	126.7	162.2	210.6	155.3
Feb. 15	(1)	218.9	(1)	(1)	162.2	(1)	(1)
Mar. 15	(1)	217.6	(1)	(1)	162.4	(1)	(1)
Apr. 15	182.9	217.8	193.4	128.1	162.2	214.6	156.7
MEMPHIS, TENN.							
1950: Average	175.9	212.1	206.8	148.3	140.7	174.2	145.0
Jan. 15	(1)	203.1	(1)	(1)	140.3	(1)	(1)
Feb. 15	(1)	202.9	(1)	(1)	140.3	(1)	(1)
Mar. 15	172.8	204.8	204.0	148.9	140.5	171.5	143.8
Apr. 15	(1)	203.4	(1)	(1)	140.5	(1)	(1)
May 15	(1)	205.8	(1)	(1)	140.5	(1)	(1)
June 15	172.7	208.3	202.8	149.7	140.5	172.0	141.3
July 15	(1)	213.6	(1)	(1)	140.5	(1)	(1)
Aug. 15	(1)	219.4	(1)	(1)	140.5	(1)	(1)
Sept. 15	179.2	221.5	210.6	150.1	141.2	176.6	145.7
Oct. 15	(1)	220.1	(1)	(1)	141.2	(1)	(1)
Nov. 15	(1)	218.3	(1)	(1)	141.2	(1)	(1)
Dec. 15	182.7	224.0	213.2	151.1	141.5	180.4	150.9
1951: Jan. 15	(1)	227.6	(1)	(1)	141.4	(1)	(1)
Feb. 15	(1)	230.8	(1)	(1)	141.5	(1)	(1)
Mar. 15	186.5	233.8	217.0	154.4	141.5	183.4	151.3
Apr. 15	(1)	232.9	(1)	(1)	141.4	(1)	(1)

[1] Not available.

TABLE C–1: *Consumers' price index for moderate-income families: Adjusted all-items and group indexes, United States and 34 cities, by month, 1950–April 1951*—Continued

[1935–39=100]

Period	All items	Food	Apparel	Rent	Fuel, electricity, and refrigeration	House-furnishings	Miscellaneous
MILWAUKEE, WIS.							
1950: Average	174.6	206.8	188.2	143.6	145.7	191.6	151.6
Jan. 15	(1)	196.3	(1)	(1)	145.4	(1)	(1)
Feb. 15	168.6	196.4	185.4	139.2	145.9	185.8	146.9
Mar. 15	(1)	199.0	(1)	(1)	145.7	(1)	(1)
Apr. 15	(1)	198.9	(1)	(1)	146.8	(1)	(1)
May 15	172.0	204.2	184.0	140.9	143.4	185.9	150.6
June 15	(1)	206.6	(1)	(1)	143.4	(1)	(1)
July 15	(1)	212.7	(1)	(1)	143.8	(1)	(1)
Aug. 15	176.6	213.7	185.6	145.2	144.7	189.3	153.1
Sept. 15	(1)	212.3	(1)	(1)	145.3	(1)	(1)
Oct. 15	(1)	212.3	(1)	(1)	147.2	(1)	(1)
Nov. 15	180.3	213.0	197.0	149.0	147.4	205.0	155.5
Dec. 15	(1)	216.3	(1)	(1)	148.9	(1)	(1)
1951: Jan. 15	(1)	219.6	(1)	(1)	148.7	(1)	(1)
Feb. 15	187.5	227.4	203.3	158.0	149.7	210.5	157.6
Mar. 15	(1)	226.9	(1)	(1)	150.8	(1)	(1)
Apr. 15	(1)	224.8	(1)	(1)	150.8	(1)	(1)
MINNEAPOLIS, MINN.							
1950: Average	170.9	195.2	193.0	139.2	141.9	181.0	161.3
Jan. 15	(1)	189.1	(1)	(1)	141.6	(1)	(1)
Feb. 15	(1)	187.5	(1)	(1)	142.6	(1)	(1)
Mar. 15	167.4	187.2	190.5	138.0	142.8	175.8	159.5
Apr. 15	(1)	187.1	(1)	(1)	142.8	(1)	(1)
May 15	(1)	191.3	(1)	(1)	142.8	(1)	(1)
June 15	169.1	194.1	190.2	139.0	141.4	176.6	159.0
July 15	(1)	196.8	(1)	(1)	139.9	(1)	(1)
Aug. 15	(1)	200.7	(1)	(1)	140.6	(1)	(1)
Sept. 15	172.8	199.1	192.9	140.0	141.7	183.5	163.0
Oct. 15	(1)	200.7	(1)	(1)	142.3	(1)	(1)
Nov. 15	(1)	202.1	(1)	(1)	142.3	(1)	(1)
Dec. 15	177.7	206.8	202.6	142.5	142.3	193.9	165.0
1951: Jan. 15	(1)	213.8	(1)	(1)	142.3	(1)	(1)
Feb. 15	(1)	217.9	(1)	(1)	142.3	(1)	(1)
Mar. 15	183.2	217.7	208.0	144.4	142.3	199.0	168.9
Apr. 15	(1)	217.6	(1)	(1)	136.7	(1)	(1)
MOBILE, ALA.							
1950: Average	170.9	203.9	190.0	136.7	129.8	169.4	147.9
Jan. 15	(1)	196.4	(1)	(1)	129.1	(1)	(1)
Feb. 15	(1)	194.8	(1)	(1)	129.7	(1)	(1)
Mar. 15	167.4	198.7	187.2	134.8	129.8	164.4	145.3
Apr. 15	(1)	199.7	(1)	(1)	129.9	(1)	(1)
May 15	(1)	199.8	(1)	(1)	129.7	(1)	(1)
June 15	168.2	200.1	186.7	136.6	130.2	165.0	145.9
July 15	(1)	204.7	(1)	(1)	130.2	(1)	(1)
Aug. 15	(1)	212.6	(1)	(1)	129.9	(1)	(1)
Sept. 15	173.9	210.2	192.1	139.7	129.8	172.9	149.7
Oct. 15	(1)	207.4	(1)	(1)	129.7	(1)	(1)
Nov. 15	(1)	208.8	(1)	(1)	129.4	(1)	(1)
Dec. 15	177.1	213.2	198.0	140.5	129.8	179.7	152.6
1951: Jan. 15	(1)	220.4	(1)	(1)	130.0	(1)	(1)
Feb. 15	(1)	222.5	(1)	(1)	130.3	(1)	(1)
Mar. 15	181.9	223.8	205.4	142.7	130.6	177.6	154.6
Apr. 15	(1)	225.7	(1)	(1)	130.4	(1)	(1)

Period	All items	Food	Apparel	Rent	Fuel, electricity, and refrigeration	House-furnishings	Miscellaneous
NEW ORLEANS, LA.							
1950: Average	177.1	216.9	199.5	133.0	113.1	192.1	146.1
Jan. 15	(1)	209.6	(1)	(1)	113.1	(1)	(1)
Feb. 15	173.5	207.4	198.8	132.2	113.1	190.4	145.1
Mar. 15	(1)	209.8	(1)	(1)	113.1	(1)	(1)
Apr. 15	(1)	211.3	(1)	(1)	113.1	(1)	(1)
May 15	174.4	210.8	197.1	132.7	113.1	188.3	145.5
June 15	(1)	212.9	(1)	(1)	113.1	(1)	(1)
July 15	(1)	218.5	(1)	(1)	113.1	(1)	(1)
Aug. 15	179.6	227.0	198.0	134.3	113.1	191.0	145.0
Sept. 15	(1)	225.2	(1)	(1)	113.1	(1)	(1)
Oct. 15	(1)	221.5	(1)	(1)	113.1	(1)	(1)
Nov. 15	180.1	220.7	203.2	135.0	113.2	197.7	148.6
Dec. 15	(1)	228.2	(1)	(1)	113.2	(1)	(1)
1951: Jan. 15	(1)	237.8	(1)	(1)	113.2	(1)	(1)
Feb. 15	187.9	239.8	209.1	136.1	113.2	205.6	150.8
Mar. 15	(1)	242.1	(1)	(1)	113.2	(1)	(1)
Apr. 15	(1)	240.2	(1)	(1)	113.2	(1)	(1)
NEW YORK, N. Y.							
1950: Average	168.9	204.7	186.0	114.0	140.0	179.6	159.9
Jan. 15	164.8	195.9	182.4	113.9	139.7	172.5	157.9
Feb. 15	165.1	195.9	182.5	113.9	139.2	174.1	158.6
Mar. 15	165.5	197.2	182.6	113.9	139.1	173.6	158.6
Apr. 15	165.9	198.7	183.6	113.9	139.3	174.2	158.0
May 15	166.1	200.3	183.1	113.9	138.6	173.5	157.4
June 15	167.0	203.7	182.7	114.0	138.8	174.2	157.2
July 15	169.8	209.2	183.0	114.0	139.2	176.7	160.0
Aug. 15	169.7	207.2	183.9	114.0	139.8	177.9	161.1
Sept. 15	171.7	210.6	189.4	(1)	140.9	184.3	161.3
Oct. 15	172.4	210.2	192.3	114.1	141.5	189.0	161.9
Nov. 15	173.2	211.3	192.4	(1)	142.1	191.7	162.9
Dec. 15	175.4	216.1	194.0	(1)	142.1	193.8	164.3
1951: Jan. 15	177.8	221.0	195.6	114.5	142.1	196.9	165.9
Feb. 15	180.8	227.0	200.6	(1)	142.9	200.2	167.0
Mar. 15	180.4	224.7	201.5	(1)	142.9	201.7	167.6
Apr. 15	180.6	224.9	201.8	115.0	142.9	201.6	167.6
NORFOLK, VA.							
1950: Average	175.7	206.4	181.0	142.0	160.7	188.9	156.6
Jan. 15	(1)	194.8	(1)	(1)	157.8	(1)	(1)
Feb. 15	170.3	195.1	179.0	136.4	159.9	184.5	154.5
Mar. 15	(1)	198.7	(1)	(1)	159.9	(1)	(1)
Apr. 15	(1)	199.1	(1)	(1)	159.9	(1)	(1)
May 15	173.6	202.1	178.3	142.5	159.9	185.2	156.2
June 15	(1)	205.9	(1)	(1)	160.3	(1)	(1)
July 15	(1)	210.3	(1)	(1)	160.3	(1)	(1)
Aug. 15	178.8	217.6	180.1	145.4	160.3	188.6	156.5
Sept. 15	(1)	216.3	(1)	(1)	161.3	(1)	(1)
Oct. 15	(1)	211.8	(1)	(1)	162.6	(1)	(1)
Nov. 15	179.3	210.8	185.4	146.0	163.1	196.4	159.0
Dec. 15	(1)	214.8	(1)	(1)	163.1	(1)	(1)
1951: Jan. 15	(1)	225.2	(1)	(1)	164.0	(1)	(1)
Feb. 15	187.1	231.1	192.5	146.6	164.6	203.0	161.2
Mar. 15	(1)	233.8	(1)	(1)	164.6	(1)	(1)
Apr. 15	(1)	227.9	(1)	(1)	164.6	(1)	(1)

[1] Not available.

TABLE C–1: *Consumers' price index for moderate-income families: Adjusted all-items and group indexes, United States and 34 cities, by month, 1950–April 1951*—Continued

[1935–39=100]

Period	All items	Food	Apparel	Rent	Fuel, electricity, and refrigeration	House-furnishings	Miscellaneous
PHILADELPHIA, PA.							
1950: Average	170.3	201.3	183.7	125.1	144.3	196.4	152.9
Jan. 15	166.4	191.3	182.4	124.5	143.8	189.1	152.4
Feb. 15	165.9	190.2	181.3	124.6	143.3	189.3	152.2
Mar. 15	166.8	193.4	180.9	124.6	142.5	189.1	152.2
Apr. 15	166.7	193.6	180.5	124.8	143.6	189.3	151.7
May 15	167.4	195.5	180.9	124.8	141.3	189.9	152.0
June 15	169.1	201.4	180.8	124.7	142.1	190.4	151.6
July 15	170.4	205.9	180.5	124.8	142.5	191.6	151.2
Aug. 15	171.8	208.1	180.8	125.4	144.6	194.6	152.3
Sept. 15	173.1	208.8	186.3	(1)	145.7	199.3	152.8
Oct. 15	173.8	207.9	187.9	(1)	146.3	208.7	153.5
Nov. 15	174.1	206.7	190.3	125.9	147.6	211.3	153.8
Dec. 15	178.1	212.9	191.7	(1)	148.1	214.8	159.2
1951: Jan. 15	181.0	217.7	196.9	(1)	148.1	219.1	161.0
Feb. 15	185.4	222.2	201.1	126.1	149.7	220.8	168.0
Mar. 15	185.6	221.4	201.3	(1)	150.3	221.1	169.0
Apr. 15	185.9	222.3	201.7	(1)	149.7	220.7	169.3
PITTSBURGH, PA.							
1950: Average	173.8	208.1	216.0	123.0	138.4	192.0	152.6
Jan. 15	170.0	199.7	214.8	122.2	138.2	188.0	149.9
Feb. 15	169.4	198.4	214.3	122.2	138.2	186.7	149.7
Mar. 15	169.5	198.5	214.0	122.3	138.5	187.0	149.8
Apr. 15	169.9	201.0	212.5	122.3	138.6	186.9	149.5
May 15	171.0	205.1	212.9	123.1	137.0	183.6	149.8
June 15	171.8	207.5	213.7	123.4	137.0	184.5	149.6
July 15	172.9	211.1	213.0	123.4	137.0	187.6	149.4
Aug. 15	176.0	213.3	214.2	123.4	138.6	191.8	155.2
Sept. 15	177.4	214.6	219.4	(1)	138.5	196.2	155.8
Oct. 15	178.8	215.9	220.4	123.7	139.6	202.5	157.0
Nov. 15	178.7	213.8	221.6	(1)	140.1	203.2	157.7
Dec. 15	180.2	218.0	221.6	(1)	140.1	206.4	158.2
1951: Jan. 15	183.4	222.4	227.0	123.7	148.8	213.9	159.7
Feb. 15	185.6	227.4	232.5	(1)	149.9	214.7	159.9
Mar. 15	186.0	227.2	234.3	(1)	150.0	214.9	160.7
Apr. 15	186.7	227.8	234.6	125.4	150.3	216.6	161.0
PORTLAND, MAINE							
1950: Average	166.2	194.1	192.0	116.4	150.5	183.9	153.7
Jan. 15	(1)	187.3	(1)	(1)	151.4	(1)	(1)
Feb. 15	(1)	186.7	(1)	(1)	149.7	(1)	(1)
Mar. 15	163.7	190.3	188.1	116.0	149.7	179.0	152.4
Apr. 15	(1)	188.2	(1)	(1)	148.1	(1)	(1)
May 15	(1)	189.2	(1)	(1)	145.8	(1)	(1)
June 15	164.4	193.0	187.7	116.3	148.0	178.6	152.6
July 15	(1)	198.9	(1)	(1)	148.3	(1)	(1)
Aug. 15	(1)	198.0	(1)	(1)	149.2	(1)	(1)
Sept. 15	168.1	197.7	196.2	116.7	152.1	187.1	154.6
Oct. 15	(1)	198.9	(1)	(1)	153.5	(1)	(1)
Nov. 15	(1)	198.1	(1)	(1)	154.9	(1)	(1)
Dec. 15	171.3	202.9	200.0	117.2	155.0	195.2	156.4
1951: Jan. 15	(1)	207.9	(1)	(1)	155.0	(1)	(1)
Feb. 15	(1)	211.0	(1)	(1)	155.3	(1)	(1)
Mar. 15	175.7	210.5	207.7	117.7	156.0	199.4	159.2
Apr. 15	(1)	209.6	(1)	(1)	155.8	(1)	(1)
PORTLAND, OREG.							
1950: Average	179.9	221.4	187.6	139.4	132.4	186.4	161.8
Jan. 15	174.9	210.4	183.8	137.2	131.8	178.3	159.9
Feb. 15	(1)	212.1	(1)	(1)	132.0	(1)	(1)
Mar. 15	(1)	211.3	(1)	(1)	132.0	(1)	(1)
Apr. 15	175.8	212.9	185.1	138.2	131.5	181.1	159.3
May 15	(1)	216.6	(1)	(1)	131.2	(1)	(1)
June 15	(1)	219.1	(1)	(1)	131.2	(1)	(1)
July 15	179.3	224.2	184.0	139.2	131.2	182.3	160.7
Aug. 15	(1)	227.5	(1)	(1)	132.8	(1)	(1)
Sept. 15	(1)	228.5	(1)	(1)	132.8	(1)	(1)
Oct. 15	184.3	228.7	193.3	140.4	133.7	195.4	164.9
Nov. 15	(1)	230.7	(1)	(1)	134.0	(1)	(1)
Dec. 15	(1)	234.9	(1)	(1)	134.6	(1)	(1)
1951: Jan. 15	190.4	243.4	196.5	144.9	135.1	203.1	166.9
Feb. 15	(1)	247.4	(1)	(1)	135.3	(1)	(1)
Mar. 15	(1)	250.3	(1)	(1)	134.8	(1)	(1)
Apr. 15	194.1	248.6	199.6	150.9	134.9	207.8	169.1
RICHMOND, VA.							
1950: Average	169.6	196.8	188.1	140.5	150.0	201.2	147.3
Jan. 15	164.6	188.3	185.0	132.1	149.6	195.3	145.7
Feb. 15	(1)	187.9	(1)	(1)	149.6	(1)	(1)
Mar. 15	(1)	189.3	(1)	(1)	150.5	(1)	(1)
Apr. 15	164.7	189.0	185.1	132.0	150.3	195.7	145.4
May 15	(1)	191.1	(1)	(1)	146.8	(1)	(1)
June 15	(1)	195.2	(1)	(1)	147.1	(1)	(1)
July 15	170.0	200.7	184.6	145.3	148.2	193.3	146.6
Aug. 15	(1)	202.9	(1)	(1)	148.2	(1)	(1)
Sept. 15	(1)	202.9	(1)	(1)	151.5	(1)	(1)
Oct. 15	173.8	202.0	193.3	147.5	152.2	211.7	149.2
Nov. 15	(1)	201.6	(1)	(1)	152.7	(1)	(1)
Dec. 15	(1)	210.3	(1)	(1)	152.7	(1)	(1)
1951: Jan. 15	179.8	215.6	198.1	148.5	148.3	220.8	152.4
Feb. 15	(1)	218.3	(1)	(1)	148.3	(1)	(1)
Mar. 15	(1)	217.4	(1)	(1)	148.3	(1)	(1)
Apr. 15	181.2	215.9	202.0	150.8	148.3	226.6	153.1
ST. LOUIS, MO.							
1950: Average	171.5	213.7	191.6	125.7	139.7	171.5	146.1
Jan. 15	(1)	204.6	(1)	(1)	140.0	(1)	(1)
Feb. 15	(1)	202.8	(1)	(1)	140.5	(1)	(1)
Mar. 15	168.0	204.7	188.6	124.9	140.5	167.1	145.5
Apr. 15	(1)	202.6	(1)	(1)	140.0	(1)	(1)
May 15	(1)	207.2	(1)	(1)	137.3	(1)	(1)
June 15	168.8	210.2	188.7	126.1	137.3	166.1	143.9
July 15	(1)	220.1	(1)	(1)	137.5	(1)	(1)
Aug. 15	(1)	220.8	(1)	(1)	138.5	(1)	(1)
Sept. 15	174.0	220.4	193.4	126.7	140.1	175.3	146.7
Oct. 15	(1)	220.2	(1)	(1)	141.0	(1)	(1)
Nov. 15	(1)	221.2	(1)	(1)	140.5	(1)	(1)
Dec. 15	178.8	229.7	199.0	127.5	142.8	182.6	149.2
1951: Jan. 15	(1)	234.0	(1)	(1)	142.8	(1)	(1)
Feb. 15	(1)	240.0	(1)	(1)	143.0	(1)	(1)
Mar. 15	185.2	239.4	203.6	128.3	143.0	187.5	156.3
Apr. 15	(1)	237.6	(1)	(1)	143.1	(1)	(1)

[1] Not available.

TABLE C–1: *Consumers' price index for moderate-income families: Adjusted all-items and group indexes, United States and 34 cities, by month, 1950–April 1951*—Continued

[1935–39=100]

Period	All Items	Food	Apparel	Rent	Fuel, electricity, and refrigeration	House-furnishings	Miscellaneous
SAN FRANCISCO, CALIF.							
950: Average	174.7	215.2	184.1	123.1	86.0	164.2	167.0
Jan. 15	(1)	214.3	(1)	(1)	84.5	(1)	(1)
Feb. 15	(1)	211.9	(1)	(1)	84.5	(1)	(1)
Mar. 15	172.9	210.5	181.4	122.8	84.5	159.3	166.9
Apr. 15	(1)	210.8	(1)	(1)	86.5	(1)	(1)
May 15	(1)	210.4	(1)	(1)	86.5	(1)	(1)
June 15	172.4	211.1	181.3	123.5	86.5	157.6	165.1
July 15	(1)	215.9	(1)	(1)	86.5	(1)	(1)
Aug. 15	(1)	217.3	(1)	(1)	86.5	(1)	(1)
Sept. 15	175.3	214.3	184.9	123.5	86.5	169.7	167.7
Oct. 15	(1)	217.0	(1)	(1)	86.5	(1)	(1)
Nov. 15	(1)	219.3	(1)	(1)	86.5	(1)	(1)
Dec. 15	181.5	229.0	192.2	125.6	86.5	175.7	169.4
1951: Jan. 15	(1)	238.0	(1)	(1)	86.5	(1)	(1)
Feb. 15	(1)	235.3	(1)	(1)	86.5	(1)	(1)
Mar. 15	188.7	241.7	199.3	131.9	92.0	179.1	173.5
Apr. 15	(1)	238.4	(1)	(1)	92.0	(1)	(1)
SAVANNAH, GA.							
1950: Average	178.2	208.8	186.5	149.0	153.4	196.4	160.6
Jan. 15	172.3	197.0	184.6	139.4	152.2	192.2	158.5
Feb. 15	(1)	195.6	(1)	(1)	152.2	(1)	(1)
Mar. 15	(1)	200.0	(1)	(1)	152.2	(1)	(1)
Apr. 15	173.4	200.0	182.3	142.1	152.5	193.5	158.9
May 15	(1)	203.6	(1)	(1)	152.4	(1)	(1)
June 15	(1)	206.3	(1)	(1)	152.6	(1)	(1)
July 15	177.7	211.6	181.1	152.7	152.6	190.9	158.8
Aug. 15	(1)	219.5	(1)	(1)	152.6	(1)	(1)
Sept. 15	(1)	217.9	(1)	(1)	153.9	(1)	(1)
Oct. 15	183.6	215.9	194.3	155.5	154.4	202.9	163.7
Nov. 15	(1)	214.9	(1)	(1)	156.4	(1)	(1)
Dec. 15	(1)	223.0	(1)	(1)	156.4	(1)	(1)
1951: Jan. 15	189.2	229.8	196.1	158.5	156.4	209.8	165.7
Feb. 15	(1)	231.5	(1)	(1)	156.6	(1)	(1)
Mar. 15	(1)	232.3	(1)	(1)	156.6	(1)	(1)
Apr. 15	195.5	237.6	205.2	161.6	160.6	218.2	170.9
SCRANTON, PA.							
1950: Average	169.0	202.6	196.2	115.1	149.0	171.5	145.7
Jan. 15	(1)	192.4	(1)	(1)	147.1	(1)	(1)
Feb. 15	164.0	191.4	194.4	113.0	147.1	167.7	143.8
Mar. 15	(1)	194.7	(1)	(1)	148.8	(1)	(1)
Apr. 15	(1)	194.0	(1)	(1)	148.8	(1)	(1)
May 15	166.6	199.6	193.1	113.8	147.2	167.2	144.0
June 15	(1)	204.2	(1)	(1)	147.9	(1)	(1)
July 15	(1)	209.5	(1)	(1)	148.3	(1)	(1)
Aug. 15	171.2	209.8	194.5	116.3	149.1	170.8	145.8

Period	All items	Food	Apparel	Rent	Fuel, electricity, and refrigeration	House-furnishings	Miscellaneous
SCRANTON, PA.—*Continued*							
1950: Sept. 15	(1)	208.9	(1)	(1)	149.8	(1)	(1)
Oct. 15	(1)	207.2	(1)	(1)	150.6	(1)	(1)
Nov. 15	173.1	207.1	201.8	117.3	151.1	180.3	148.9
Dec. 15	(1)	212.1	(1)	(1)	151.8	(1)	(1)
1951: Jan. 15	(1)	217.7	(1)	(1)	152.0	(1)	(1)
Feb. 15	180.8	223.7	210.5	118.7	158.3	185.7	150.5
Mar. 15	(1)	222.7	(1)	(1)	158.3	(1)	(1)
Apr. 15	(1)	221.4	(1)	(1)	154.9	(1)	(1)
SEATTLE, WASH.							
1950: Average	177.4	211.8	185.9	145.3	129.4	193.1	162.4
Jan. 15	(1)	205.8	(1)	(1)	128.3	(1)	(1)
Feb. 15	174.3	205.3	182.5	144.8	128.3	187.2	161.8
Mar. 15	(1)	204.4	(1)	(1)	128.4	(1)	(1)
Apr. 15	(1)	205.6	(1)	(1)	128.9	(1)	(1)
May 15	174.4	206.9	182.8	145.4	128.9	189.7	160.2
June 15	(1)	208.6	(1)	(1)	128.9	(1)	(1)
July 15	(1)	211.4	(1)	(1)	128.9	(1)	(1)
Aug. 15	177.3	214.6	184.8	145.8	129.0	189.6	161.4
Sept. 15	(1)	214.1	(1)	(1)	129.3	(1)	(1)
Oct. 15	(1)	218.0	(1)	(1)	131.2	(1)	(1)
Nov. 15	183.1	221.8	192.3	147.6	131.2	205.2	166.2
Dec. 15	(1)	225.7	(1)	(1)	131.5	(1)	(1)
1951: Jan. 15	(1)	230.2	(1)	(1)	131.8	(1)	(1)
Feb. 15	188.3	231.7	201.8	148.1	132.0	213.5	168.7
Mar. 15	(1)	234.3	(1)	(1)	132.1	(1)	(1)
Apr. 15	(1)	234.4	(1)	(1)	132.1	(1)	(1)
WASHINGTON, D. C.							
1950: Average	169.5	202.6	210.9	116.7	144.2	202.0	159.2
Jan. 15	(1)	194.4	(1)	(1)	143.5	(1)	(1)
Feb. 15	166.0	194.0	210.2	116.4	143.0	196.8	156.9
Mar. 15	(1)	194.7	(1)	(1)	143.0	(1)	(1)
Apr. 15	(1)	194.4	(1)	(1)	143.0	(1)	(1)
May 15	166.8	196.9	208.5	116.5	141.7	196.7	157.4
June 15	(1)	201.9	(1)	(1)	143.0	(1)	(1)
July 15	(1)	205.8	(1)	(1)	143.3	(1)	(1)
Aug. 15	170.8	207.4	209.0	117.4	144.0	200.7	159.9
Sept. 15	(1)	207.0	(1)	(1)	145.6	(1)	(1)
Oct. 15	(1)	208.9	(1)	(1)	145.8	(1)	(1)
Nov. 15	173.5	208.9	215.1	117.8	147.1	213.0	162.5
Dec. 15	(1)	216.7	(1)	(1)	147.4	(1)	(1)
1951: Jan. 15	(1)	221.2	(1)	(1)	147.4	(1)	(1)
Feb. 15	179.2	223.3	222.5	118.1	149.1	222.4	164.3
Mar. 15	(1)	222.4	(1)	(1)	149.1	(1)	(1)
Apr. 15	(1)	222.2	(1)	(1)	146.7	(1)	(1)

[1] Not available.

Appendix D

TABLE D–1: *Population weights used for combining city data into composites for the United States* [1]

Regions and metropolitan areas [2]	Weights for combining: City food data for food price index for large cities in United States		Weights for combining: City data for other goods and services to obtain indexes for large cities in United States	
	1950 percent	1942 percent	1950 percent	1942 percent
North Atlantic:				
Boston, Lowell, Lawrence, Haverhill,[3] Worcester,[4] Brockton [5]	3.84	4.9		
Providence [6]	.91	.8		
Fall River [5]	.17	.4		
Bridgeport, Waterbury	.51	.6	6.88	8.8
New Haven, Hartford, Springfield–Holyoke, New Britain–Bristol [5]	1.45	2.1		
Portland, Maine [4]	.15	.2	.15	.2
Manchester [4]	.11	.1	.11	.1
Buffalo, Erie	1.62	1.6	3.86	3.9
Rochester, Syracuse, Utica–Rome, Schenectady–Troy–Albany	2.24	2.3		
New York City, Stamford–Norwalk [5]	11.98	11.8	16.13	13.4
Newark (Northeastern N. J.)[7]	4.15	1.6		
Philadelphia, Allentown–Bethlehem, Easton, Wilmington, Trenton, Atlantic City, Reading, Lancaster, York,[4] Harrisburg	7.07	7.2	7.07	7.2
Scranton, Wilkes-Barre–Hazleton	.80	.9	.80	.9
Pittsburgh, Johnstown, Altoona, Charleston, Wheeling–Steubenville	4.10	4.2	4.10	4.2
Total	39.10	38.7	39.10	38.7
South Atlantic:				
Baltimore	1.64	1.8	1.64	1.8
Washington	1.81	1.9	1.81	1.9
Richmond, Roanoke, Durham,[4] Greensboro [4]–High Point	.93	.8	1.11	1.0
Winston-Salem	.18	.2		
Norfolk, Portsmouth, Newport News [3]	.68	.7	.68	.7
Atlanta, Augusta,[4] Macon,[4] Asheville,[4] Charlotte [4]	1.59	1.3	1.59	1.3
Savannah	.19	.2	.56	.6
Charleston,[4] Columbia [4]	.37	.4		
Jacksonville, Tampa–St. Petersburg, Miami	1.48	1.1	1.48	1.1
Total	8.87	8.4	8.87	8.4
North Central:				
Chicago, South Bend, Rockford	7.23	8.1	7.23	8.1
Milwaukee, Racine, Kenosha, Madison [4]	1.51	1.7	1.51	1.7
Indianapolis, Fort Wayne, Terre Haute [4]	1.04	1.2		
Peoria, Davenport [8]	.60	.4	1.93	2.2
Springfield, Ill.,[9] Decatur	.29	.6		
North Central—Continued				
Cincinnati, Hamilton,[4] Huntington–Ashland	1.60	1.8		
Louisville, Evansville	.91	1.0	3.83	4.1
Columbus, Dayton, Springfield, Ohio [4]	1.32	1.3		
Detroit, Jackson,[4] Kalamazoo,[4] Toledo, Grand Rapids, Flint, Lansing,[4] Saginaw [4]	5.55	6.1	5.55	6.1
Cleveland, Akron, Canton, Youngstown	3.31	3.6	3.31	3.6
St. Louis, Springfield, Mo.[4]	2.20	2.5	2.20	2.5
Kansas City, Mo., Topeka,[4] St. Joseph [4]	1.25	1.3		
Wichita	.27	.3		
Cedar Rapids	.13	.1	2.65	2.8
Omaha, Sioux City,[4] Lincoln,[4] Des Moines	1.00	1.1		
Minneapolis [10]	1.09	1.1	1.68	1.7
St. Paul [10]	.59	.6		
Total	29.89	32.8	29.89	32.8
South Central:				
Birmingham, Montgomery,[4] Chattanooga,[4] Nashville	1.56	1.7	1.98	2.0
Knoxville	.42	.3		
Memphis	.60	.5		
Jackson	.18	.2	1.02	.9
Little Rock	.24	.2		
Mobile [4]	.28	.3	.28	.3
Houston, Austin,[4] Beaumont–Port Arthur,[4] San Antonio, El Paso	2.29	2.1		
Dallas, Fort Worth, Waco,[4] Oklahoma City, Tulsa	2.07	1.8	4.36	3.9
New Orleans, Shreveport [4]	1.06	1.1	1.06	1.1
Total	8.70	8.2	8.70	8.2
Western:				
Denver, Pueblo [4]	.81	.8		
Salt Lake City	.34	.3	1.23	1.2
Butte-Anaconda [3]	.08	.1		
Seattle, Spokane, Tacoma	1.52	1.3	1.52	1.3
Portland, Oreg.	.87	.7	.87	.7
San Francisco–Oakland, Sacramento, San Jose, Fresno [4]	3.78	3.1	3.78	3.1
Los Angeles, San Diego	6.04	5.6	6.04	5.6
Total	13.44	11.9	13.44	11.9
Grand total	100.00	100.0	100.00	100.0

[1] Source: 1950 population weights based on 1950 Census of Population, Preliminary Counts, Series PC–3, No. 3 and No. 4; 1942 population weights based on 1940 population adjusted by percent of change from April 1940 to May 1942 from U. S. Department of Commerce, Bureau of the Census, Estimates of the Civilian Population by Counties, May 1, 1942, Series P–3, No. 33.

[2] In each case the city first enumerated is that in which prices are obtained.

[3] Not classified as a metropolitan area in 1950, but included for comparability with weights used in previous years.

[4] Not classified as a metropolitan district in 1940 by the census.

[5] Not classified as a metropolitan district in 1940, but was a separate metropolitan area in 1950; included for comparability with old weights.

[6] For the purpose of computing the composite food-cost index in 1942 the Providence weight was computed on the basis of two-thirds of the combined population of the Providence metropolitan district as given by the census, the Fall River weight on the basis of one-third of that population.

[7] Deleted from the New York–northeastern New Jersey metropolitan area; includes population of all northeastern New Jersey counties.

[8] For the purpose of computing the composite food-cost index in 1942, the Peoria weight includes one-third of combined population of the Davenport–Moline–Rock Island metropolitan district; the Springfield, Ill., weight, two-thirds of that population.

[9] In 1940 not classified as a metropolitan district by the census. For the purpose of computing the composite food-cost index in 1942, the Peoria weight included one-third of the combined population of the Davenport–Moline–Rock Island metropolitan district; the Springfield, Ill., weight two-thirds of that population.

[10] Population of Duluth–Superior prorated over Minneapolis and St. Paul.

Appendix E.—Relative Importance of Items in Index

In adjusting the Consumers' Price Index as of January 1950, weights were revised to reflect the 1949–50 pattern of consumers' expenditures. New items were introduced, and the weights of others were changed. (For a description of the adjusted index, see pp. 10–20.) As a result, the relative importances, which reflect the effective weight of each item in the index, were changed as shown in table E–5.

"Relative importance" refers to the percentage distribution of the "value weights" which enter into the index calculation. The relative importance figures for the base period of the index represent the distribution of family expenditures for that period. To exemplify, if 30 percent of consumers' expenditures were allocated to food and 10 percent to recreation, 30 percent and 10 percent would represent relative importances of these groups. In subsequent periods, the relative importances do not reflect the distribution of actual expenditures. Instead, they are the percentage distribution of the costs necessary to purchase in the current period, the same quantity and quality of goods purchased in the base period. They are therefore affected by the size of the base-period expenditure, as well as by the differences in the rates at which prices for different items change, i. e., relative importance will increase for those items which rise in price faster than average and decline for those items which increase in price less than average.

Changes in relative importance over time are illustrated by assuming that an index contains only two items, as follows. The base-period expenditure for item A was $60 (3 units at $20 each), and for item B it was $40 (one unit at $40). The base-period relative importance would be 60 percent and 40 percent, respectively. If the price of A doubles and the price of B increases only 50 percent, the cost of the base-period units currently becomes $120 (3 units of item A at $40 each) plus $60 (one unit of item B at $60) or $180. The relative importance of item A is thus 67 percent $\left(\frac{120}{180}\right)$ and of item B, 33 percent $\left(\frac{60}{180}\right)$.

Utilization of relative importances makes possible useful short-cut procedures in constructing special indexes, and in weighting group indexes together to obtain composite or "all items" indexes. These procedures are here described and the current explanation supersedes that made in the August 1948 issue of the Monthly Labor Review.

Value Weights—Origin and Changes

It is obviously impossible to collect, frequently, the information on price changes for all the goods and services purchased by consumers; but complete coverage is unnecessary for the purpose of the CPI calculation. Instead, pricing of a representative sample of items suffices, since fairly large groups of related items have similar price movements over time. Thus, in the construction of the CPI, the price movement of one item is imputed to the group of which it is a part.

Before the January 1950 adjustment, the index was calculated by using the annual average expenditure for each item purchased by families of wage earners and lower-salaried workers as disclosed in a 1934–36 expenditure survey. The expenditures for related groups of items known to have similar price movements were then totaled, and representative items were priced. The total expenditure for each group was multiplied by the percentage change in the price of the item selected to represent it. In this manner the 1934–36 annual expenditures were adjusted to the 1935–39 price level.

These figures formed the base-period "value weights" and their percentage distribution gives the base-period relative importance. In order to obtain value weights for subsequent periods, these base-period weights were multiplied by the appropriate price relatives from period to period. Subsequent value weights divided by those of the base period yield the index for the subsequent period. The percentage distribution of these value weights at any period is the relative importance for that period.

Value weights in the CPI have been altered at times to reflect unusual conditions or to calculate the index with a different number of priced items. Thus, they are not strictly comparable over the years since 1935–39. For example, during World War II, the weights were adjusted within com-

modity groups (and to some extent between groups) to account for rationing and shortages, but the original weights were subsequently restored.

In 1947, the number of priced items was reduced and at the same time some articles of children's clothing were added to the priced items. Base-period value weights assigned to those items for which pricing was discontinued were reassigned to currently priced items. Base-period value weights for children's clothing (which had previously been assigned to items used to reflect the price movement of children's clothing) were assigned to the representative items which had been added to the list of priced items. These later adjustments affected the relative importance of individual items in relation to the group and to the all-items total, but the relationship of groups to the total index was unaffected.

More important than the foregoing adjustments, however, are those changes in value weights (and consequently relative importance) due to changed prices. Since prices of items increase or decrease at different rates, the relationships (or relative importance) of the value weight of the item to the total varies from time to time, as exemplified at the beginning of this article. In the index before adjustment, for example, the relative importance of food as of January 1950 had increased much more from the base period than that of any other group; this resulted because prices of food had increased more than those of other groups, and not because families were spending a larger fraction of their total expenditures on food. In contrast, the relative importance of rent declined because rents rose very slowly compared with prices of other things. The relative importance of major groups and subgroups of food and miscellaneous commodities is shown in table E–1 for the base period (1935–39) and for January 1950, both before and after adjustment.

January 1950 figures after adjustment are not comparable with those previously published. A few changes in classification were made as part of the interim adjustment: radios were transferred from the housefurnishings to the miscellaneous group; television and alcoholic beverages were added to the miscellaneous group. The group of unallocated expenditure items, formerly included in the miscellaneous group, were distributed proportionally to priced items. The effect of these changes is shown in table E–1. Unallocated items have been distributed proportionally to the priced items in the January 1950 figures both before and after adjustment in order to show the changes in relative importances.

TABLE E–1.—*Percentage distribution of index value weights*

Commodity group	1935–39	January 1950		
		Before adjustment, with unallocated—		After adjustment
		Separated	Distributed	
Food	33.9	39.8	41.6	33.3
Cereals and bakery products	5.3	5.9	6.1	3.9
Meats, poultry, and fish	9.6	12.4	13.0	10.6
Meats	7.7	10.0	10.5	7.6
Beef and veal	4.2	5.9	6.2	4.7
Pork	2.7	2.9	3.0	2.1
Lamb	.8	1.2	1.3	.8
Chickens	1.1	1.1	1.1	2.0
Fish	.8	1.3	1.4	1.0
Dairy products	6.5	7.2	7.5	6.1
Eggs	1.9	1.7	1.8	1.4
Fruits and vegetables	7.3	8.6	9.0	7.0
Fresh	5.6	6.9	7.3	4.7
Frozen				.3
Canned	1.4	1.2	1.2	1.8
Dried	.3	.5	.5	.2
Beverages	1.1	1.8	1.9	2.4
Fats and oils	1.1	1.0	1.0	.9
Sugar and sweets	1.1	1.2	1.3	1.0
Apparel	10.5	11.7	12.2	12.8
Rent	18.1	13.2	13.8	11.6
Fuel, electricity, and refrigeration	6.4	5.4	5.6	3.7
Housefurnishings	4.2	4.5	4.7	5.7
Miscellaneous	26.9	25.4	22.1	32.9
Allocated:				
Medical care	3.8	3.2	3.3	5.2
Personal care	2.3	2.4	2.5	2.4
Automobiles	3.8	5.2	5.5	7.8
Other transportation	4.1	2.4	2.5	3.6
Reading and recreation	2.8	2.8	2.9	5.8
Household operation	3.6	3.1	3.3	4.1
Tobacco and alcoholic beverages	2.3	2.0	2.1	4.0
Unallocated	4.2	4.3		
All items	100.0	100.0	100.0	100.0

Table E–1 illustrates that the index relative importances as of January 1950 (before adjustment) represent the percentage distribution of the current costs of a fixed market basket of goods and services and not the actual current distribution of consumer expenditures. Actually, consumers change their buying habits considerably over time. For example, new items, such as television, are introduced in the market and claim their share of the consumers' dollar. In addition, the relationships of prices of competing goods cause consumers to substitute one item for another; if the price of rib roast, for example, advances, the consumer often substitutes a cheaper cut of meat such as frank-

furters or possibly a cheese or egg dish. Government controls also affect the expenditure pattern as well: with rents controlled many consumers had greater proportionate amounts to spend on other items. Thus, as the base period recedes, the relative-importance figures become less and less indicative of the manner in which consumers spend their money.

The interim adjustment was designed specifically to correct this deviation from reality. As of January 1950, the value weights were adjusted to reflect the current distribution of consumers' expenditures, i. e., the manner in which consumers were spending their money as of that date. The extent of the revision in the value weights may be seen by comparing the relative importance both before and after revision in table E–1.

Uses of Relative Importance

Index relative importance figures can be calculated for any date in much the same manner as are value factors. By the steps shown in tables E–2 and E–3, the relative importances may be determined for any particular date desired, and group indexes may be combined to approximate the all-items index. This all-items index will not exactly equal the Bureau's published index, partly because of differences in rounding and partly because of minor changes in value weights and differences in the method of handling the group of unpriced items.

In using relative importance figures, it must be remembered that they are not quantity weights; they are value weights expressed as percentages and are applied to price relatives, not to prices. The reference date (or base period) of the relative must be the same as the date of the relative importance. Thus, the discussion which follows uses base-period relative importances and published indexes on a 1935–39 base for periods prior to January 1950, and indexes and relative importances based on January 1950 for periods after that date.

The procedure for calculating relative importances, shown in table E–2, consists of multiplying the base-period group relative importance by the corresponding index of the group for the period desired, in this case January 1950. Prices of the miscellaneous unallocated group were assumed to move with (i. e., are assigned the same index as) the all-items index.

The products of these multiplications, when summed, approximate the all-items index, and the percentage distribution of the products represents the relative importance of each group in January 1950.

TABLE E–2: *Calculation of relative importance of components, January 1950, before adjustment of weights*

Group	Relative importance, 1935–39 (1)	Index, January 1950 (1935–39=100): Adjusted series (2)	Product: columns (1)×(2) ÷100 (3)	Relative importance, January 1950 [1] (col. 3÷168.2799) (4)
Food	33.9	196.0	66.4440	39.5
Apparel	10.5	185.0	19.4250	11.6
Rent	18.1	129.4	23.4214	13.9
Fuel	6.4	140.0	8.9600	5.3
Housefurnishings	4.2	184.7	7.7574	4.6
Miscellaneous:				
Allocated	22.7	155.1	35.2077	20.9
Unallocated	4.2	168.2	7.0644	4.2
All items	100.0	168.2	168.2799	100.0

[1] Including effect of new unit bias correction in rent.

To obtain the relative importances for the adjusted index after January 1950, the procedure shown in table E–3 should be followed: multiply the group relative importances for the adjusted index for January 1950 by the relative price change in the corresponding adjusted index from January 1950 to the designated date. The percentage distribution of these products is the relative importance. The sum of the products is the weighted relative change from January 1950 (i. e., an all-items index with January 1950=100).

To obtain the all-items index on a 1935–39 base, multiply this figure by the January 1950 all-items index.

TABLE E–3: *Calculation of relative importance of components, February 1951, adjusted series*

Group	Index—January 1950 (1935–39=100) (1)	Relative importance, January 1950 (2)	Relative change in index, January 1950 to February 1951 (3)	Product: cols. (2)×(3)÷100 (4)	Relative importance, February 1951 (col. 4÷109.2740) (5)
Food	196.0	33.3	115.3	38.3949	35.1
Apparel	185.0	12.8	109.2	13.9776	12.8
Rent	129.4	11.6	103.6	12.0176	11.0
Fuel	140.0	3.7	102.8	3.8036	3.5
Housefurnishings	184.7	5.7	113.5	6.4695	5.9
Miscellaneous	155.1	32.9	105.2	34.6108	31.7
All items	168.2	100.0	109.3	109.2740	100.0

All items, February 1951 (1935–39=100)=Σ (column 4)×168.2=183.8.

The January 1950 indexes for all items and rent used in tables E–2 and E–3 are adjusted indexes corrected for "new unit bias"[1] (as shown in appendix C, p. 27). Therefore, the relative importances for January 1950 calculated in table E–2 differ from those in table E–1, which do not show the effect of the rent correction.[2] To calculate relative importances for the "old series" index, the procedure shown in table E–2 should be followed for periods both before and after January 1950, using "old series" index numbers.

The manner in which special indexes may be calculated is illustrated in table E–4. An index of all items less food is computed in the example shown. Procedures are the same as those already explained, except that the relative importance of groups excluding food is redistributed to equal 100.

The uses which may be made of group relative importances may also be made by item, using price relatives for individual foods in regular food releases and for other items in the quarterly releases for other groups. However, since some item weights have been changed from time to time, this calculation will give only approximations.

In the following listing of January 1950 relative importances, the food figures are based on a weighted average of the value weights of 56 cities; for other groups they are based on a weighted average of actual or estimated data for 34 cities. This presentation differs from the ordinary calculation regularly issued for December of each year which has been based only on the cities priced in December weighted to represent all cities. In the list, all groups of unallocated items shown in earlier reports—other apparel, other housefurnishings, other household supplies, and other unallocated items—have been distributed proportionately to priced items.

TABLE E–4: *Calculation of indexes, before and after adjustment of weights, for selected groups*

Group	Before adjustment				
	Relative importance, 1935-39		Index, January 1950 (1935–39=100)	Product: cols. (2) ×(3)÷100	Relative importance, less food, January 1950 [1] (col. 4÷153.1361)
	All groups	All groups, less food			
	(1)	(2)	(3)	(4)	(5)
Food	33.9				
Apparel	10.5	17.0	185.0	31.4500	20.5
Rent	18.1	29.2	129.4	37.7848	24.7
Fuel	6.4	10.3	140.0	14.4200	9.4
Housefurnishings	4.2	6.8	184.7	12.5596	8.2
Miscellaneous:					
Allocated	22.7	36.7	155.1	56.9217	37.2
Unallocated	4.2				
All items, less food	100.0	100.0	168.2	153,1361	100.0

Group	After adjustment					
	Index, January 1950	Relative importance January 1950		Relative change in index, January 1950 to February 1951	Product: columns (3)×(4) ÷100	Relative importance, less food, February 1951 (col. 5÷106.2607)
		All groups	All groups, less food			
	(1)	(2)	(3)	(4)	(5)	(6)
Food		33.3				
Apparel	185.0	12.8	19.2	109.2	20.9664	19.7
Rent	129.4	11.6	17.4	103.6	18.0264	17.0
Fuel	140.0	3.7	5.6	102.8	5.7568	5.4
Housefurnishings	184.7	5.7	8.5	113.5	9.6475	9.1
Miscellaneous	155.1	32.9	49.3	105.2	51.8636	48.8
All items, less food	153.1	100.0	100.0	106.3	106.2607	100.0

[1] Including effect of new unit bias correction in rent.

All items, less food, February 1951 (1935-39=100.0)=Σ (column 5)×153.1=162.7.

[1] See Correction of New Unit Bias in the Rent Component of Consumers' Price Index, pp. 1–10.

[2] Previously published relative importances for the period 1940 through 1949, during which the new unit bias was accumulating, do not show the effect of this correction. Appropriate adjustments must be made.

Table E–5: *List of items included and relative importance of each item in major groups of items and in total index after adjustment, January 1950*

Item and unit	Group total	All-items total
FOOD	100.0	33.3
Cereals and bakery products	11.7	3.9
Cereals :		
Flour, wheat—5 lb.	1.8	.6
Corn flakes—11 oz.	.4	.1
Corn meal—lb.	.1	(1)
Rice—lb.	.2	.1
Rolled oats—20 oz.	.2	.1
Bakery products :		
Bread, white—lb.	6.5	2.2
Vanilla cookies—lb.	2.5	.8
Meats	31.5	10.6
Beef :		
Round steak—lb.	4.0	1.4
Rib roast—lb.	1.3	.4
Chuck roast—lb.	1.7	.6
Frankfurters—lb.	2.7	.9
Hamburger—lb.	3.4	1.1
Veal cutlets—lb.	1.0	.3
Pork :		
Chops—lb.	2.8	.9
Bacon, sliced—lb.	1.6	.5
Ham, whole—lb.	1.9	.6
Salt pork—lb.	.3	.1
Lamb, leg—lb.	2.3	.8
Poultry—frying chickens	5.5	2.0
Fish :		
Fish (fresh, frozen)—lb.	2.1	.7
Salmon, pink—16-oz. can	.9	.3
Dairy products	18.3	6.1
Butter—lb.	2.6	.9
Cheese—lb.	1.7	.6
Milk, fresh (delivered)—qt.	6.7	2.1
Milk, fresh, (grocery)—qt.	4.7	1.6
Milk, evaporated—14½-oz. can	.9	.3
Ice cream—pt.	1.7	.6
Eggs, fresh—doz.	4.3	1.4
Sugar and sweets	3.1	1.0
Sugar—5 lb.	2.2	.7
Grape jelly—12-oz. jar	.9	.3
Fruits and vegetables	21.2	7.0
Frozen foods	.8	.3
Strawberries—16 oz.	.2	.1
Orange juice—6 oz.	.2	.1
Peas—12 oz.	.4	.1
Fresh fruits and vegetables	14.1	4.7
Fresh fruits :		
Apples—lb.	.8	.3
Bananas—lb.	1.6	.5
Oranges—doz.	2.1	.7
Fresh vegetables :		
Beans, green—lb.	1.0	.3
Cabbage—lb.	.5	.2
Carrots—bunch	.8	.3
Lettuce—head	1.6	.5
Onions—lb.	1.0	.3
Potatoes—15 lb.	2.6	.9
Sweet potatoes—lb.	.4	.1
Tomatoes—lb.	1.7	.6
Canned fruits and vegetables	5.6	1.8
Canned fruits :		
Peaches—No. 2½ can	.9	.3
Pineapples—No. 2½ can	.7	.2
Canned vegetables :		
Corn—No. 2 can	1.0	.3
Tomatoes—No. 2 can	1.4	.5
Peas—No. 303 can	.9	.3
Baby food—4¾-oz. jar	.7	.2
Dried fruits and vegetables	.7	.2
Fruits, prunes—lb.	.2	.1
Vegetables, navy beans—lb.	.5	.1
Beverages	7.1	2.4
Coffee—lb.	5.3	1.8
Cola drinks—6-bottle carton	1.8	.6
Fats and oils	2.8	.9
Lard—lb.	.4	.1
Shortening, hydrogenated—lb.	1.0	.4
Salad dressing—pt.	.7	.2
Oleomargarine—lb.	.7	.2

Item	Group total	All-items total
APPAREL	100.0	12.8
Wool	29.1	3.7
Men's:		
Overcoats	1.6	.2
Topcoats	1.1	.1
Suits	8.1	1.1
Slacks	1.7	.2
Sweaters	.5	.1
Women's:		
Coats, heavy, fur trimmed	1.8	.2
Coats, sport, heavy	3.2	.4
Coats, light	2.2	.3
Suits	4.9	.6
Dresses	1.1	.1
Girls': Coats	1.4	.2
Boys':		
Suits	.4	.1
Slacks	.3	(1)
Mackinaw	.8	.1
Cotton	19.0	2.4
Men's:		
Suits	.1	(1)
Trousers	.5	.1
Overalls, denim	.8	.1
Shirts, work	.8	.1
Shirts, business	2.2	.3
Pajamas	.5	.1
Shorts	.8	.1
Undershirts	.5	.1
Unionsuits	.3	(1)
Socks	.9	.1
Gloves, work	.5	.1
Women's:		
Dresses, street	2.0	.2
Housedresses	1.0	.1
Nightgowns	.3	(1)
Gloves	.4	.1
Girls':		
Dresses	1.6	.1
Slips	.3	(1)
Panties	.3	(1)
Anklets	.5	.1
Boys':		
Slacks	.7	.1
Jeans, blue denim	.4	.1
Shirts, sport	.6	.1
Shirts, polo	.2	(1)
Shorts, knit	.3	(1)
Yard goods	1.3	.2
Diapers	1.2	.2
Silk, rayon, and nylon	18.5	2.4
Men's:		
Suits, rayon, tropical	.6	.1
Socks	.5	.1
Women's:		
Blouses, rayon	1.6	.2
Dresses	5.5	.6
Slips	1.8	.3
Nightgowns	1.1	.1
Panties	.8	.1
Hose, nylon	5.8	.8
Yard goods	.8	.1
Footwear	14.0	1.8
Men's:		
Shoes, oxford	3.6	.5
Shoes, work	1.0	.1
Rubbers, dress	.3	(1)
Women's:		
Shoes, oxford	4.0	.5
Shoes, strap, pump, or tie	1.8	.2
Children's:		
Girls', oxford	1.3	.2
Boys', oxford	2.0	.3
Other garments	7.8	1.0
Men's:		
Hats, felt	1.0	.1
Jackets, horsehide	1.1	.1
Women's:		
Coats, fur	2.6	.4
Gloves, capeskin	.3	(1)
Girdles	2.8	.4

[1] 0.05 percent or less.

TABLE E–5: *List of items included and relative importance of each item in major groups of items and in total index after adjustment, January 1950*—Continued

Item	Group total	All-items total
APPAREL—Continued		
Services	11.6	1.5
Men's:		
Dry cleaning	8.4	1.1
Shoe repair	1.9	.2
Women's: Shoe repair	1.3	.2
RENT	100.0	11.6
FUEL, ELECTRICITY, AND REFRIGERATION	100.0	3.7
Anthracite, Pennsylvania	7.3	.3
Bituminous coal	12.7	.5
Coke	2.7	.1
Fuel oil	11.1	.4
Kerosene	1.0	(1)
Range oil	2.3	.1
Wood	.1	(1)
Electricity	30.9	1.1
Gas:		
Space heating	7.8	.3
Other than heating	18.4	.7
Ice	5.7	.2
HOUSEFURNISHINGS	100.0	5.7
Towels	1.0	.1
Sheets	3.1	.2
Curtains	9.0	.5
Blankets	1.7	.1
Rugs:		
Cotton	.7	(1)
Axminster	4.6	.3
Felt base	2.0	.1
Living room suites	8.7	.5
Dinette suites:		
Oak	2.6	.1
Chrome	1.9	.1
Bedroom suites	6.8	.4
Sofa beds	1.3	.1
Bedsprings	2.7	.2
Mattresses	3.4	.2
Sewing machines, electric	1.8	.1
Toasters, electric	2.3	.1
Washing machines, electric	14.1	.8
Vacuum cleaners, electric	4.1	.2
Refrigerators, electric	15.8	.9
Stoves, cook	5.0	.3
Dinnerware, 53-piece set	3.9	.2
Pans, aluminum	2.8	.2
Brooms	.7	(1)
MISCELLANEOUS	100.0	32.9
Transportation	34.7	11.4
Automobiles	11.5	3.7
Tires	.7	.2
Gasoline	6.3	2.1
Motor oil	.5	.2
Auto repairs	2.1	.7
Auto insurance	2.0	.7
Auto license, fees and registration	.8	.3
Streetcar fares	7.3	2.4
Bus fares	1.4	.4
Railroad fares	2.1	.7

Item	Group total	All-items total
MISCELLANEOUS—Continued		
Medical care	15.7	5.2
Physicians:		
Office visit	2.0	.6
House visit	1.7	.5
Obstetrical care	.6	.2
Surgeons: Appendectomy	.4	.1
Specialist: Tonsillectomy	.4	.1
Dentist:		
Filling	2.4	.9
Extraction	.9	.3
Hospitals:		
Men's pay ward	.7	.2
Room	.9	.3
Group hospitalization	2.7	1.0
Optometrist: Eyeglasses complete	.7	.2
Medicine and drugs:		
Prescriptions	1.1	.4
Aspirin	.2	.1
Quinine	.1	(1)
Tincture of iodine	.3	.1
Milk of magnesia	.6	.2
Household operation	12.5	4.1
Laundry services	3.1	1.0
Domestic services	3.4	1.1
Telephone	2.2	.7
Postage	.4	.1
Water rent	.7	.2
Laundry soap:		
Bar	.8	.3
Granulated	1.1	.4
Toilet tissue	.8	.3
Recreation	17.6	5.8
Velocipedes	2.6	.9
Motion pictures: Adults	6.9	2.2
Newspapers	4.4	1.5
Television sets	2.6	.9
Radios: Table models	1.1	.3
Alcoholic beverages and tobacco:	12.3	4.0
Cigars	.5	.2
Cigarettes	6.1	1.9
Pipe tobacco	.3	.1
Beer	5.4	1.8
Personal care	7.2	2.4
Barber shop service, Haircuts: Men's	1.9	.7
Beauty shop service, Women's:		
Plain shampoos and waves	.8	.3
Permanent waves	.6	.2
Home permanent refills	.1	(1)
Toilet articles:		
Toilet soap	1.1	.3
Toothpaste	.9	.3
Face powder	.8	.3
Sanitary napkins	.6	.2
Razor blades	.4	.1

[1] 0.05 percent or less.

TABLE E–6: *Relative importance of major groups of goods and services in the consumers' price index after adjustment, by city, January, February, or March 1950*

City	All items	Food	Apparel	Housing	Fuel, electricity, and refrigeration	House-furnishings	Miscellaneous							
							Total miscellaneous	Medical care	Personal care	Reading and recreation	Household operation	Public transportation	Automobiles	Alcoholic beverages and tobacco
Atlanta [1]	100.0	30.0	12.7	11.0	3.9	6.7	35.7	4.2	2.3	4.7	8.5	2.5	9.4	4.1
Baltimore [2]	100.0	33.6	11.7	13.0	4.4	6.2	31.1	3.8	2.3	5.0	4.0	5.0	7.0	4.0
Birmingham [3]	100.0	30.8	14.9	10.3	3.8	6.9	33.3	4.3	2.5	4.2	7.6	3.0	7.6	4.1
Boston [3]	100.0	36.1	11.8	12.1	6.1	4.1	29.8	5.3	2.4	5.0	4.0	4.8	4.4	3.9
Buffalo [3]	100.0	32.6	12.0	11.3	4.7	6.2	33.2	4.2	2.3	6.1	3.5	2.6	9.8	4.7
Chicago [3]	100.0	37.6	11.4	11.8	3.6	3.9	31.7	5.4	2.5	5.3	3.6	3.4	6.9	4.6
Cincinnati [3]	100.0	34.1	12.8	10.8	3.6	7.6	31.1	4.3	2.3	5.4	3.1	3.7	8.5	3.8
Cleveland [1]	100.0	32.2	13.3	10.8	4.2	7.1	32.4	5.1	2.4	4.6	2.9	3.3	10.5	3.6
Denver [3]	100.0	29.3	12.2	12.1	3.6	6.9	35.9	5.9	2.5	4.7	4.2	2.3	12.5	3.8
Detroit [3]	100.0	31.2	12.2	11.1	4.2	6.8	34.5	5.4	2.1	5.9	3.6	2.3	11.5	3.7
Houston [3]	100.0	30.1	13.6	11.1	2.0	7.8	35.4	6.3	2.6	6.1	5.3	2.0	9.9	3.2
Indianapolis [3]	100.0	29.1	12.6	10.9	5.0	8.4	34.0	4.2	2.2	5.1	2.9	2.5	13.3	3.8
Jacksonville [2]	100.0	29.5	12.5	10.8	3.4	6.1	37.7	4.0	2.4	4.6	9.4	2.6	10.3	4.4
Kansas City [3]	100.0	29.3	12.1	12.6	3.8	6.9	35.3	5.0	2.2	4.9	4.3	2.9	12.5	3.5
Los Angeles [3]	100.0	30.5	12.3	12.3	1.6	6.3	37.0	5.7	2.2	6.4	3.6	2.6	13.4	3.1
Manchester [3]	100.0	30.4	15.8	10.2	6.5	7.2	29.9	4.5	2.3	5.2	4.4	2.3	7.0	4.2
Memphis [2]	100.0	30.2	13.8	10.9	2.8	9.0	33.3	5.6	2.3	5.4	4.5	1.9	10.0	3.6
Milwaukee [1]	100.0	31.4	12.6	12.2	4.7	7.3	31.8	5.4	2.3	5.7	2.8	2.7	9.8	3.1
Minneapolis [2]	100.0	30.5	12.0	11.2	4.9	6.6	34.8	6.4	2.3	5.1	3.5	2.8	11.2	3.5
Mobile [2]	100.0	31.4	15.2	11.0	4.2	7.1	31.1	3.8	2.5	4.5	6.2	2.8	6.9	4.4
New Orleans [1]	100.0	36.0	13.8	11.6	3.0	5.4	30.2	3.4	2.5	5.1	5.2	4.2	5.9	3.9
New York [3]	100.0	36.2	13.9	11.9	3.0	4.0	31.0	4.9	2.4	7.0	4.1	4.4	3.3	4.9
Norfolk [1]	100.0	31.4	11.4	10.6	5.4	9.1	32.1	4.5	2.4	4.9	6.2	2.8	7.7	3.6
Philadelphia [3]	100.0	34.9	12.7	11.4	4.5	6.1	30.4	4.1	2.4	5.7	3.7	4.9	5.3	4.3
Pittsburgh [3]	100.0	32.5	14.2	11.5	3.5	6.8	31.5	5.4	2.4	5.1	3.2	4.2	7.0	4.2
Portland, Maine [2]	100.0	32.3	12.9	11.3	5.8	6.1	31.6	5.0	2.3	6.3	4.0	1.7	7.2	5.1
Portland, Oreg. [3]	100.0	30.8	11.6	11.0	3.2	6.2	37.2	7.0	2.2	6.0	3.5	2.4	13.1	3.0
Richmond [3]	100.0	32.8	14.0	10.9	5.4	5.6	31.3	6.3	2.3	5.0	6.0	2.5	6.5	2.7
St. Louis [2]	100.0	33.1	11.9	10.8	4.0	6.6	33.6	4.7	2.4	4.8	3.0	4.4	10.0	4.3
San Francisco [2]	100.0	33.1	12.8	11.0	1.3	4.5	37.3	6.7	2.3	7.1	5.1	3.3	9.6	3.2
Savannah [3]	100.0	30.9	14.3	11.0	4.1	7.2	32.5	4.3	2.6	4.9	6.4	3.2	7.0	4.1
Scranton [1]	100.0	36.3	15.1	11.7	4.9	6.5	25.5	5.2	2.4	3.9	2.8	2.0	5.5	3.7
Seattle [1]	100.0	32.0	11.5	11.5	3.5	5.5	36.0	7.7	2.3	5.9	3.9	3.3	9.3	3.6
Washington [1]	100.0	30.0	13.7	13.5	3.3	4.8	34.7	5.3	2.4	5.9	4.9	3.5	9.2	3.5

[1] February 1950. [2] March 1950. [3] January 1950.

Appendix F

TABLE F–1: *Percentage distribution of expenditures as of the survey date (1947, 1948, or 1949) and adjusted to 1950, by expenditure group: Wage earners and clerical workers, white families of 2 or more persons*

Group	Denver		Detroit		Houston		Manchester		Memphis		Richmond		Washington, D. C.	
	1948	1950	1948	1950	1948	1950	1947	1950	1949	1950	1947	1950	1947	1950
Food	30.0	29.5	32.3	32.5	32.0	30.2	32.8	30.6	29.2	29.4	34.4	31.8	31.4	29.7
Apparel	13.2	12.0	12.8	11.5	14.1	12.6	16.9	15.7	13.2	12.9	14.8	13.7	14.3	13.5
Housing	11.8	12.1	10.7	10.6	10.1	11.6	9.7	10.2	11.5	11.9	10.6	11.0	13.5	13.2
Fuel, light, and refrigeration	3.7	3.5	4.0	4.1	2.2	2.0	5.6	6.3	2.8	2.5	4.8	5.1	3.2	3.0
Household operation	4.0	4.2	3.4	3.5	5.1	5.3	3.9	4.5	4.7	4.6	5.8	6.3	4.7	5.2
Housefurnishings	7.0	6.9	6.7	6.6	7.7	7.5	7.0	7.3	9.0	8.8	5.7	5.6	5.0	4.9
Automobile transportation	11.4	12.7	11.2	11.9	9.4	10.8	6.1	7.0	11.8	11.3	6.5	7.7	8.1	9.8
Other transportation	2.2	2.3	2.0	2.4	1.8	1.8	1.8	2.3	1.6	1.6	1.9	2.3	2.9	3.5
Personal care	2.5	2.4	2.1	2.1	2.5	2.4	2.2	2.3	2.2	2.2	2.4	2.1	2.4	2.3
Medical care	5.6	5.9	5.2	5.5	6.3	6.5	4.2	4.4	6.2	6.2	5.9	6.7	5.4	5.4
Reading and recreation	4.8	4.7	5.8	5.7	5.6	6.1	5.5	5.2	4.7	5.5	4.5	5.2	5.7	6.1
Tobacco and alcoholic beverages	3.8	3.8	3.8	3.6	3.2	3.2	4.3	4.2	3.1	3.1	2.7	2.5	3.4	3.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Appendix G

TABLE G–1: *Summary of mean square tests of deviations [1] of estimated weights from survey weights, 6 cities*

	Food	Clothing	Housing			Fuel, light, and refrigeration	Furnishing and equipment	Household operation	Auto purchase and operation			Other transportation	Personal care	Medical care	Reading and recreation	Alcoholic beverages and tobacco	All groups
			Total	Home owners' costs	Rent				Total	Auto purchase	Auto operation						
MEAN SQUARE DEVIATIONS																	
All races—Final weights:																	
Adjusted to 100 percent	7.81	1.15	------	0.33	0.40	0.77	0.66	0.46	------	2.19	0.52	0.32	0.03	0.37	0.18	0.43	15.62
Before adjustment to 100 percent	6.56	1.39	------	.45	.51	.87	.89	.58	------	2.43	.55	.35	.03	.28	.13	.44	15.46
White families—basic data:																	
Current index weights	[2] 92.92	1.11	[2] 4.09	------	------	5.10	3.64	.97	10.42	------	------	[2] .60	[2] .33	[2] 4.54	[2] 4.88	[2] 2.50	131.10
1934–36 weights	7.46	2.88	21.52	------	------	14.40	5.56	.69	5.69	------	------	.34	.04	.84	3.43	1.53	64.38
6-city average 1950 weights	[3] 6.14	2.20	.55	.36	.24	2.66	1.18	.95	5.46	------	------	[3] .89	[4] *.02	[3] 1.30	.22	.38	21.95
Data estimated by various methods:																	
Method A	*6.47	1.33	.89	.79	------	1.14	1.24	.84	3.44	*2.90	------	*.10	.04	.30	.62	.57	16.98
Method B	8.59	*1.22	2.31	------	------	*.78	*.84	*.60	6.24	------	------	.40	.27	*.23	*.11	*.35	21.94
Method C	6.16	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------
Method D	6.29	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------
Method E	------	1.38	------	------	------	------	------	------	------	------	------	.12	------	------	------	------	------
Method F	------	------	------	------	------	1.40	------	------	------	------	------	------	------	------	------	------	------
Method G	------	------	------	------	------	1.90	------	------	------	------	------	------	------	------	------	------	------
Method H	------	------	------	------	*.37	------	------	------	------	------	------	------	------	------	------	------	------
Method I	------	------	------	------	.56	------	------	------	------	------	------	------	------	------	------	------	------
Method J	------	------	------	*.29	------	------	------	------	------	------	------	------	------	------	------	------	------
Method K	------	------	------	3.00	------	------	------	------	------	------	------	------	------	------	------	------	------
Method L	------	------	------	2.82	------	------	------	------	------	------	------	------	------	------	-	------	------
Method M	------	------	------	3.49	------	------	------	------	------	------	------	------	------	------	--	------	------
Method N	------	------	------	10.10	------	------	------	------	------	------	------	------	------	------	------	------	------
Method O	------	------	1.53	------	------	------	------	------	------	------	------	------	------	------	------	------	------
All families—basic data:																	
6-city average 1950 weights (separately by race)	------	------	------	------	------	------	------	------	------	------	------	------	[4] *.03	------	------	------	------
Data estimated by various methods:																	
Method A—with Negro as ratio to white	*6.56	------	------	------	------	------	------	------	------	*2.43	------	*.35	------	------	------	------	------
Method B—with Negro as ratio to white	8.31	*1.39	1.97	------	------	*.87	*.89	*.58	5.02	------	------	.44	.27	*.28	*.13	*.44	[5] 20.59
Method A—computed directly	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------
Method B—computed directly	8.19	.87	2.04	------	------	.69	.84	.37	5.12	------	------	.43	.28	.18	.19	.35	19.55
Method B—separately by race	8.10	1.55	1.99	------	------	.59	1.00	.36	4.87	------	------	.40	.27	.31	.23	.34	20.01
Method C—with Negro as ratio to white	6.38	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------
Method D—computed directly	4.20	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------
Method H—separately by race	------	------	------	------	*.51	------	------	------	------	------	------	------	------	------	------	------	------
Method J—with Negro as ratio to white	------	------	------	*.45	------	------	------	------	------	------	------	------	------	------	------	------	------
Method P—computed directly	8.55	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------
Method R—computed directly	------	------	------	------	------	------	------	------	------	------	*.55	------	------	------	------	------	------
Method S—with Negro as ratio to white	------	------	------	------	------	------	------	------	------	2.63	------	------	------	------	------	------	------
Method T—computed directly	------	------	------	------	------	------	------	------	------	4.46	------	------	------	------	------	------	------
Method U—computed directly	------	------	------	------	------	------	------	------	------	2.78	------	------	------	------	------	------	------

*Indicates selected method.

[1] Denver, Detroit, Houston, Manchester, Memphis, Richmond. Washington not included in tests since original and present index weights were not strictly comparable with those for other cities.

[2] White pattern compared with index weights for all races.

[3] Estimate adjusted for significant difference between mean of 6 cities and mean of 32 cities in 1934–36.

[4] Average of 7 cities.

[5] For groups for which Method B was used for white families, combined estimates for white and Negro were calculated by this method despite the slightly higher mean square than by Method B computed directly for all races or separately by races. Tests for Negro families alone gave a much lower mean square for all groups when calculated as a ratio to white than when calculated separately by Method B.

NOTE.—Mean square tests were carried through only for those methods and groups which preliminary investigation by correlation analysis or other means indicated might be successful.

DESCRIPTION OF ESTIMATING METHODS

Method A: General—Ratio of change from 1934–36 6-city relative importance to 6-city 1950 relative importance × 1934–36 relative importance for city to be estimated.

Method B: General—Ratio of differences between 6-city current index relative importance and 6-city 1950 relative importance × current index relative importance of city to be estimated.

Method C: 6-City Regression—Individual city ratios of change in relative importance from 1934–36 (A) with change from 1935 to 1949 in State per capita income. Estimated ratios for city to be estimated applied to 1934–36 weight to obtain 1950 estimated relative importance.

Method D: 6-City Regression—*Food expenditures* for wage-earner clerical families, 6 cities, 1950, with city-county *OASI income*, 1948. Estimated dollar expenditures for food converted to percent of estimated total expenditures for wage-earner clerical-worker families. Total expenditure estimated from current index total cost-weights (1934–36 quantities × current prices) by ratio of 6-city actual expenditures to index cost weights.

Method E: 6-City Regression—Relative importance, 6 cities, 1950, with *population* in each city.

Method F: Same as E with *temperature* (degree days) in each city.

Method G: Multiple 6-City Regression—Relative importance, 6 cities, 1950, with *temperature* (degree days) and *percent of home owners* in each city.

Method H: Average rent for all families from *dwelling unit survey* adjusted to survey level, in each city, as a percent of estimated total expenditures for all families, calculated from index cost-weights in a manner similar to that of Method D.

Method I: Average rent (H) converted to a percent of estimated expenditures for families of wage-earner clerical workers (defined in Method D).

Method J: Estimated average expenditures for owned housing *by all families* calculated as the product of *7-city average 1950 costs per home owner*, and percent of home owners in each city from dwelling unit survey, converted to a percent of estimated total expenditures for all families (defined in Method D).

Method K: Housing *costs per home owner* estimated for each city by ratio of change from 1934–36 to 1950 for 6 cities (as for Method A). Estimated average expenditures for owned housing *by all families* calculated as product of estimated costs per home owner and percent of home owners (obtained from dwelling unit survey), and converted to percent of estimated total expenditures of all families (defined in Method D).

Method L: Same as K except with ratio of change from 1934–36 to *survey date*, i. e., not adjusted to 1950 as in K.

Method M: Same as K with home owner expenditures estimated for *wage-earner clerical-worker families* and converted to a percent of estimated total expenditures of wage-earner clerical-worker families.

Method N: 5-City Regression—Ratio of expenditures for home-owner costs (less repairs) to rent, 5 cities, 1950 (excluding Manchester) with OASI income, 1948. Home-owner costs calculated by applying the ratio derived from this regression to dwelling unit survey rent for each city. Repairs estimated by Method A. Total home-owner expenditures converted to a percent of estimated total expenditures for all families (defined in Method D).

Method O: Method A for home-owner costs and Method H for rent.

Method P: 6-City Regression—Average food expenditures for wage-earner clerical-worker families, 1950, 6 cities, with State per capita income. Food expenditures converted to percent of estimated total expenditures of wage-earner clerical-worker families (defined in Method D).

Method R: 6-City Regression—Expenditures for auto operation from all families, 6 cities, 1950, with percent of families owning cars. Latter estimated for each city from car registrations, reduced by 6-city ratio of survey data to registration data. Expenditures converted to percent of estimated total expenditures of all families (defined in Method D).

Method S: Estimates of relative importance by Method A adjusted by ratio of deviations from survey data (1950) to average change in State per capita income from 1935 to 1949.

Method T: Dollar expenditures estimated by series of ratios and regressions, using percent of families owning cars estimated from survey data for 6 cities and car registrations for all cities, survey data on average expenditures in 6 cities and State per capita income in all cities. Expenditures converted to percent of estimated total expenditures for all families (defined in Method D).

Method U: Multiple 6-city regression with zero intercept—average expenditures for auto purchase for all families, 1950, with percent of families owning cars estimated from 1949 car registrations reduced to survey percent and 1949 State per capita income. Expenditures converted to percent of estimated total expenditures for all families (defined in Method D).

Appendix H

TABLE H–1: *Grouping of family expenditure data used in obtaining weights for various indexes, by group*

FOOD INDEX

Family expenditures for—	Represented in the index by—
Cereals and bakery products	
Cereals:	
Flour, wheat	Flour, wheat.
Flour mixes	
Ready-to-bake biscuits	
Uncooked wheat cereal	
Macaroni, etc	
Corn flakes	Corn flakes.
Other ready-to-eat cereals	
Corn meal	Corn meal.
Rice	Rice.
Rolled oats	Rolled oats.
Other uncooked cereals	
Cornstarch, popcorn	Weighted average of prices for all priced cereals.
Bakery products:	
Bread	Bread, white.
Crackers	
Plain rolls	
Cookies	Vanilla cookies.
Cake	Layer cake.
Pies	
Doughnuts, sweet rolls, pastry	Weighted average of prices for vanilla cookies and layer cake.
Other bakery products	Weighted average of prices for all priced bakery products.
Meats, poultry, and fish	
Beef:	
All beefsteak	Round steak.
Rib roast	Rib roast.
Chuck roast	Chuck roast.
Other roast	Weighted average of prices for rib and chuck roast.
Hamburger	Hamburger.
Stew meat	
Frankfurters	Frankfurters.
Bologna	
Smoked sausage	
Cold cuts	
Corned, dried beef, etc	Weighted average of prices for all priced beef and frankfurters.
All veal	Veal cutlets.
Pork:	
All chops	Pork chops.
Fresh pork	
Fresh ham	
Bacon	Bacon, sliced.
Smoked or cured ham	Ham, whole.
Picnics (shoulder)	
Butts, etc	
Salt pork	Salt pork.
Liver	Weighted average of prices for all priced beef, frankfurters, veal and pork.
All lamb	Lamb, leg.
Tongue, heart, etc., canned, frozen, and other meats.	Weighted average of prices for all priced meats.

Family expenditures for—	Represented in the index by—
Meats, poultry, and fish—Continued	
All poultry	Frying chickens, New York dressed, and dressed and drawn.
Game	Weighted average of prices for all priced meats and poultry.
Fish:	
All fresh or frozen fish	Fish, fresh or frozen.
All canned fish	Salmon, pink.
Cured, smoked, other fish	Weighted average of prices for all priced fish.
Dairy products	
Butter	Butter.
Cheese and cheese spreads	Cheese.
Fresh milk	Milk, fresh, delivered and grocery.
Buttermilk	
Skimmed milk	
Chocolate milk	
Cream	
Ice cream	Ice cream.
Evaporated milk	Milk, evaporated.
Condensed milk	
Powdered milk	
Other dairy products	Weighted average of prices for all priced dairy products.
Eggs	
Eggs	Eggs, fresh.
Fruits and vegetables	
Fresh fruits and vegetables:	
Fresh fruits:	
Apples	Apples.
Bananas	Bananas.
Oranges	Oranges.
Lemons	
Grapefruit	
All other fresh fruits and all fresh fruit juices.	Weighted average of prices for all priced fresh fruits.
Fresh vegetables:	
Beans, green, wax, lima	Beans, green, fresh.
Cabbage	Cabbage.
Carrots	Carrots.
Lettuce	Lettuce.
Onions, dry and green	Onions.
Potatoes	Potatoes.
Sweetpotatoes	Sweetpotatoes.
Tomatoes	Tomatoes.
All other fresh vegetables	Weighted average of prices for all priced fresh vegetables.
Frozen fruits and vegetables:	
Strawberries	Strawberries, frozen.
Orange juice, concentrated	Orange juice, concentrated, frozen.
Other frozen fruits and juices	Weighted average of prices for frozen strawberries and orange juice.
All frozen vegetables	Peas, frozen.

TABLE H-1: *Grouping of family expenditure data used in obtaining weights for various indexes, by group*—Continued

FOOD INDEX—Continued

Family expenditures for—	Represented in the index by—
Fruits and vegetables—Continued	
Canned fruits and vegetables:	
Canned fruits:	
Peaches	Peaches, canned.
Pineapple	Pineapple, canned.
All other canned fruits and fruit juices.	Weighted average of prices for all priced canned fruits.
Canned vegetables:	
All canned corn	Corn, canned, cream style.
Tomatoes and tomato products.	Tomatoes, canned.
Peas	Peas, canned.
All other canned vegetables and vegetable juices and soups.	Weighted average of prices for canned corn, tomatoes, and peas.
All baby foods	Baby foods, strained.
Dried fruits and vegetables:	
Prunes	Prunes, dried.
Apricots	
Raisins, etc	
Navy beans	Navy beans.
Other beans	
Peanuts	
Other dried fruits, vegetables, and nuts.	Weighted average of prices for all priced dried fruits and vegetables.
Beverages	
Coffee	Coffee.
Tea	
Cocoa	
Beverages—Continued	
Cola drinks	Cola drinks.
Other carbonated drinks	
Malted milk, other nonalcoholic beverages.	Weighted average of prices for all priced beverages.
Fats and oils	
Lard	Lard.
Beef suet, etc	
Vegetable shortening	Shortening, hydrogenated.
Other shortening	
Salad and cooking oils	
Salad dressing, cooked	Salad dressing, cooked.
Mayonnaise	
Other special dressing	
Margarine	Margarine.
Peanut butter, other fats and oils	Weighted average of prices for all fats and oils.
Sugar and sweets	
All sugar	Sugar, white.
Apple butter	Grape jelly.
Jellies	
Jams	
Preserves	
All other sweets	Weighted average of prices for all priced sugar and sweets.
Miscellaneous	
Prepared foods, all miscellaneous and other foods.	Weighted average of prices for all priced food items.

APPAREL INDEX

MEN'S APPAREL	
Wool	
Overcoats, full length or fingertip length.	Overcoats.
Snow suits	
Ski suits	
Topcoats	Topcoats.
All 3 and 4 piece wool suits	Suits: 14–15 oz. medium quality; 13–13½ oz., medium quality; 13–13½ oz., inexpensive quality.
2 piece heavy wool suits	
Wool sport coats	
2 piece light wool suits	Suits, tropical.
Dress slacks	Slacks, dress.
Trousers, wool	
Slacks, knickers	
Sweaters, wool, pull-over and coat style	Sweaters.
Sweaters, rayon and cotton	
Cotton	
Suits, cotton	Suits, cotton.
Trousers, slacks, dress, cotton	
Trousers, work, cotton, cotton and wool.	Trousers, work.
Uniforms, costumes	
Overalls, bib style or waistband, dungarees, overall jumpers	Overalls.
Jackets and coveralls	
Special work clothing	
Shirts, work, cotton	Shirts, work.
Shirts, sport, wool or cotton, woven or knit.	
Gloves, work	Gloves, work.
Shirts, business and dress	Shirts, business, nationally advertised and not nationally advertised.

MEN'S APPAREL—Continued	
Cotton—Continued	
Pajamas	Pajamas.
Nightshirts	
Shorts, woven or knit	Shorts, 100 x 60 and 80 x 60.
Briefs	
Undershirts, light and heavy	Undershirts.
Other underwear	
Union suits	Union suits.
Heavy drawers	
Socks, cotton	Socks, dress, cotton.
Rayon and nylon	
Suits, rayon	Suits, rayon.
Trousers, slacks, dress, other than wool and cotton	
Slack suits, etc	
Socks, rayon, dress	Socks, dress, rayon.
Socks, other than cotton and rayon	
Other apparel	
Jackets, leather melton cloth, wool, and other than wool, water repellent	Jackets, leather.
Raincoats	
Hats, felt, straw, cotton, wool, rayon	Hats, felt.
Caps, helmets	
Footwear	
Shoes, street or dress	Shoes, street, medium quality. Shoes, street, inexpensive.
Shoes, sport and athletic	Shoes, work.
Houseslippers	
Shoes, work, regular; work, safety	

TABLE H–1: *Grouping of family expenditure data used in obtaining weights for various indexes, by group*—Continued

APPAREL INDEX—Continued

Family expenditures for—	Represented in the index by—
MEN'S APPAREL—Continued	
Footwear—Continued	
Protective rubber footwear: Rubbers, arctics, galoshes, boots.	Rubbers.
Sandals, play shoes, sneakers, loafers, etc.	Rubbers.
Miscellaneous	
Shorts, bathing suits, bathrobes, lounging robes, athletic supporters, handkerchiefs, dress gloves, ties, accessories, jewelry, etc.	Weighted average of prices for all priced items in the men's apparel group.
WOMEN'S APPAREL	
Wool	
Coats, wool, heavy, dress with fur	Coats, fur-trimmed with and without interlining.
Coats, wool, heavy, dress, no fur	Coats, sport, heavy, with and without interlining.
Coats, wool, heavy, sport	Coats, sport, heavy, with and without interlining.
Snow suits, ski suits	Coats, sport, heavy, with and without interlining.
Leggings, ski pants	Coats, sport, heavy, with and without interlining.
Sweaters	Coats, sport, heavy, with and without interlining.
Raincoats or rain jackets	Coats, sport, heavy, with and without interlining.
Coats, wool, light, sport	Coats, sport, lightweight wool.
Coats, wool, light, dress	Coats, sport, lightweight wool.
Coats, other than wool	Coats, sport, lightweight wool.
Suits, wool	Suits, wool.
Skirts, wool	Suits, wool.
Jackets	Suits, wool.
Suits, other than wool	Suits, wool.
Skirts, rayon or cotton	Suits, wool.
Dresses, wool, street	Dresses, wool.
Cotton	
Dresses, cotton, street	Dresses, street.
Cotton housedresses	Housedresses.
Aprons, smocks, etc.	Housedresses.
Special work clothing	Housedresses.
Uniforms, costumes, etc.	Housedresses.
Nightgowns, cotton and other than rayon.	Nightgowns.
Pajamas, cotton or wool	Nightgowns.
Gloves, other than leather	Gloves, fabric.
Rayon, nylon, and silk	
All blouses and shirts	Blouses, rayon.
Dresses, street: Rayon and silk	Dresses: Street, rayon, prints, medium and inexpensive quality.
Dresses, street: Cotton and rayon	Dresses: Street, rayon, prints, medium and inexpensive quality.
Dresses, street: Formal and semiformal	Dresses: Street, rayon, solid colors, medium and inexpensive quality.
Jumpers	Dresses: Street, rayon, solid colors, medium and inexpensive quality.
Sport slacks, slack suits	Dresses: Street, rayon, solid colors, medium and inexpensive quality.
Shorts, play suits	Dresses: Street, rayon, solid colors, medium and inexpensive quality.
Bathing suits, etc.	Dresses: Street, rayon, solid colors, medium and inexpensive quality.
	Dresses: Street, spun rayon, gabardine.
	Dresses: Wash, pigmented rayon, prints.
Slips and petticoats, rayon and nylon, other than rayon.	Slips, rayon.
Vests, undershirts	Slips, rayon.
Nightgowns, rayon or silk	Nightgowns, rayon.
Pajamas, silk	Nightgowns, rayon.
Robes, bathrobes, etc.	Nightgowns, rayon.
All panties, bloomers and briefs	Panties, rayon.
Other underwear	Panties, rayon.
Hose, rayon, plain and mesh	Hose, nylon, 45 gauge, 30 denier.
Hose, other	Hose, nylon, 45 gauge, 30 denier.
Anklets, cotton	Hose, nylon, 51 gauge, 15 denier.
Hose, nylon, plain and mesh	Hose, nylon, 51 gauge, 15 denier.
Anklets, other than cotton	Hose, nylon, 51 gauge, 15 denier.

Family expenditures for—	Represented in the index by—
WOMEN'S APPAREL—Continued	
Other apparel	
Coats, fur	Coats, fur.
Fur scarfs, muffs, etc.	Coats, fur.
Corsets	Girdles.
Girdles	Girdles.
Garter belts	Girdles.
Brassieres	Girdles.
Gloves, leather	Gloves, leather.
Footwear	
Shoes, oxford, street, dress, sport, work.	Shoes, street, oxford.
Oxfords and ties	Shoes, street, oxford.
Loafers, other leather shoes	Shoes, street, oxford.
Nonleather shoes	Shoes, street, oxford.
Athletic shoes, play shoes	Shoes, street, oxford.
Beach shoes, sneakers	Shoes, street, oxford.
Houseslippers	Shoes, street, oxford.
Rubbers, boots, etc.	Shoes, street, oxford.
Shoes, pumps, sandals, straps	Shoes, street, pump.
Miscellaneous	
Felt hats, straw hats, other hats; head scarfs, etc., handbags, leather; other handbags, handkerchiefs, umbrellas, belts, accessories, jewelry, etc.	Weighted average of prices for all priced items in the women's apparel group.
BOYS' APPAREL	
Wool	
All wool suits	Suits.
Wool sport coats	Suits.
Trousers, dress, wool	Slacks.
Overcoats	Mackinaws, wool, mixture.
Topcoats	Mackinaws, wool, mixture.
Jackets, wool or melton cloth, leather, other	Mackinaws, wool, mixture.
Sweaters, wool, coat style or pull-over; rayon, cotton, other	Mackinaws, wool, mixture.
Snow suits, ski suits	Mackinaws, wool, mixture.
Raincoats	Mackinaws, wool, mixture.
Cotton	
Slacks, knickers, short pants, trousers, cotton or rayon	Slacks.
Work or dress, cotton suit	Slacks.
Slacksuit, trunks, bathing suits	Slacks.
Overalls, bib style, waist band; dungarees, overall jumpers and jackets	Jeans.
Coveralls	Jeans.
Special work clothing	Jeans.
Uniforms, etc.	Jeans.
Shirts, dress and school	Shirts, sport, short and long sleeves.
Shirts, work cotton; sport shirt woven, cotton, wool and other	Shirts, sport, short and long sleeves.
Pajamas	Shirts, sport, short and long sleeves.
Nightshirts	Shirts, sport, short and long sleeves.
Bathrobes	Shirts, sport, short and long sleeves.
Shirts, sport, knit	Shirts, polo, short and long sleeves.
Shorts, woven; briefs, knit	Shorts.
Drawers, heavy	Shorts.
Undershirts, light or heavy	Shorts.
Unionsuits	Shorts.
Other underwear	Shorts.
Footwear	
All shoes, slippers, boots, rubbers, etc.	Shoes, oxfords.
Miscellaneous	
Cotton, wool, rayon, felt hats; caps, helmets; cotton, rayon, other socks; handkerchiefs, ties, belts, accessories, jewelry, etc., gloves	Weighted average of prices for all priced items in the boys' apparel group.

TABLE H–1: *Grouping of family expenditure data used in obtaining weights for various indexes, by group*—Continued

APPAREL INDEX—Continued

Family expenditures for—	Represented in the index by—
GIRLS' APPAREL	
Wool	
Coats, wool, other; Suits, wool, other; Skirts, wool, rayon and/or cotton; Snow suits, ski suits; Leggings, ski pants; Jackets, sweaters, raincoats	Coats, wool, with and without interlining.
Cotton	
Dresses; cotton, wool, rayon or silk, cotton and rayon	Dresses.
All slips and petticoats; Vests, undershirts; Nightgowns; All pajamas, robes, etc.	Slips.
All panties, bloomers, briefs; Other underwear	Panties.
All anklets and stockings	Anklets.
Footwear	
All shoes, sandals, sneakers, house slippers, rubbers, galoshes, and other protective footwear.	Shoes, oxfords.
GIRLS' APPAREL—Continued	
Miscellaneous	
Felt, straw, cloth hats; head scarfs, bands, etc.; girdles, garter belts, brassieres; leather gloves; leather and other handbags; umbrellas, belts and accessories, jewelry, etc., other gloves and mittens, other clothing.	Weighted average of prices for all priced items in the girls' apparel group.
INFANTS' APPAREL	
All infants' clothing	Diapers.
MATERIALS AND SERVICES	
All dry cleaning, pressing, storage, blocking, seamstress, tailor, repair, dyeing, dry cleaning fluid, etc., except household furnishings.	Dry cleaning and pressing.
Men's and boys' shoe repairs, shines, cleaning, etc.	Men's half soles and heels.
Women's and girls' shoe repairs, shines, cleaning, etc.	Women's heel lifts.
Yard goods, yarn, findings	Yard goods: rayon crepe, percale.

FUEL,[1] ELECTRICITY, AND REFRIGERATION INDEX

Coal: Anthracite [1]	Coal: Anthracite: Pennsylvania, white ash: Stove. Chestnut. Pea. Buckwheat No. 1.
Coal: Bituminous [2]	Coal: Bituminous: Low and medium volatile: Lump. Egg. Stove. Nut. Stoker. Run of mine. High volatile, Eastern: Lump. Egg. Nut. Stoker. High volatile, Western: Lump. Egg. Nut. Stoker. Lignite: Lump. Bituminous processed fuels: Fireballs, solorite, etc.
Coke [3]	Coke: Nut. Egg.
Briquets [3]	Briquets.
Wood [4]	Wood: Cordwood, soft.
Sawdust	Sawdust.
Fuel oil [5]	Fuel oil: Kerosene. Range oil. Fuel oil No. 1. Fuel oil No. 2. Fuel oil No. 100. Fuel oil No. 200.
Gas	Gas: Residential heating (million B. t. u.). Other than residential heating: 10.6 therms—range. 19.6 therms—range and manual type water heater. 30.6 therms—range, automatic storage tank or instantaneous water heater. 40.6 therms—range, automatic storage tank or instantaneous water heater and refrigerator.
Electricity	Electricity: 25 kw. hr.\ Lighting and small 40 kw. hr./ appliances. 100 kw. hr., lighting, appliances, and refrigeration. 250 kw. hr., lighting, appliances, refrigerators, and range.
Ice	Ice: Delivered. Cash and carry.

[1] Because of considerable variation between cities and regions in the type of fuel used this diagram shows all items of fuel as being priced with the general pattern of imputation shown in the succeeding footnotes.

[2] Weight for anthracite, when not priced, is generally imputed to bituminous coal. Weight for bituminous coal, when not priced, is generally imputed to anthracite.

[3] Weight for coke and briquets is generally imputed to anthracite and/or bituminous coal. If coal is not priced, the weight is prorated over the heating fuels subgroup (heating fuels subgroup includes all priced fuel, light, and refrigeration items except ice, electricity, and gas used for other than space heating).

[4] Weight for wood is generally prorated over the heating fuels subgroup.

[5] Weight for fuel oils not priced is generally imputed to kerosene; when kerosene is not priced, the weight is prorated to electricity, gas, and coal. Weight for kerosene is imputed to fuel oils or, if they are not priced, to electricity, gas, and coal.

TABLE H–1: *Grouping of family expenditure data used in obtaining weights for various indexes, by group*—Continued

HOUSEFURNISHINGS INDEX

Family expenditures for—	Represented in the index by—
Furniture	
Living room suites	Living room suites, medium and inexpensive quality.
Chairs	
Dinette sets	Dinette set, chrome.
Kitchen furniture	
Dining room suites	Dining room suites, medium quality.
Buffets	
China cabinets	
Benches	
Stools	
Hassocks	
Bedroom suites	Bedroom suites, medium and inexpensive quality.
Dressers	
Chests	
Vanities	
Desks	Weighted average of prices for bedroom and dining room suites.
Bookcases	
Record cabinets	
Tables	
Bedsprings	Bedsprings, coil.
Beds	
Cots	
Cribs	
Porch, garden, and other furniture	Weighted average of prices for dinette sets, dining room suites, bedroom suites, bedsprings.
Sofas	Sofa beds.
Sofa beds	
Studio couches	
Textile furnishings	
Carpet, rugs	Rugs, Axminster.
	Rugs, cotton.
Linoleum	Rugs, felt base.
Mattresses	Mattresses, innerspring construction.
Pillows	
Blankets	Blankets: 100 percent virgin wool.
Comforters	
Quilts	
Towels	Towels, cotton, terry.
Curtains	Curtains, cotton marquisette.
Draperies	
Slip covers	
Yard goods for— curtains, tablecovers, bedspreads, couch covers	

Family expenditures for—	Represented in the index by—
Textile furnishings—Continued	
Sheets	Sheets, muslin.
Pillow cases	
Table linen	
Bath mats, table pads, yarn, trimmings, etc	Weighted average of prices of all priced textile furnishings.
Other household textiles	
Household appliances	
Refrigerators, mechanical and ice	Refrigerators, electric.
Deep freeze unit	
Washing machines	Washing machines, electric.
Mechanical dryers	
Sewing machines	Sewing machines, electric.
Vacuum cleaners	Vacuum cleaners, electric.
Irons	Toaster, electric.
Hot plate	
Small electrical equipment	
Cook stoves	Cook stoves, gas.
Electric light bulbs	Weighted average of prices of all priced household appliances.
Fans, electric	
Canning equipment	
Carpet sweepers	
Ironing machines	
Heating stoves, heaters	
Typewriters	
Other housefurnishings	
Dishes	Dinnerware.
Glassware	
Flatware	
Serving dishes, bowls, pitchers, kitchen crockery and glassware	
Brooms, brushes, mops, pails, etc	Brooms.
Pots, pans	Pans, aluminum.
Pressure cooker	
Wash tub, board, wringer boiler, etc	Weighted average of prices of dinnerware, brooms, aluminum pans.
Ironing board	
Clothes basket	
Other kitchen equipment	
Miscellaneous	
All other household equipment	Weighted average of prices of all priced items in housefurnishings index.

MISCELLANEOUS INDEX

Family expenditures for—	Represented in the index by—
Transportation: Automobile	
Automobile purchase	Automobiles, delivered price: Ford. Chevrolet. Plymouth.
Gasoline	Gasoline, regular.
Oil and lubricants	Motor oil.
Tires and recaps	Tires, balloon 6.00 x 16.
Tubes	
Repairs, parts, servicing, etc	Chassis lubrication. Front end suspension. Major brake adjustment.
All insurance	Automobile insurance, public liability, bodily injury and property damage.
Drivers' and automobile licenses and taxes	Automobile licenses and fees for Ford, Plymouth, and Chevrolet.

Family expenditures for—	Represented in the index by—
Transportation: Automobile—Continued	
Parking and garage rent	Weighted average of prices of all priced items of automobile transportation.
Other operating expenses	
Transportation: Other than automobile	
Interurban public transportation	Railroad fares.
Plane fares	
Local public transportation	Streetcar: Cash. Token, ticket. Weekly pass. Bus: Cash. Token, ticket. Weekly pass.
Rent for an automobile	Weighted average of prices of railroad, streetcar and bus fares.
Shared car pool expenses	
Taxi fares	
Motorcycles, boats, etc	
Other transportation expenses	

TABLE H–1: *Grouping of family expenditure data used in obtaining weights for various indexes, by group*—Continued

MISCELLANEOUS INDEX—Continued

Family expenditures for—	Represented in the index by—
Medical care	
Group hospitalization	Group hospitalization.
Physicians', surgeons', and specialists' fees	Physician: Office visits. House visits. Obstetrical case. Surgeon: appendectomy. Specialist: tonsillectomy.
Dental care	Dentist: Usual fee for an adult. Filling. Extraction.
Hospital care	Hospital rates: Men's pay ward. Semiprivate room. Private room.
Oculist, optometrist, eye care including glasses	Optometrist: eyeglasses complete, including examination.
Group medical care Combined hospital bills	Weighted average of prices of all priced items of medical care, excluding drugs and prescriptions.
Prescriptions and drugs	Prescriptions, nonnarcotic capsules. Prescriptions, narcotic. Aspirin. Quinine. Iodine. Milk of magnesia.
Osteopath, chiropractor, faith healer Clinic care Laboratory tests and X-rays Nursing care Appliances and supplies Other medical care	Weighted average of prices of all priced items of medical care.
Recreation	
Newspaper Magazines Books (excluding school and technical) Books, rental and library fees Other reading expenses	Newspapers: On the street. Delivered to home.
Movies and other paid admissions	Motion-picture admissions, adults.
Radios Radio-phonograph combination sets Phonographs	Radio, table model.
Children's toys and play equipment	Velocipede.
Television sets Television combination sets Installation and service	Television sets.
Athletic clothing Pianos and other musical instruments Repairs of musical instruments Phonograph records, sheet music Hobbies Pets, etc Photographic equipment Dues to social clubs, etc Equipment, fees, licenses for games, etc.	Weighted average of prices of all priced recreation items excluding television sets.

Family expenditures for—	Represented in the index by—
Personal care	
Haircuts Shaves	Barber services, men's haircuts.
Beauty shop services, waves and shampoos.	Beauty shop services, shampoo and wave set.
Permanent waves	Beauty shop services, permanent wave.
Manicures and other services	Weighted average of prices of priced beauty shop services.
Home permanent supplies	Home permanent wave refill.
Toilet soap	Toilet soap.
Toothpaste Mouthwashes Shaving soap Shampoos	Toothpaste.
Cosmetics, perfumes, etc	Face powder.
Cleansing tissues, sanitary supplies	Sanitary napkins.
Brushes, combs, razors, files, etc	Razor blades.
Household operations	
Telephone Telegraph	Telephone rates, per month.
Wages and tips to maids, baby sitters, etc Child care	Domestic service, day workers.
Laundry and dry cleaning (excluding clothing) sent out.	Laundry service, thrifty. Laundry service, economy.
Laundry and cleaning supplies	Laundry soap, yellow, wrapped. Laundry soap, granulated.
Paper products	Toilet paper.
Postage	Postage.
Water rent Water-softening service	Water rents.
Stationery, pencils, ink Moving expenses Freight and express Other household operations (excluding flower seeds, bulbs, fertilizers). Garbage disposal Servicing and repair of equipment	Weighted average of prices of all priced items in the household operations group.
Tobacco and alcoholic beverages	
Cigars	Cigars.
Cigarettes	Cigarettes.
Other tobacco and smokers' supplies	Pipe tobacco.
Alcoholic beverages	Beer.

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