Workers' Budgets in the United States:

City Families and Single Persons,

1946 and 1947

[From the Monthly Labor Review, February 1948, with additional data]

Bulletin No. 927

UNITED STATES DEPARTMENT OF LABOR
L. B. Schwellenbach, *Secretary*

BUREAU OF LABOR STATISTICS
Ewan Clague, *Commissioner*

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Letter of Transmittal

UNITED STATES DEPARTMENT OF LABOR,
BUREAU OF LABOR STATISTICS,
Washington, March 1, 1948.

THE SECRETARY OF LABOR:

I have the honor to transmit herewith a report on a City Worker's Family Budget, together with related short articles on budgets. The report was prepared at the request of the Labor and Federal Security Subcommittee of the Committee on Appropriations of the House of Representatives. In response to the subcommittee's instruction that the Bureau find out what it costs a worker's family to live in large cities in the United States, and the relative differences in living costs between cities, the report shows dollar costs for 34 cities and comparisons between cities, for March 1946 and June 1947.

With the assistance of a technical advisory committee, the report was prepared by members of the Prices and Cost of Living Branch, under the general supervision of Lester S. Kellogg and Dorothy S. Brady.

EWAN CLAGUE, *Commissioner.*

Hon. L. B. SCHWELLENBACH,
Secretary of Labor.

Foreword

SINCE THE City Worker's Family Budget was first presented several months ago, many questions have been raised concerning its implications with respect to incomes and wages. Some of these questions are answered—insofar as answers are possible from the data available—in the detailed report on the budget and the supplemental reports presented in this bulletin. Other questions—most of them questions of interpretation and emphasis—seem to require further clarification.

The specific question asked is: "Why did the Bureau choose a family of two adults and two children, when such families are but a small fraction of urban families?" There are many good reasons for the choice of a four-person family as the basis for the initial budget. The family of husband, wife, and two children under 15 is something of a standard in the United States, even if, at any given time, it is statistically uncommon. It represents a stage through which almost half of the families pass at one time or another: in 1940, about 45 percent of families of two or more persons with male heads—"normal" families—contained four or more persons. The buying habits of the family of two adults and two children range over a wide variety of goods and services common to family life in the United States. And it has been used as the unit for other budgets compiled in this country in recent years. These are among the reasons that led the technical advisory committee to recommend this type of family as a starting point for this study of family budgets.

The four-person family of husband, wife, and two school-age children, although a logical choice for such purposes, does not bulk large statistically in the population at a given time (table A). Of the urban families (including single-person families) enumerated in the census of 1940, about one in eight was a four-person family with a male head, and not all of these, of course, were composed of two adults and two children. When single-person families are excluded, one family in six contained four persons with a male family head. Similarly, the male head of a four-person family is not typical, in a statistical sense, of the entire United States labor force, which contains many women and many single persons; but two-thirds of the men in the labor force were heads of families, and nearly one-third were heads of families of four or more persons (table B).

TABLE A.—*Distribution of urban families, by family size and sex of head, 1940* [1]

Family size and sex of head	Percent of—	
	Urban families, including one-person families	Urban families of two or more persons
All families	100.0	
Families of 2 or more persons	73.6	100.0
With male heads	63.6	86.4
With 2 or 3 persons	35.2	47.8
With 4 persons	13.0	17.7
With 5 or more persons	15.4	20.9
With female heads	10.0	13.6
Families of 1 person	13.8	

[1] Source.—U. S. Bureau of Census, February 1948.

TABLE B.—*Distribution of urban labor force, by sex and family status, 1940* [1]

Sex and family status	Percent of persons in urban labor force
All persons in labor force	100.0
Heads of families of 2 or more	49.4
Male	45.8
Heads of 2- or 3-person families	25.5
Heads of 4-person families	9.3
Heads of families of 5 or more	11.0
Female	3.6
Single-person families	15.3
Male	16.2
Female	19.1
Relatives of family head	35.3
Male	8.5
Female	6.8

[1] Source.—U. S. Bureau of the Census, February 1948.

The choice of this family as the unit for budget purposes raises question of comparability of the budget totals with income distributions: "How many families have incomes that enable them to maintain or exceed the modest, but adequate, level of living described in the budget?" The extent to which this level of living is actually achieved, of course, can be estimated only by

comparing the budget cost with the distribution of incomes of families of the size and composition represented in the budget. Unfortunately, available income statistics do not reveal income distributions in large cities in 1946 and 1947 in relation to family size. It is known that expenditure patterns and needs vary widely among family types and among communities of different sizes. It would therefore be confusing and inconclusive to compare the budget requirements for a family of four in a large city with income distributions or averages that did not differentiate between single persons and families and between various family types, in cities of different sizes.

The dollar total of the budget can be compared directly only with the total annual income of the family of four, preferably of types similar to that described in the budget, for cities of the same size, class, and similar economic characteristics. Total income, of course, includes the family income from all sources—not just wages or salaries. Since the budget represents the total which it would cost the family to live at the indicated level for a year, the budget total should be compared with annual income. In this comparison care should be taken that the income figure used includes income tax and social security deductions, if the comparison is with the budget totals including these as costs.

Comparison of the budget with wage rates or weekly wages must also be made carefully. In the United States where wages are so commonly determined by collective bargaining, wage rates typically attach to the *job*, rather than to the individual *worker*, and tend to be more directly influenced by the nature of the work than by the varying needs of the individuals who comprise the work force. For example, the union rate for a given occupation in a given community will be uniform, regardless of the family status or other responsibilities of the individual workers. There is no presumption, therefore, that the wages in any given occupation at any given time—and, still less, an average wage—will correspond to the budget required to support a family of a specific size at a specified level of living. (A notable exception is found in some State minimum wage laws which are specifically designed to maintain a single person, usually a woman, at what is usually described as a "level of health and decency" (see p. 52). A wage that would support a family of four at the level of living described in this budget obviously would support a smaller family at a higher level and a larger family at a lower level.

It has been observed that there is a tendency for earnings of the individual working man in the American economy, as he progresses through his working life, to increase and decrease approximately when his family responsibilities increase and decrease. The young man entering the labor force earns a relatively low "beginner's wage" at a time when he usually is contributing to the maintenance of an older family or has only himself to support. By the time he marries and assumes responsibility for his own family, the chances are that he has gained in experience and earning power and may continue to gain through the period of dependency of his children. If his earnings begin to decline as he passes middle age, so, typically, do his responsibilities. This generalization is substantiated by studies of family incomes since 1935.

This pattern reflects average experience; it is by no means automatic or universal. In some industries and occupations, workers continue to gain in experience and earning power; in others, maximum earnings are quickly reached. Furthermore, the pattern is complicated in individual cases by a great variety of circumstances of earning, spending, saving, and borrowing. To the extent that this tendency applies to the budget family, we might expect to find the husband of the family, who has been married 15 years or more and is 35 to 40 years old, well advanced in his trade or skill. It is likely that his earnings, therefore, are higher than the average for his occupation and region. If he has seniority rights, he is less likely to be laid off; his annual earnings would be higher on that account.

The assumption, explicit in the budget, that the husband is the sole wage earner in the family (except for occasional or part-time earnings of the son) is entirely consistent with the manner of living of the United States family with two children of school age. Although many families (including many families of four) depend more or less on secondary workers to supplement the earnings of the principal wage earner, only a small fraction of women with children of school age are employed outside the home. The manner of living and the expenditures would both be significantly different if the mother were assumed to be employed

For example, a working woman would likely spend more for clothes, transportation, household operation, and meals away from home than is allowed in the budget for the woman of the family.

In order to test the relation of the budget to family incomes, the Bureau has compared total incomes of families of different sizes for one fairly typical city for which the Bureau has income data for 1945. Of the four-person families with male heads in this city sample, an estimated 12 percent had total incomes which were below the cost of the budget for goods and services as priced in March 1946; about 88 percent were above. For other types of families, the proportions of families with incomes below the corresponding budget level was significantly higher. These facts are very significant, for they show that the budget is not a luxury budget, nor out of reach of most city families in the United States. On the other hand, it is a matter of concern that in such a prosperous year as 1946 one-eighth to one-fourth of the families could not maintain even that modest level of living.

The City Worker's Family Budget, of course, will be compared with income data of many kinds, as more data become available. That is one of the purposes for which it was compiled. It is the hope of the Bureau of Labor Statistics that when such comparisons are made, whether for purposes of research or as a basis for practical decision or action, they will be made with a discriminating regard for the concepts and facts on which the budget is based and with an understanding of its valid uses and inherent limitations.

EWAN CLAGUE.

Contents

The Budget in Perspective

A. FORD HINRICHS [1]

IN THE PAST, FAMILY BUDGETS have always been developed by one of two methods. One method was to observe the way people actually spent their money and from this information to develop a budget for an average family at any given income level. Such a budget describes the way in which an average $2,000 or $3,000 family actually spent its income. This has its uses; but a budget that depends on income does not furnish a key to what people think they need to have to attain conditions of living that are described by such phrases as "a minimum of subsistence," "a maintenance budget," "a standard of health and decency," or "an American standard of living."

To get free from this dependence on existing income, analysts have used a second method. This method involved reliance on the judgment of a person or a group of people to draw up a list of commodities that would yield one or another of these standards. Thus, within fairly wide limits, there could be as many "maintenance budgets" as there were investigators, painstaking as each investigation might be.

Furthermore, these budgets were not drawn up to discover anything about the standard of living as such. The WPA maintenance budget of 1935, for example, was drawn up to aid in setting WPA wage rates. Other budgets have been drawn up to aid in setting State minimum wages for women. Still others have been drawn with an eye to their effect on wage bargaining in skilled trades. Thus, the budgets were not only subjective, but the judgment of the analyst was influenced by the objective of the specific budget.

The Bureau of Labor Statistics budget for a city worker's family of four persons breaks new ground. The methods used in its preparation are described in detail in the articles which follow. At this point it needs merely to be noted that the standard is determined by objective methods, so that any other group of workers using the same data would arrive at a similar conclusion as to what constitutes this particular kind of standard and how much it costs to maintain it.

It is hard to describe this standard of living to people who have been used to thinking in such elastic terms as "maintenance" or "health and decency" or to people who assume that the chief use to be made of a budget is to fix wages.

This budget stands on its own feet. It is compiled from standards of calories and vitamins determined by scientific experiment; from housing standards involving a larger element of judgment, but still independently arrived at by experts in housing needs; and from standards that are revealed by the ways in which people actually spend their money.

It can best be described as a single point on a scale of living patterns that ranges continuously from a mere existence level to levels of luxurious living where the consumer is almost surfeited with goods. The point selected for measurement is in general the point where the struggle for "more and more" things gives way to the desire for "better and better" quality. Above this level, for example, the average family is likely to be more interested in escaping from an endless round of the cheaper cuts of meat than in increasing the number of pounds of meat that it buys. Below this level, on the other hand, people find it harder and harder to economize, being unable to shift extensively to cheaper commodities and therefore forced to "do without."

What the level of the budget would be and what practical applications could be made of it could not be foretold. The data, not the investigators, shaped the budget of goods that people strive for before they become much interested in quality. The facts indicate that this budget of goods and services would have cost $2,800 to $3,000 in most large cities in June 1947 and that about $300

[1] Mr. Hinrichs was Acting Commissioner of Labor Statistics when the project which resulted in the City Worker's Family Budget was initiated, and in that capacity participated in the early planning and much of the initial work on the project. He currently is economist for Kiplinger Magazine.

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more needed to be added to cover taxes and insurance. One can no more conclude from this statement of fact that every unskilled worker should get a wage of at least $1.50 per hour than one can say that skilled workers should be content if they are getting this much.

Actually this budget is primarily a new tool in the kit of the research worker. Like the microscope it opens new horizons to investigation—makes it possible to ask and find the answers to new questions. But it does not itself produce answers any more than the microscope does.

Since it is possible now to measure at least some one standard of living objectively, it has become possible to repeat the process at different times and places to determine how this standard may change or differ. Even on the basis of such data as exist, it appears to be possible to say that we are evolving a national standard of living. Black or white, in the North or the South, people want much the same things.

There are almost no income data to compare with this standard. It would seem to be worth while to know the cost of this kind of standard for families of varying size and to know the incomes of these families, for this level of living represents essentially a breaking point in our society. It divides the population into two groups, the lower of which is struggling to attain a physically more adequate existence. It is only above this level that people have enough to begin to think largely in terms of the quality of their living.

In the unpublished data there is a wealth of material on the nature of the market in the United States. The information on consumer spending used in deriving the budget goes far beyond the published data in isolating the influence of family composition on consumption patterns. The unpublished data contain more extensive detail than the printed reports on the physical quantities purchased at the successive income brackets by families of specific types.

Even as it stands, the budget clearly indicates the opportunity to improve living through consumer education. This is no luxury budget, but any experienced and careful shopper will discover ways in which the average housewife can get more for her money than she does in this American "standard."

In particular the budget has many lessons for those who are trying to compare what people get with what they ought to get and for those who are anxious to devise methods of bringing these two values together. The nutritionists' standards and actual American family practice with respect to milk consumption are so far apart that this budget does not provide enough milk to warrant calling it an adequate budget. The fact is that the average family in the United States will buy "enough" milk only when it is getting a large oversupply of almost every other nutritional element. The data do not reveal whether the scientists are wrong in this definition of what people need or whether people are making unwise choices between values. There is nothing to indicate that people would not buy as much milk as the scientists prescribe, if they had a greater purchasing power.

At almost every point this kind of budget, that grows out of the way people actually behave, throws light on American values. Actually it shows conclusively that adequacy simply will not be attained, if the budget is figured only on a list of goods determined to be biologically necessary. Right or wrong, it is a fact that families will allow their children to have an occasional "coke" or ice-cream cone even at the expense of an adequate diet.

The sociologist will ponder some of the findings. In the United States, people do not communicate much except by word of mouth; a letter a week and a few cards for special occasions seem to satisfy their basic needs. They buy almost no books; but they go to far more movies in a year than the movie critics rate as really good.

These examples by themselves are relatively unimportant. They suggest that we might learn much about ourselves if international comparisons of living standards were available.

One of the most important lines of inquiry that can be pursued—now that we have a tool of measurement—is the question of how rapidly this living standard changes. Does an increase in national income enable us to come closer to satisfying this standard that is so strongly desired; or does the standard itself rise, so that its attainment keeps receding like a mirage?

To the practical-minded this budget may prove disappointing. If the scientist will use it as a new tool over the years, he can enlarge our understanding of the world in which we live and our capacity for happier living.

The City Worker's Family Budget

General Description of Purpose and Methods Followed in Developing the Budget for 34 Cities in the Spring of 1946 and Summer of 1947

LESTER S. KELLOGG and DOROTHY S. BRADY [1]

Origin and Procedure of Budget Study

IN THE SPRING OF 1945 the Labor and Federal Security Subcommittee of the Committee on Appropriations of the House of Representatives directed the Bureau of Labor Statistics "to find out what it costs a worker's family to live in the large cities of the United States." The Subcommittee indicated that it wanted to know the relative differences in living costs between cities and, in addition, the total number of "dollars required for the average worker in overalls to live in these cities."

To carry out this request most effectively, the Bureau of Labor Statistics, with the approval of the Subcommittee, appointed a Technical Advisory Committee to assist in developing basic standards and methods to be used in the project. The technical committee consisted of specialists and technicians who because of their training and experience are considered responsible authorities in studies of living costs.

Guided by the standards established by the technical committee and following the methods which it outlined, the Bureau of Labor Statistics first developed the list of items and quantities making up a budget for a city worker's family, and then obtained prices for this list of goods and services and worked out dollar totals for 34 large cities in the United States. In determining this budget, a family of four was used as the basis for the calculation; it was expected that budgets would later be developed for families of larger and smaller sizes. Pending the eventual development of such detailed additional budgets, the article on Budget Levels for Families of Different Sizes (p. 49) describes a procedure for estimating budget totals for families of different sizes. This procedure has been found to give dependable over-all results.

The family of four includes an employed father, a housewife not gainfully employed, and two children under 15. The budget was designed to represent the estimated dollar cost required to maintain this family at a level of adequate living—to satisfy prevailing standards of what is necessary for health, efficiency, the nurture of children, and for participation in community activities.

This is not a "subsistence" budget, nor is it a "luxury" budget; it is an attempt to describe and measure a modest but adequate standard of living. The methods by which the budget items and quantities were determined in accordance with these standards, and the methods of pricing, are described in detail in the following sections for each of the major groups in the budget.

In general, whenever appropriate scientific standards are available they have been used as a starting point. For foods, the recommendations of the Food and Nutrition Board of the National

[1] Former Chief of the Prices and Cost of Living Branch and Chief of the Cost of Living Division. In the development of the budget, major contributions were made by Ethel D. Hoover, Chief of the Branch's Consumers' Prices Division; Margaret E. Thomas, Chief of the Branch's Operations Division; Dorothy M. Durand; Lenore A. Epstein; Helen Humes; Abner Hurwitz; Floyd C. Mann; Eleanor M. Snyder, and many other members of the Branch.

Research Council set the basic standards of nutritional adequacy. For housing, standards established by the American Public Health Association's Committee on the Hygiene of Housing and the Federal Public Housing Administration were adopted. These technical standards were then translated into a list of foods and into a description of housing by reference to the actual buying and renting practices of families with moderate incomes.

For clothing and other goods and services, allowances were established to meet prevailing standards of what is necessary for health, efficiency, and participation in social and community activities, with adjustments to take account of geographical differences. Here also, actual lists were made on the basis of records of family purchases obtained in surveys made by the Bureau of Labor Statistics over a period of years by interviews with housewives.

The budget is unique in that it represents, not an "ideal" budget, or a "judgment" budget devised by a few people, but rather the actual choices of American families. It was determined objectively. In considering this budget, emphasis should be placed upon the quantities and kinds of goods of which it is composed. Judgment on its adequacy should be based upon the level of living that it represents in a period of more nearly normal prices rather than upon its dollar cost at today's high prices.

Following the selection of the list of items, the goods and services included in the budget were priced in December 1945, March 1946, the fall of 1946, and June 1947 by the Bureau's field staff. Dollar figures are presented here only for March 1946 and June 1947. Although there have been important increases in retail prices, especially for food, since July 1947, estimates for later periods could not be prepared in time for this report.

The cost of the budget is shown here in two totals—one includes the cost of goods and services and the second, a grand total, includes, in addition, a number of requirements for families for which costs vary according to locality, nature of employment or occupation, and size of income and number of dependents. These requirements include Federal and State income taxes, other State and local taxes, old-age and unemployment deductions from wages, insurance (either private company or national service life insurance), and union dues.

The budget is provided for each of the 34 large cities for which consumer price indexes are regularly prepared by the Bureau. Although the budget has not been priced for other cities, the Bureau has prepared a procedure which will make it possible for an experienced staff to estimate intercity differences in living costs with a minimum of effort.

The following sections include the report of the Technical Advisory Committee, which sets the general approach and method, a detailed description of the methods followed by the Bureau in developing the budget and in pricing it, the cost of the budget in 34 cities, and finally the list of items included in the budget and their quantities. The statistical documentation of the procedures with tests of their validity are to be presented in detail in a later publication.

It is not possible to describe this budget in a few words or phrases without the possibility of misinterpretation. Although it is always tempting to try to put the essence of the ideas in concentrated form, it is impossible to find a few words or sentences that mean the same thing to every reader. The concept of a "standard" budget is complex; it cannot be presented in too concentrated form, with accuracy. If anything, this report is too brief.

In constructing the budget the Bureau of Labor Statistics has had the assistance of the Bureau of Human Nutrition and Home Economics of the U. S. Department of Agriculture in developing the section on food and of the Bureau of Research and Statistics of the Social Security Board on the section on medical care.

The Family Budget

Level of Living

In accordance with the directive of the Labor and Federal Security Subcommittee of the House Appropriations Committee of the Seventy-ninth Congress, the Bureau of Labor Statistics has determined the annual cost of a worker's family budget which includes the kinds and quantities of necessary goods and services, according to standards prevailing in the large cities of the United States.

The budget was derived under the general guidance of a technical committee. It applies to an employed worker's family of four; husband, aged 38, who is the breadwinner; wife, aged 36, the homemaker; and two children, a boy 13 years of age in high school and a girl 8, in grade school. The family lives in a separate house or apartment; there are no lodgers or co-tenants, and the husband has no dependents other than his wife and children.

The family dwelling, which is rented, contains five rooms, including a kitchen, and a bathroom, and is supplied with hot and cold running water. Ordinary safeguards against unsafe or unsanitary conditions are provided. There is at least one window in each room, to afford daylight illumination and ventilation, and electric lighting equipment is installed in each room. The type of heating equipment and the amount of fuel required to maintain an average room temperature of 70° F. in the winter months varies in accordance with the climate of the locality. The dwelling is located within reasonable commuting distance of major centers of employment, high schools, churches, and shopping, and within walking distance of food stores and elementary schools.

The wife does all the cooking, cleaning, and laundry without paid assistance. The home is equipped with the usual housefurnishings and the mechanical aids which are considered household necessities—a gas or electric cook stove, a mechanical refrigerator, and a washing machine. Some furniture, kitchenware, appliances, and household linens are purchased each year in order to maintain household inventories. The budget also provides the supplies of soap and cleaning materials essential to insure cleanliness.

The food budget provides a diet that approximates the nutritional allowances recommended by the Food and Nutrition Board of the National Research Council. The specific foods and their quantities are typical of those purchased by families in the United States whose diets are satisfactory and do not differ greatly in the quantities of calories or nutrients from the allowances recommended. They are not the selections of experts who may know much more about the "best buys" in terms of food values than the average housewife, but rather what growing families do eat. Menus may be changed within the food allowances specified by the budget to provide variety and to satisfy the tastes of individual families. It should be possible, for example, to serve meat for dinner several times a week, if the cheaper cuts of beef, pork, lamb, and veal are served on weekdays; a chicken or a roast may be served on Sunday and a turkey on Thanksgiving.

About 5 percent of the meals are purchased away from home, principally lunches bought at work. Most of the lunches, however, are prepared at home and carried to work or school. Two nickel ice cream cones, a 5-cent candy bar, two bottles of soft drinks, and a bottle of beer could be purchased each week with the small amount allowed for such items.

The clothing list in the budget provides for the variations in the practices of families who live in localities of distinctly different climate. A few average purchases serve to illustrate the general level of the clothing budget: for the husband, one heavy wool suit every 2 years, one light-wool suit every 3 years, five shirts, and two pairs of shoes each year; for the wife, a heavy wool coat every 4 years, four dresses and three pairs of shoes each year; for the boy, one sweater or jacket, two pairs of trousers, three shirts, and three pairs of shoes each year; for the girl, one snow suit or heavy coat every 2 years, four dresses, and four pairs of shoes each year. As in the case of foods, the specific items may be varied within the budget totals to satisfy individual family requirements.

Local transportation needs include travel to work and to high school and trips to downtown shopping areas, churches, movies, meetings of organizations, and social visits. A trip out of town every 3 or 4 years for a vacation or to visit relatives and family is also provided. The budget provides a used automobile for some families but does not imply that each family must have one. The automobile appears to be less important in the scale of family wants in a very large city like New York than in most other large cities. Accordingly, the budget provides for transportation in terms of preferred forms of travel in the area. In New York, Chicago, and Philadelphia most of the travel is assumed to be by public transportation; in all other large cities the majority of families are assumed to have a car.

Other goods and services in the budget are classified under the general headings of recreation, education, personal care, tobacco, and communications. The modest character of these require-

ments may be judged by the following examples. The family owns a small radio, buys one daily newspaper, including a Sunday edition, and 32 copies of some popular-priced magazine in a year. Movies are attended by the husband, wife, and daughter once in 3 weeks and by the son once in 2 weeks. A small sum is allocated for children's toys and games, pets, camera supplies, and dues to social and recreational clubs, such as the Boy Scouts and women's civic organizations. School expenses for the children cover books and supplies as required in each city and dues for school clubs and entertainments. The husband has a haircut about once every 3 weeks, the son every 5 weeks, and the wife and daughter every 3 months. Toilet soap, tooth paste, shaving supplies for the husband, and inexpensive cosmetics for the wife are specified. A telephone in the dwelling is not considered essential, but an average of three local calls is made each week. Stationery and stamps are included to provide for about one letter a week.

The budget takes account of many of the buying habits of United States families. Partial-payment plan buying, for instance, is taken into consideration. On the other hand, no account has been taken at this time of the kinds of shifts families make when prices of some commodities relative to others become too high, although obvious changes, such as the substitution of canned or dried vegetables when fresh vegetables are out of season, have been taken into account.

Although not included in the total of goods and services, the budget recognizes an average cost for other essential needs and requirements of families of this type. Personal taxes, Federal and State income taxes, and poll taxes are mandatory, as well as contributions to social insurance, retirement funds, and other similar insurances. Some private insurance is almost universal and the family budget includes a small amount for the purchase of life insurance providing benefits in addition to those assured under social insurance and similar group plans. Dues to organizations, such as unions and business associations, are also listed among the necessary outlays of an employed worker. The occupational expenses which must be met include, in addition, the special clothing and equipment that the worker must provide for himself. Allowance must be made for contributions to churches, welfare associations, and other philanthropic purposes.

Concept of the Family Budget [2]

The general concepts of the budget summarized above were prescribed for the Bureau's staff in detail by its Technical Advisory Committee. The formal report of this committee, which contains the principles and concepts upon which the budget was based, is given in full below.

In addition to this formal report, the Bureau had the benefit of the technical committee's advice on numerous occasions in connection with the practical solutions devised by the Bureau for the problems encountered in carrying out this committee's general directives.

"The specific recommendations of the committee with respect to the items of the budget and the quantities of each to be allowed were based upon certain general concepts, principles, and assumptions which must be made explicit. The first task of the committee was to formulate the level of living that the budget should represent. What the Congress desired, as the committee interpreted it, was the cost at current prices in large cities of family living which met American standards of what is required. The budget therefore should represent the necessary minimum with respect to items included and their quantities as determined by prevailing standards of what is needed for health, efficiency, nurture of children, social participation, and the maintenance of self-respect and the respect of others.

"Unfortunately, there is no single descriptive word or phrase that clearly and unequivocably carries to everyone the same concept of the level of living aimed at, or furnishes a 'yardstick' by

[2] The report of the Technical Advisory Committee, consisting of the following members, who served in their individual capacities as experts:
Hazel Kyrk, chairman; Department of Home Economics, University of Chicago.
Dorothy Dickins, Department of Home Economics, Mississippi Agricultural Experiment Station.
Amy Hewes, Professor Emeritus of Economics, Mount Holyoke College.
Emily H. Huntington, Department of Economics, University of California.
Samuel Jacobs, Office of Price Administration, and later Mrs. Katherine Ellickson, Congress of Industrial Organizations.
L. E. Keller (deceased May 1947), Brotherhood of Maintenance of Way Employees.
Broadus Mitchell, International Ladies' Garment Workers' Union A. F. L.
Howard B. Myers, Committee for Economic Development.*
Margaret G. Reid, Bureau of Human Nutrition and Home Economics, U.S. Department of Agriculture.

* NOTE: Mr. Myers was unable to be present at the time the text of the report was approved by the Committee and did not approve the report. He has subsequently indicated that while concurring generally in the method of budget construction developed by the Committee, he objects to the use of the terms "minimum" or "necessary minimum" to describe the standard recommended by the Committee. The Chairman of the Committee calls attention to the fact that "the report states that the Committee was unable to find any single term which would accurately describe the level of living represented by this budget and that no member of the Committee suggested such a term."

which what should or should not be included in the budget can immediately be determined. Many agencies and individuals in this and other countries have undertaken the task of making and pricing budgets, either as necessary tools for public welfare administration, as guides to public policy, or for appraising the economic conditions of a group or community. They have consistently found it difficult to describe accurately and without ambiguity the kind of living provided or to formulate without vagueness what needs are met. To say that the recommended budget covers the 'necessary minimum' to some may mean that it includes only the least necessary for physical survival. But that is far from being the case. If it were said that it is designed to represent an 'adequate minimum,' some would assume that no more or no better is to be desired; and that also is far from being the case. If the budget were described as one providing for health and decency, the word 'decency' would require definition and amplification.

"Although the level of living represented by the budget cannot be briefly described by words having scientific precision yet the concept of a necessary minimum is a reality. Judgments are constantly being expressed as to what is necessary not only for one's self and one's family but for others. These judgments are expressed in public policy as well as in the management of private affairs. The task of the committee may be described as expressing in precise, measurable form the social judgment as to what is necessary for acceptable living. Those who say it is impossible to define human needs must, if consistent, refrain from judgments on the matter, a virtual impossibility.

"What the recommended budget is designed to represent may in part be shown by indicating what it does not represent. It is not an attempt to reproduce the average consumption pattern of all or a chosen group of families, such as wage earners living in large cities. Such data are available for fairly recent dates and further data could readily be made available. By the application of current prices the dollar cost at the present time of the manner of living shown could be calculated. The items in such a budget and the amount of the annual purchase would be statistical facts, varying with the total national income and its distribution. The budget the committee recommends might under certain circumstances be near or above such an 'average' budget and under other circumstances far below, although over time they would be expected to move together. Nor does the recommended budget purport to represent the estimated average consumption under assumed conditions of full and efficient production and a given income distribution. Such a budget could be constructed for comparative purposes if desired. The budget recommended, in the third place, does not represent the American 'ideal' way of living. Nor does it represent the committee's ideal level of living, or concept of the good life. It is not supposed to represent the committee's tastes, moral judgments, or ideas of what money should be spent for. Budgets are frequently constructed to show the 'best' or a good way to spend a given sum. This is not one of them. Finally, this budget is not a 'subsistence' or 'maintenance' budget in the sense that directly or indirectly it attempts to provide only for physical needs, or what would be necessary to carry families through a limited period of stringency.

"When it is said that the budget recommended is intended to cover the necessary minimum, 'necessary' is to be given the common interpretation as including what will meet the conventional and social as well as biological needs. It represents what men commonly expect to enjoy, feel that they have lost status and are experiencing privation if they cannot enjoy, and what they insist upon having. Such a budget is not an absolute and unchanging thing. The prevailing judgment of the necessary will vary with the changing values of the community, with the advance of scientific knowledge of human needs, with the productive power of the community and therefore what people commonly enjoy and see others enjoy.

"With this concept of the level of living the budget was to provide, the next task of the committee was to discover procedures by which the necessary minimum of food, clothing, medical care, and other classes of goods and services could be arrived at. Preliminary to this, certain basic decisions were made. It was decided that the budget should be made for a family of four, a husband, wife, and two children under 18 but no other dependents, that the family would share its dwelling with no other persons, and that the

wife would not be gainfully employed. The assumption that the husband's income should be adequate to provide necessary items usually purchased, that those outside the immediate family should be otherwise supported, and that there should be no lodgers or co-tenants, seemed to the committee clearly to be prevailing social judgments with respect to the type of family selected.

"The designation of a family of four, composed as indicated, as the type for which the budget should be constructed was in some respects an arbitrary selection. It indicates no judgment as to optimum size from the standpoint of desirable population growth. The frequency with which families of this size are found may be easily ascertained from the Census reports. In 1940 about 17 percent of urban, husband-wife families of all ages had two children under 18, about 65 percent had none or only one, and 18 percent had more than two. Many of the families with no child or only one under 18 at home in 1940, earlier or later had such children. The Census data indicate that about half of the urban families at their peak are of this size or larger and about half are smaller. The fact that the committee would emphasize is that a single budget cannot represent the requirements of all family types, nor of a single family throughout its life span. A series of budgets would be required for the latter purpose, starting with the newly married and ending with the elderly couple. The outlay required to meet the budget constructed for a family of four would not provide the necessary minimum, similarly defined, for families with more than two children, in which more than half of the urban children are reared, and would provide something better for those with only one child or with none.

"A second decision made by the committee was that the family for which the budget was constructed need not be described other than as 'urban American'; in other words, the occupational class of the husband, as skilled or unskilled worker, or wage earner, was irrelevant for the purpose in hand. The adequate minimum is essentially the same for all, and special occupational requirements, if any, should be separately taken into account in estimating the income required to enable a particular class of families to meet the budget.

"To translate the level of living to be represented by the budget into quantities of specific goods and services the committee relied so far as possible upon existing objective, verifiable data. For each category of the budget they sought to discover the data and methods of analysis that would yield a measure of the necessary minimum of items and quantities. Their recommendations therefore have to do with the data and the procedures to be used in arriving at the items rather than with the items themselves. The committee, for example, did not attempt to decide what quantity of milk or other foods should be included in the budget, but instead they decided that nutrients should be provided as recommended by the Food and Nutrition Board of the National Research Council and that the specific foods, yielding these nutrients and set up for pricing, should be determined by analysis of the food choices actually made by a representative sample of urban families. The committee did not attempt to decide whether the wife's coat should be fur-trimmed or how often she should have a new one, but instead recommended that these questions should be answered by specified type of analysis of data on families' spending practices. The data and procedures used to arrive at the items and quantities for each part of the budget will be separately discussed.

"In general, the committee recommended the use of two kinds of data to arrive at the component parts of the budget: one, those derived from laboratory experiments or from scientific observations of the same character; the other, those showing the spending practices of representative samples of urban families of the same type as that for which the budget was to be constructed. Analysis of the latter type of data seemed the best way to discover the necessary minimum for certain purposes. Laboratory experiments, for example, may indicate the necessary nutrients, but only the analysis of actual food choices will show what is considered necessary in the way of variety and flavor. Similarly, the clothing items that permit a decent appearance and association with others on a self-respecting basis must be derived from a study of the actual choices made by families living under urban conditions. By the use of such data not only are unwarranted assumptions in regard to the tastes and concepts of need of the generality of families avoided, but also unwarranted assumptions in regard to fore-

sight and economy in buying and in the use of goods after acquisition.

"To sum up:

"(1) The budget resulting from the committee's recommendations will represent neither a 'subsistence' nor an 'ideal' level of living.

"(2) The budget constructed for a husband-wife family with two children under 18 will not represent the necessary minimum similarly defined for families of other composition.

"(3) Methods of arriving at the items to be priced and their quantitative weights are recommended rather than specific items and quantities.

"(4) The data to be used as evidence as to requirements included both the recommendation of scientists and customary consumption separately or in combination as seemed appropriate for each category of the budget."

Method of Determining the Family Budget

The standard as defined by the Technical Advisory Committee in the previous section is a dividing point in the consumption of United States families. The budget is a list of goods and services that, according to the prevailing standards of the community, are considered essential. The definition of the budget recognizes that in the actual experience of families there is a scale which ranks various consumption patterns in an ascending order from mere subsistence to plenitude in every respect. The budget level described here is at a point on this scale below which deficiencies exist in one or more aspects of family consumption.

This consumption scale is established by society. It can be discovered only through observation of the expressions of society's ratings of the various existing levels of living. These ratings of the various levels of living are expressed in the judgments of scientists, such as medical and public health authorities; and secondly, in the behavior of individual consumers. Scientific judgments are based primarily on the studies of the relation between family consumption and individual and community health. The expressions of consumer judgment appear in the choices made by consumers as economic barriers are progressively removed.

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The scales based on scientific studies and the scales expressed in consumer behavior are in substantial agreement. The consumption patterns of each income bracket, from the lowest to the highest, provide the scale of consumer judgments; that is, consumers in general would consider each consumption level along the scale of income as more satisfactory than the preceding one.

The basic problem in the formulation of the budget is to identify the dividing point in this scale of consumption. To find the dividing point, it is necessary to use some indicator of group judgment that marks the place in the scale below which reduction meets greater and greater resistance; above which expansions become more and more limited. The chief indicator of group judgment which was used in deriving this budget was the manner in which families increase their consumption as their purchasing power increases. As purchasing power increases, the consumption level expands and more goods and better quality goods enter into the pattern of living. As purchasing power decreases, the consumption level contracts, fewer goods are purchased, and the quality of the goods purchased is reduced. As the consumption level approaches the dividing point in the judgment of society, families resist further decreases with increasing stubbornness. As purchasing power increases, consumption levels above the dividing point expand at slower and slower rates.

Studies of city family expenditures made between 1929 and 1941 were used as a description of the current mode of United States family living in deriving this budget. The Bureau's study of city consumers' expenditure experience in 1944 was helpful in providing information on the continuation of trends of consumption which had started before the war. This period, 1929 through 1941, was selected because of the availability of the necessary objective information, much of which was obtained by a reexamination of original questionnaires and tabulations, although a great deal of it is available in published reports.[4]

The Manner of Living

These studies furnish the detailed description of the scale of consumption, from lowest levels

[4] See p. 10 for footnote.

to very high levels, by showing the goods and services purchased for each income bracket from incomes of only a few hundred dollars to incomes well over $10,000 a year. The determination of the budget level from the manner in which the purchases changed from each consumption level to the succeeding one on the scale is described below for each consumption group.

The city family almost universally lives in an individual home—either an apartment or a house. Family privacy is believed to be so important that any other living arrangement is considered only as a last resort. In general, two or more families share one dwelling only under extreme pressure of circumstances. The widespread complaint against "doubling up" in the present period of acute housing shortage is evidence that such an arrangement is accepted by families only as a temporary expedient. Thus, according to prevailing standards, each family lives in a separate house or apartment.

The husband is the breadwinner and the wife devotes her time to child care and homemaking. This is a second essential characteristic of the United States way of family life which was kept in mind in developing the budget. Actually, in February 1944, during the height of wartime employment of women, only 11 percent of the mothers with young children worked for pay outside the home and since VJ-day the percentage has been declining. The mother of young children, as a general rule, does not attempt to hold a paid job unless her husband's earnings are insufficient to support the family.

The mother, as homemaker, not only prepares the family meals but also performs the heavier household tasks, such as cleaning and the laundry of household linens and clothing. This is the pattern of living of city workers' families in the United States. Since there is usually no paid household help, the house is ordinarily equipped as a workplace with essential facilities for carrying out these tasks without undue physical strain.

The Home and Its Operation

Prevailing Standards. The home must provide the fundamental needs—shelter, sanitation, and privacy for the family group and its individual members. City dwellings in the United States characteristically have plumbing and heating facilities, a separate bath, and a separate kitchen. Hand pumps, privies, shared toilets, or fireplaces for heating and cooking exist in cities as substitutes only in situations where income is and has continuously been too low to provide modern housing.

It is a fact that the four-person city family in the United States considers five rooms, including a kitchen, and bath, with modern plumbing, heating and lighting, as basic to satisfactory housing. This type of dwelling is rented or purchased by families with children as soon as income permits; only families with very low incomes occupy dwellings that do not meet this standard.

Certain types of durable equipment for household operation are also customarily owned by the family or furnished by the landlord. Of all the labor-saving devices now available for the home, three articles are considered so essential that city families of moderate means possess them and families with low incomes make considerable sacrifices to obtain them. These are the gas or electric cook stove, the mechanical refrigerator, and the washing machine. The electricity or gas necessary to operate this equipment, as well as fuel for house heating, and running water are considered essential elements in our prevailing standard of housing.

The city worker's home ordinarily is within reasonable traveling distance of his place of employment, schools, and food stores. Neighbor-

[4] Expenditure and Savings of City Families in 1944. Bureau of Labor Statistics Serial No. R. 1818.

Family Spending and Saving in Wartime, 1941–42. Bureau of Labor Statistics Bulletin No. 822.

Family Food Consumption in the United States. U. S. Department of Agriculture, Miscellaneous Publication No. 550.

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Study of Consumer Purchases (Urban and Village Series), 1935–37, Family Food Consumption and Dietary Levels, Five Regions. U. S. Department of Agriculture, Miscellaneous Publication No. 452.

Sixteenth Decennial Census of the United States, 1940. Report on Housing and Population.

Urban Housing: A Summary of Real Property Inventories Conducted as Work Projects, 1934–36. U. S. Works Progress Administration, Division of Social Research.

National Health Survey, 1935–36, Collected Papers. Federal Security Agency, U. S. Public Health Service.

Medical Care and Costs in Relation to Family Income: A Statistical Source Book. Federal Security Agency, Social Security Board, Bureau of Research and Statistics, Bureau Memorandum No. 51.

The Incidence of Illness and the Volume of Medical Services among 9,000 Canvassed Families, 1928–31 (a collection of 23 reprints). Federal Security Agency, U. S. Public Health Service.

The Incidence of Illness and the Receipt and Costs of Medical Care Among Representative Family Groups, by I. S. Falk, Margaret Klem, and Nathan Sinai. Chicago (University of Chicago Press), 1933.

hoods that lack convenient access to these community facilities or those having obviously unsafe or unsanitary conditions are avoided if possible. Nevertheless, the neighborhood conditions which prevail in United States cities generally fall far short of ideal standards of safety and healthful outdoor recreation for all members of the family.

Standards of the Specialists. The American Public Health Association, through its Committee on the Hygiene of Housing, has recently taken the lead in formulating specifications for healthful housing. This committee's most recent recommendations, presented in Basic Principles of Healthful Housing have been followed, insofar as practicable, in formulating the standards for this budget. The standards clearly correspond with the essentials as expressed by family choices. There has been a continuous campaign in the United States for many years against unsafe or unsanitary conditions in dwellings and neighborhoods. This has led to tenement laws, building codes, community planning, and other measures for community protection and improvement. Today, it is the acknowledged responsibility of the municipal authorities to protect the community against hazards of fire, accident, and disease by means of public health regulations. The emphasis over this period has shifted from regulation for control of over-all hazards to the more positive approach of planning for housing and community development.

Standards for the Budget. Privacy requires a separate house or apartment containing a common living room, a kitchen and bathroom, and the necessary number of sleeping rooms. For a family of the type described in this budget, the requirement is five rooms and a bathroom.

Sanitation necessitates a pure water supply, adequate in quantity for personal and household cleanliness, to be piped under pressure to kitchen sink, wash bowl, toilet, bathtub, or shower. Other requirements are that doors and windows are screened where necessary; that structure is protected against contamination from sewage; and that neighborhood is free from accumulations of refuse that harbor disease-carrying vermin.

Heating and ventilation involves heating equipment installed and the necessary fuel for maintaining a temperature of 70° F. in the dwelling during the winter months. The amount of fuel and type of heating equipment varies from city to city in accordance with the length and severity of the cold season. One or more windows in each room is a minimum requirement for ventilation.

Lighting requires daylight illumination and installed electric lighting equipment in each room.

Other equipment includes kitchen sink with drain; gas or electric cook stove; mechanical refrigerator; hot water heater with storage tank; washing machine; and adequate supplies of gas or electric power to operate this equipment.

Safety precautions are that the dwelling must be of sound construction, with foundation, roof, walls, porches, and stairs repaired as necessary to prevent any danger of collapse; it must have adequate provision for escape in case of fire; and safety precautions in electric, plumbing, and heating installations as required by municipal authorities. The neighborhood must have space for outdoor exercise and children's play, and must be free from worst hazards of traffic, such as railroad or elevated tracks or unregulated thoroughfares of automobile traffic.

Community facilities, such as high school, churches, shopping centers, and facilities for recreation, entertainment, and medical care, must be easily accessible by public transportation; food stores and elementary schools must be within walking distance of the home, and major employment centers within reasonable commuting distance by public transportation or automobile.

Food

National Research Council Recommendations. A satisfactory diet must provide the necessary food allowances—minerals, vitamins, calories—recommended by the Food and Nutrition Board of the National Research Council.[5] These allowances are used in all nutrition programs in the United States. They are the official yardstick used in

[5] This Council was established in 1916 by the National Academy of Sciences to assist the Government in organizing the scientific resources of the country. Its membership is composed of about 220 representatives of scientific and technical societies, research organizations, Government scientific bureaus, and a few members at large. It has eight major divisions, one of which is the Division of Biology and Agriculture. The Food and Nutrition Board is one of the technical groups established within this division. Its work is carried on through committees assigned to special subjects. The Committee on Dietary Allowances, composed of scientists with special competence in the field of human nutrition, was set up to review and evaluate all available evidence and to formulate nutrient allowances for use in evaluating foods consumed by persons and families and in planning adequate diets. The first recommended allowances were issued in 1941; they were revised in 1945, and will undergo further revision as needed.

planning rations for the armed forces, and in setting specifications for adequate school lunches. Recommended allowances at present exist for calories and the following nutrients: protein, calcium, iron, thiamine (B_1), riboflavin (B_2), niacin, ascorbic acid, and vitamin A for persons of varying age, sex, and activity.

The Food and Nutrition Board of the National Research Council makes the following statement in its 1943 bulletin on what the allowances provide:[6]

> The allowances for specific nutrients are intended to serve as a guide for planning adequate nutrition for the civilian population of the United States. The quantities given were planned to provide not merely the minimum sufficient to protect against actual deficiency disease but a fair margin above this to insure good nutrition and protection of all body tissues. Since the actual requirements for these purposes are not known, it is recognized that the margins of safety may vary considerably for the different factors. The Board realizes that the values proposed will need to be revised from time to time as more knowledge of nutritive requirements becomes available.

Pattern of Consumption. A satisfactory diet must provide the recommended allowances of calories and nutrients and it must also conform to the ordinary eating habits of city families. Provision for customary eating habits is necessary for two reasons. First, the food Americans eat is not and never has been simply a matter of nutrition. People like to eat what they know how to prepare and have become accustomed to; they will accept other foods very slowly. If they cannot buy an adequate diet with their customary foods, there is little chance that the diet will be adequate. Second, since nutritional needs are not yet fully known, customary habits give maximum assurance of adequate nutrition. For these reasons the selection of items for the budget is based first upon nutritional standards, and second, upon customary eating habits of people in the United States—including not only meals at home, but ice cream and other between-meal snacks and lunches put up at home to take to school or work. The diet thus follows both scientific recommendations and customary practices.

The United States family eats three meals a day—breakfast and dinner at home, and lunch at school, at work, or in the home. Between-meal snacks of certain foods and beverages at soda fountains, lunch counters, and from street vendors have become practically universal. Ice cream cones and soft drinks have become essentials even for the poorest city family with children, who will sacrifice an otherwise adequate diet for a minimum of these items for their children.

The growth of services for providing prepared food for eating away from home has been tremendous in recent years. The majority of city families with children, however, still prepare a greater part of their food at home; the custom of carrying lunches from home is still popular. Foods prepared at home are, therefore, the principal source of the supply of vitamins and minerals consumed.

Scale of Food Consumption. The foods eaten by city families, when arranged in a scale according to the quantities of the calories and nutrients which they provide, form a succession of diets which are increasingly satisfactory in the judgment both of consumers and of scientists.

The quantities of the foods included in this budget were determined at the point in the scale of diets where the consumption of calories and nutrients agreed most closely with the recommendations of the National Research Council. This method of deriving the food budget leads to a grouping of foods in the way that families with satisfactory diets actually buy them.[7] The food budget, in this sense, was developed by families themselves. It permits them, in line with their habits, a satisfactory diet with some choice of foods.

Food "Away from Home." Food bought and eaten away from home consists mainly of meals at work and at school. Except for families of highest incomes, outlays for other meals away from home, for ice cream, candy, and beverages, are individually small. Outlays for these items, nonetheless, are closely related to expenditures for food eaten at home. The provision in the budget for food away from home, therefore, was

[6] Recommended Dietary Allowances, January, 1943.

[7] In contrast with this procedure, the method used in many low-cost food plans is to start with the customary food habits of low-income families and to reduce the quantities of some foods and to increase the quantity of others in order to have an adequate diet at low cost. This type of food plan has merits in teaching low-income families how to get adequate diets with little or no increase in the cost of food. As a basis for measuring the cost of an adequate diet, it has been criticized on the basis that it is developed by people thoroughly familiar with the scientific value of foods in relation to their costs—a condition which applies to few housewives.

determined in relation to the amounts provided for food at home.

Beverages and Tobacco. Outlays for tobacco and beverages are also related to outlays for foods consumed at home. This means that family consumption of food and tobacco, as well as food eaten at home, tend to increase as incomes increase. The determination of a certain budget for food, accordingly, determines the budget allowance for these items.

All families purchase food for preparation in the home.[8] Almost all families spend something for food away from home. Meals away from home, tobacco, and beverages, however, do not appear in the consumption of every individual family. Provision for these items in the budget are, accordingly, presented as an average and each is smaller than the amounts spent by the individual families who use them.[9]

Other Consumption Groups

Scale of Consumption. The quantities of goods and services purchased in each of the other consumption categories—clothing, household furnishings and equipment, transportation, recreation, medical care, and miscellaneous—increase systematically from the lowest income bracket to the highest. At the lower end of this scale of purchases the differences between the successive levels are primarily in quantity, the housewife buys more dresses and the husband more suits; at the upper end of the scale the differences are primarily in quality, wives and husbands buy more expensive dresses and more expensive suits.

Each of the consumption groups is composed of a combination of articles and services which includes many sets of substitutes. Accordingly, the scale can be expressed in terms of the total quantities purchased of articles and services that form a related set. Thus, in the case of clothing, the wife's whole wardrobe may be considered as a related set within which there are many substitutes, such as the housedress, the coverall, the smock, and perhaps the slack suit.

Determination of the Budget Level. To locate the dividing point for the budget level of goods and services other than housing and food, it is necessary to rely solely on indicators of consumer judgments—other "scientific" criteria do not exist. "Scientific" standards do not now exist, and perhaps never will, for meeting those needs for which physical requirements are less important than psychological and social requirements. The budget level must be sets of goods and services regarded as so necessary that families would go into debt or reduce their level of savings to maintain consumption at that level when, for example, prices in general were increased. In other words, it must represent the level of consumption that, once experienced, would persist even to the extent of increasing the total spent on consumption and reducing the level of savings.

Accordingly, the relation between amounts bought and changes in income were charted, and that point where the increase in buying showed a tendency to decline relatively was interpreted as the point to be used as the budget level.[10] This method permitted an *objective* test, based on facts, of quantities that were put on the list in those parts of the budget where "scientific" standards do not exist. If families continued to increase the rate of buying as incomes went up, they obviously had an urgent and unfilled need for more of a particular group of articles. At that point where they started to buy in decreasing proportions with larger incomes the budget level was determined.

Clothing. The clothing budget was determined by the procedure just described. Separate studies

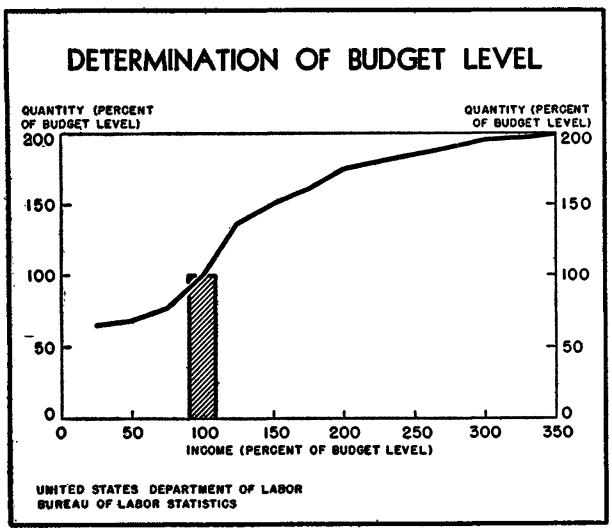
[8] The surveys have indicated that very few families with children eat all of their meals away from home.

[9] See the section on The Budget as Combinations of Choices, p. 16.

[10] The goods and services within a group were summarized as a total by combining the quantities of each item purchased with the use of a fixed set of prices as weights. The prices selected as weights were those characteristic of the family choices at the lower end of the income range. The characteristic graphic pattern of the changes in the weighted total quantity of goods and services is an elongated S-curve, resembling the well-known growth curves. Quantities at first increase relatively more and more rapidly with increases in purchasing power; then, the increase becomes relatively smaller and smaller. The relative change of purchases with income is called the income elasticity. The income elasticity of the weighted total quantity for each category rises to a maximum and then declines along the income scale. This pattern of consumption in relation to income is more characteristic of recent periods than of periods before the First World War. Although conclusive statistical analysis has not been completed, it is possible to infer that the form of relationship is a reflection of the changing "standard of living" of the urban population. Families with the lowest incomes at the present time are unable or unwilling to confine themselves to the level of purchases characteristic of families with equivalent incomes in, say, 1901. A particularly interesting example is found in the transportation expenditures. Transportation was so unimportant that it was not separately recorded and was not even mentioned in the report on the survey made in the year 1901. The recent surveys show that among urban families today there is a level of transportation so necessary that even the families with the lowest incomes must make expenditures for this requirement.

The accompanying chart showing the relation between incomes and quantities of goods and services purchased by urban families demonstrates the shape of this curve and indicates the point on the curve at which the budget level falls.

were made of the purchases by husbands, wives, boys in the age group 11–16, and girls in the age group 6–10. These studies covered families with incomes from $250 to $15,000 in the year 1941. Husbands' clothing purchases varied from an average of 30 articles in the lowest income group to 60 in the highest income group. The variation in total number of articles purchased for other family members was 25 to 55 for wives, 20 to 60 for boys, and 25 to 55 for small girls. The dividing point for the budget corresponded to the purchase of approximately 50 articles for the husband, 40 articles for the wife, 35 articles for the boy, and 40 articles for the girl. [11]



Housefurnishings. Family purchases of furniture and equipment and of textile housefurnishings were analyzed by the same procedure to determine the budget level of the number of articles purchased per year.

Purchase rates for furniture showed no signficant variation over the income scale for families of the type described for this budget, presumably because these families needed only occasional replacements to the basic stock of furniture acquired in earlier years. As no satisfactory information was available for furniture and equipment purchases in relation to inventories owned, the method used to determine purchase rates of these items is somewhat less satisfactory than in the case of other goods and services.

Textile housefurnishings (bedding, towels, curtains, etc.) which are replaced with greater regularity than furniture showed the usual variation in number of articles bought with increasing amounts of purchasing power. Purchases of these items varied from about 4 a year in the lowest income group to more than 20 in the highest. The budget level appeared to be about 13.

Transportation. Transportation is measured as a composite of miles traveled in automobiles and on railroads and of number of trips in local public conveyances. The amount of transportation used by urban families living in metropolitan districts varies along the income scale from about 2,200 car-miles and 515 local fares to 22,000 car-miles and 200 local fares. The budget level corresponds to about 6,000 car-miles and 300 local fares per year.

Because the mode of transportation, as well as its volume, is related to the size, location, and characteristics of the community, the budget presented here applies to metropolitan districts with central cities of at least 50,000 population. Within the metropolitan districts distinct differences in the preferable forms of travel appear between the largest (1,900,000 population) and those of smaller size. The budget, accordingly, reflects a variation between 2 groups of cities—New York, Chicago, and Philadelphia, and all others—which is principally a difference in the volume of automobile ownership and the balancing use of local public transportation.

Medical and Dental Care. The amount of medical care received by the families studied can best be measured in the number of home and office calls on physicians. These ranged from a low of about 2.3 calls per person in the lower brackets to about 6.0 calls per person in the higher income brackets. The budget level is determined at about 4.4 calls per person.

The dental care budget was worked out in the same fashion and is slightly over 1 case every 2 years per person.

The needs for medical and dental care, as services directly related to physical health, probably will eventually be formulated in a set of actuarial standards approved by the medical and dental profession and other informed authorities. At present, the detailed and authentic statistical data necessary to the formulation of such a set of standard requirements do not exist. It is, there-

[11] See p. 15 for discussion of clothing received as gifts

fore, not possible to adapt the budget determination of the medical care requirements to any set of standards corresponding to those used for food and housing.

The medical and dental standards established in this budget are characteristic of an income level above that of the other groups of goods and services. This corresponds to the generally accepted observation that the majority of United States families have not been receiving a satisfactory volume of these essential services. There is considerable evidence that the medical care sought by families at all income levels is gradually increasing. This increase reflects both more widespread use of insurance plans, credit arrangements, and medical prepayment plans and also increased public education in the necessity of more adequate medical and dental care.

Other Goods and Services. The budgets for the goods and services included in the groups "reading and recreation," "personal care," and "communication" were derived by the general method described above. For education, the budget includes the books, school supplies, fees, and other outlays required by the public schools, as determined by direct inquiries of officials in the 34 cities.

The two groups, "gifts" and "miscellaneous," include purchases that vary greatly from family to family and, accordingly, can be specified only in relation to the total cost of the budget. The practice of exchanging gifts with relatives and friends is almost universal. At the level of consumption described by the budget, the cost of personal gifts to persons outside the immediate family amounts to approximately 1 percent of total expenditures. The miscellaneous group, also about 1 percent of total expenditures, covers goods and services not classified in the main consumption groups and includes such varied things as garden seeds, lodging away from home, music lessons, legal service, cemetery lots, etc.

The inclusion of gifts in the budget means that the quantities specified for many articles do not represent the full family consumption of such items. The articles commonly exchanged as presents appear as a dollar total for the gifts given, not as the dollar value of the particular presents received. To have described the budget in terms of the amounts received would have represented consumption more accurately but in an unrealistic manner. The importance of gifts is illustrated by the low rate of purchases of such articles as ties and robes by the family for its own members—these are well-known items on the gift list.

Contributions. The budget must also include a provision for contributions to churches and welfare organizations which are almost universal, and in some localities have become standardized in relation to the economic position of families. Lack of general standardization, however, prevents inclusion of this item in quantitative terms. On the basis of customary practices, contributions are included in the budget at 1 percent of its total cost.

Description of Purchases

The description of the purchases at the budget level involves, first, a statement of the average quantities of each item purchased; second, a description of these items in the form of specifications. The first of these operations is a simple case of listing and statistical summary. The second operation is a process of standardization—i. e., the selection of one typical item that best characterizes the group choices at the budget level.

The precision in description or specification depends upon an interpretation of the changes in families' choices with alterations in the market and price structure. Three tendencies appear: (1) For some articles families apparently attempt to buy similar quality from time to time. Examples are clothing, textiles, articles of personal care, and personal services. (2) For some articles there is a marked tendency to follow price lines so long as a general type of durability is assured. Examples are furniture and housewares. (3) For some articles there is a marked tendency to accept simpler and less expensive (and sometimes second-hand) models as these become available on the market. Examples are radios and automobiles. Each of these tendencies is recognized in the specifications selected to describe the items included in the budget.

Specifications have been developed for all of the most commonly purchased items. However, specifications are not presented for certain of the articles and services included in the budget, such

as accessories and other articles for which the quality cannot be defined readily. These are, in the main, articles for which families show a preference for considerable variety and, accordingly, can be described only in terms of the average level of expenditure.

Budget as Combinations of Choices

The budget, as derived, represents combinations of choices which families make. It specifies for each family a dwelling, certain equipment, and certain foods of general categories, but it does not specify for each family exactly what food, clothing, and other goods and services are purchased. It lays out only the general level of purchases for each category and describes the choices made by groups of families.

The budget is accordingly a description of the way in which families at the budget level make their choices among the alternatives presented. In the transportation section, the element of choice is clearly indicated; part of the families have automobiles, while part of the families rely on public transportation. The budget as a whole implies that the families with automobiles have chosen the more expensive mode of transportation and have balanced this choice by simplifying their choices for other goods and services. Some balance the cost of the automobile by living in suburban homes renting for less than the equivalent in the central city. Some simplify their clothing choices or those of recreational facilities.

The variety of choices possible cannot be described except in most general terms. The budget describes average choices. Families that select a level above the average in one category select a level below the average in another. In terms of the general relationships observed through surveys of family consumption, expenditures for individual families' food choices vary relatively little from the average. There is more variation in housing, and still more in clothing, transportation, and recreation, where individual families effect some balance among their choices so that the total outlay does not vary very much from family to family. On other expenditures, such as those for furnishings and medical care, the expenditures in a given year vary widely from family to family. Over a period of years the variation in the expenditures of an individual family may be extreme. The budget quantities, when interpreted for the individual family, accordingly can be described as having the character of an amortization schedule or an insurance plan.

Level of Replacements and Additions

The budget quantities are based on existing inventories in the possession of families and hence are significantly affected by the extent to which goods are acquired by the individual family through inheritance, gifts, "hand-me-downs," and barter outside of the market process. Many homes are partially furnished through gifts or inheritances. Articles like sewing machines, small pieces of furniture, and bric-a-brac descend from grandmother to mother to daughter. Friends exchange good clothing "outgrown" by their children. For all such articles the budget quantities appear low when interpreted as replacement rates, but they are, in fact, what families buy.

For other articles the budget quantities may appear too high when construed simply as replacement rates. On such articles as washing machines, vacuum cleaners, and electric irons, for instance, the budget quantities reflect some net addition to inventories that results both from initial purchases and replacements before the end of the useful life of the item.

Other Types of Outlays

Occupational Expenses. A worker's family budget must obviously provide for those outlays that are essential to his employment, such as special clothing and equipment, and dues for membership in an organization, such as a labor union or a professional association. Occupational expenses vary greatly from one situation to another and cannot be detailed in a budget of general application. Organization dues likewise vary greatly among different groups and therefore cannot be exactly specified in the budget. These costs are included in the budget total as a general average and should obviously be altered when the budget is taken to apply to any particular group.

Insurance. The great majority of families, except those in the lowest income groups, purchase some life insurance, including national service life insurance. Some 30 millions of workers contribute 1 percent of their wages or salaries to old

age and survivors insurance and more than 5 millions contribute from 3½ to 5 percent of their wages or salaries to retirement funds set up by governments (railroad retirement, and Federal, State, and local retirement systems). Thousands make some contribution to retirement plans sponsored by private enterprises, perhaps in addition to Federal social insurance. In four States workers must contribute to the unemployment compensation funds.

The specification and costs of insurance cannot be stated in the budget because the provisions vary so greatly among the various industrial and occupational groups. As in the case of occupational expenses, insurance is included as a general average and should be adapted to specific applications.

Savings. Insurance, although in a sense a substitute for savings in other forms, does not constitute the total set aside by workers' families. Except in the lowest income brackets, the majority of city families manage to add something to savings accounts or purchase Government bonds during the course of a year. Savings, however, cannot be specified in general terms representing all situations and are therefore not included in this budget.

Taxes. Personal taxes are included. When the budget total has been ascertained, income taxes, both State and Federal, are calculated for each city and included.

Pricing the Family Budget

To obtain the total dollar cost of a city worker's family budget, once the items and quantities are determined it is necessary to obtain prices for the kinds of commodities and services families buy. The prices must be real; they must be the prices for which goods actually sell in the stores where workers' families buy; they must be obtained in the same kinds of stores and from the same kinds of barbers and doctors to which the United States city workers go for supplies and services. The prices must be for those goods and services that can be described and identified and for the kinds of housing now occupied.

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It is practically impossible to obtain prices for everything purchased by the city worker in each of the 34 cities; moreover, such a procedure is unnecessary. Prices are obtained, therefore, only for a sample of the goods and services in the budget —that is, rents are obtained for a sample of homes; prices are obtained for important commodities from a sample of stores; costs of services are obtained from a representative group of doctors, etc. The homes, stores, and services priced, however, have been carefully chosen to be representative of all stores, homes, and services used by the city worker.

The pricing procedures, samples of commodities and services, samples of respondents, and averaging processes used for the Bureau's consumers' price index are the foundation for calculating the total of the family budget. The actual collection of prices in the 34 large cities is made by personal visits of Bureau representatives to retail and service establishments for all goods and services except gas, electricity, heating fuels, school supplies and expenses, and miscellaneous costs in connection with automobile operation, such as inspection and registration fees. Prices of the latter are obtained through specially designed mail questionnaires.

Actual prices were collected for more than 85 percent of the goods and services included in this budget. The remaining goods and services were classified for pricing as follows: (1) Those which are purchased infrequently or which represent an insignificant portion of a total budget; (2) those for which families ordinarily spread choices over a wide variety of qualities; (3) those for which there is little, if any, geographical difference in price. Price collection for such items was limited to stores in one city (usually Washington, D. C.) or estimates were made on the basis of known relationships. For groups of related miscellaneous items which are impractical to price, such as mending supplies, etc., estimates in terms of an average total expenditure were used.

The definitions of the qualities of goods and services included in this budget represent, as in the case of the quantity allowances, the group judgment of workers' families. For most of the major groups of commodities and services in the budget, the quality levels were determined from the same basic data as those used to derive the quantities—that is, expenditure studies for the years 1929 to 1941. Where widely accepted stand-

ards exist, as in the case of housing, they were adopted, as previously described.

The size and distribution of the sample from which prices were obtained necessarily varied with the kind of commodity and service. Quotations were obtained from more sources than are usually used for the consumers' price index; they included stores in both downtown and residential areas; chain and independent types of operation; large and small establishments; and specialty and general types of stores. Neighborhood representation was stressed particularly for foods, drugs, cleaning supplies, barber and beauty shop service, and other items which are typically obtained in the communities where families live.

Clearance and other sales prices were accepted if the sale extended over a period of 2 weeks or longer—1 week in the case of food—since it was assumed that a large proportion of families could and would take advantage of sales lasting this length of time. In the spring of 1946 there was a minimum number of special offers of any kind being made by stores, so that sales prices were unimportant in the totals for this budget. By the summer of 1947 sales had again become frequent, although they were still not as frequent nor in as great volume as in the prewar period. Close-out prices for articles of limited consumer acceptance were not used.

Where a State or city retail sales tax was in effect, the appropriate tax was included. Prices for cosmetics, fur-trimmed coats, gasoline, tobacco, and other items subject to Federal excise or other State and Federal taxes included such taxes wherever applicable.

The quantity budget represents a worker's family's needs for a year. If the total dollar estimate of the budget is to represent the needs for a year ahead or the estimated cost for the year passed, the prices used must be those which represent the whole year; they should not be those characteristic of a single point of time unless prices at that point may be considered representative for the year. This is especially important in the cases of seasonal items. For flour the period of pricing is probably immaterial, since flour is normally purchased and consumed throughout the year. Oranges, on the other hand, are normally bought by city families only in the winter when they are relatively cheap; at other times the housewife substitutes canned juices or other foods. In these cases seasonally weighted average prices were used.

It has not been possible to collect all the prices necessary for a complete round of seasons. Accordingly, the budget has been calculated in the main on the basis of the prices prevailing at a single point of time. For the highly seasonal articles, prices for the last month in which there was a considerable volume of sales were used. Winter items of clothing which are ordinarily not on the shelves in the spring and summer were priced in December. The cost of the budget has been calculated in this way for two dates, March 1946 and June 1947.

Food

There are about 200 different foods customarily purchased by American workers' families which in the budget were combined into 22 groups. The Bureau selected 79 foods for pricing—those which are consumed in largest quantity and which most accurately represent the price level of all the foods in each group. Prices for all the foods in each of the groups shown in the quantity budget were determined on the basis of known relationships with selected items.

The records of family purchases of food do not include information on the quality of foods purchased. The specifications used by the Bureau for the collection of price data in grocery stores, therefore, represent for each food, the grades and sizes sold in largest volume—e. g., prices were obtained for canned green beans of U.S. Grade C (standard) in No. 2 cans; for canned corn the grade specified was U.S. Grade A (fancy).

Retail prices of food were obtained from about 1,800 reporters representing about 7,700 stores in the 34 cities. All important chain organizations in each city reported food prices. The sample of independent stores was large enough in each city to represent (1) types of stores in terms of kinds of food sold—e. g., grocery stores, meat markets, etc.—(2) sizes of stores in terms of annual sales volume, and (3) locations of stores within the city.

The average prices for each food in a city were obtained by combining the independent store average prices and the chain store average prices, with weights representing the relative volume of food sales by all independent and all chain stores

in the city. The independent store sample was "self weighting" so that the independent store prices were combined as a simple average. Chain store quotations were combined with weights representing the proportion which each company's sales were of all chain store food sales in the city.

Housing

Rental rates for dwellings which meet the standards established by the American Public Health Association's Committee on the Hygiene of Housing and the Federal Public Housing Administration were obtained from the Bureau's comprehensive surveys of housing characteristics and rents, made between December 1945 and June 1947 in the 34 cities. To bring these comprehensive surveys up to date for March 1946 and June 1947 the Bureau's rent index was applied to the rentals as determined.

The Bureau's comprehensive surveys of rental housing are made at intervals of 12 to 30 months in each of the cities for which a consumers' price index is published. The surveys obtain detailed information on housing through personal visits by Bureau representatives. The large samples of dwellings used are carefully selected so as to be representative of all sizes and types of dwellings and of all sections of the city and those suburbs which are considered by housing officials to be part of the city housing market. The detailed information obtained includes data on rents paid, facilities and services included in the rent, complete description of the dwelling, and a comprehensive description of the neighborhood.

In order to identify the dwellings of the type specified for the budget, the following description of standard was used:

> Five-room dwelling—house or apartment—including kitchen, with sink and installed stove, hot and cold running water; with a complete private bath including wash bowl, flush toilet, and tub or shower; electricity for lighting; and installed heating, either central or other type, such as base burner, pipeless furnace, or stoves, depending upon the climate of the specific city. (Central heating was generally required in cities where the normal January temperature is 40° F. or colder, and central or other installed heating for cities with warmer climates.)
>
> Dwellings which were reported as needing major repairs—i. e., structural repairs such as roof, walls, or foundation—were not included, but those needing minor repairs such as painting or papering were included in the study.
>
> Located in a neighborhood with play space for children (yards, playground, park, or roped off street, accessible without serious traffic hazards), public transportation available within 10 blocks, not adjacent to a refuse dump nor to more than one of the following hazards or nuisances: railroad or elevated tracks, noisy or smoke and fume developing industrial installations, main traffic artery, or intercity truck route.

Dwellings were considered above the standard and were not included if they had more than one complete private bath, rooms or lots substantially larger than the normal size room or lot for five-room dwellings in the specific city, or if they were located in apartment structures which provided central telephone switchboard service, maid service, doorman service, etc.

Prices were also obtained in the 34 cities for water, gas, electricity, heating fuel, refuse disposal, and durable household equipment, such as stoves and refrigerators which may or may not be the property of the occupant. Since the average monthly contract rent in some cases included shelter only and in other cases included the cost of shelter, water, heating, lighting, cooking fuel, refrigeration, furniture, etc., the proportion of dwellings having each facility included in the rent was obtained. The total housing cost for each city was calculated as the sum of the average of contract rents for dwellings of the stated standard and the average cost of fuel and furnishings for that proportion of households paying for these items separately.

Clothing and Housefurnishings

For clothing and housefurnishings the quality to be priced was determined by reference to the prices paid by families at the budget level in 1941. These prices were compared with the prices for different specifications reported to the Bureau by retailers in 34 cities in 1941. The specifications which had approximately the same average price as the consumer paid was chosen as the specification to be used in pricing for the budget. The large file of data that the Bureau has obtained in its regular consumers' price index surveys made this procedure possible. In some cases it was necessary to adjust specifications to take account of current market conditions, especially in 1946. For example, the prices paid by families indicated

that the quality of men's pajamas purchased in 1941 was as follows:

> Printed percale; 68 x 72 construction; colors fast to washing. Minimum workmanship; coat or middy style; 50 to 51 yd./doz. based on 36-inch fabric and size scale A to D.

The change during the war years made it necessary in March 1946 to price pajamas of the quality specified below:

> Printed percale; 64 x 64 or 64 x 56 construction, printed patterns; colors fast to washing. Minimum workmanship; coat style; 51 to 53 yd./doz. based on 36-inch fabric and size scale A to D.

These pajamas take into account two wartime constructions; better grades of cotton had been set aside for military uses. By June 1947, the restrictions had been eliminated and the 1941 specification was again being used.

Every effort was made to make the specifications as precise as possible, but the degree of precision varies from commodity to commodity and most of the specifications allow for some variation. Some range in quality was provided in order that products of more than one manufacturer would be included. Accurate pricing requires that the specification be stated in terms familiar to retail store personnel who are asked to furnish data. Shortages in most lines of textiles and household equipment in March 1946 made it difficult to obtain data on exactly the same quality in all stores in all cities; this difficulty had practically disappeared by the summer of 1947. In such cases alternate articles of approximately the same quality—e. g., pajamas and nightgowns—were priced.

Prices were obtained on all articles meeting the specifications as just described in all departments in four or more outlets in each of the 34 large cities in December 1945 and in March 1946. Thus, if women's dresses were sold in four departments in one store and three dresses in each department fell within the range of quality specified, 12 price quotations were obtained in that store. For commodities under uniform ceiling prices at those dates only a single quotation was obtained in each store.

The arithmetic mean of price quotations obtained in each city was used as the typical price for that city. Because of scarcities, it was not possible in the case of some commodities to obtain enough prices in each city in March 1946 to determine reliable averages. In such cases, all prices reported for several adjacent cities were averaged together and ascribed to each city within the area. Commodities treated in this fashion included washing machines, sewing machines, and mechanical refrigerators. By June 1947, supplies had improved so that the regular procedure could be followed.

The average prices for each city obtained by visiting all departments in each store did not prove to be significantly different from the average prices based on the department in each store visited regularly for the Bureau's consumers' price index. Accordingly, in December 1946, March 1947, and June 1947, the information collected for the budget was limited to the departments regularly visited in each store.

The stores visited depended upon the buying habits of people in the locality, the distribution of retail trade and the concentration of workers' homes in each city, and were primarily the larger downtown department and specialty stores. Sales of those stores accounted for a large part of the total sales of articles of the specified qualities. For some groups of items, particularly furniture and household equipment, prices were also obtained from stores located in outlying neighborhoods.

For some commodities, chiefly those for which there is no geographical difference in price, the average prices were obtained from retail outlets in one city. Washington, D. C., prices were used for this purpose and were assumed to be the same for each of the 34 cities. For example, the prices of clothespins, ironing boards, and garbage cans were obtained in this way. The items in this class are comparatively unimportant in the total cost of the budget.

Other commodities, particularly those for which precise definitions could not be developed, such as cosmetics, kitchen utensils, etc., were not priced in any of the 34 cities. For the majority of these, prices were estimated on the basis of known price relationships for each city from prices of other closely related commodities which were priced. When price relationships could not be ascertained, a uniform dollar allowance was made for each city.

Medical Care

Prices and fees were obtained for the supplies and services which were required most frequently in the medical care budget. The costs of other services and supplies were estimated from the relationships shown on various schedules of fees.

Usual fees for office and home visits and for tonsillectomies and appendectomies were obtained from a sample of at least 8 physicians and surgeons in each of the 34 cities; those for the various eye services from a minimum of 6 optometrists in each city; and dental charges were obtained from 6 dentists in each city. In all cases the group of reporting professional men represented downtown districts and outlying areas and included those whose patients were primarily wage earners and who did not charge exceptionally high fees to discourage certain types of cases.

The costs of group hospitalization insurance plans were used in those cities in which such plans were generally accepted and were providing comprehensive service. For cities in which the plans were limited in kinds of service or population groups covered, or where the plan was not in general use, the prices for a number of specified services were secured from local hospitals. For registered nurses the usual fee was obtained from local hospitals or nurses' registries; and for practical nurses the United States Employment Service reported fee was used as a flat sum in each of the cities.

Prices for prescriptions were obtained from a minimum of four drug stores in each city with representation of both chain and independent stores, and neighborhood and downtown areas.

The prices used in the computation of the budget were arithmetic averages of the fees and prices reported.

Transportation

Cash, ticket, or token rates (whichever was least expensive) for public transportation within the city and to selected suburbs were obtained from the local transportation companies in all 34 cities. School fares, to provide for children's travel to school, were also obtained. Railroad fares were obtained from a central source.

Prices for gasoline, motor oil, and tires and tubes were obtained in each city from at least four service stations scattered throughout the city, representing both distributors' outlets and independently owned stations. Manuals furnished by State and national automobile associations and insurance agencies were used to compute the annual costs for automobile insurance, licenses, and fees.

Costs of the most frequent types of automobile repairs, as determined by leading automobile manufacturers, were obtained from four repair establishments in each city including both dealer and general repair shops.

Under conditions of the budget which permit family ownership of an automobile, the car is specified as an "old one." Ordinarily this would mean a car 6–9 years old. The budget does not allow for the replacement of automobiles at 1946 and 1947 prices because used automobiles at these dates were selling at approximately what new cars cost in 1941. A dollar amount equal to that spent in 1941 was provided in the budget.

Other Goods and Services

The prices of the kinds and qualities of the other commodities or services included in the budget were determined by methods similar to those used for clothing and housefurnishings, i. e., those which were most commonly bought and for which there was fair uniformity in the quality chosen by families.

The supplies necessary for household operation such as soaps, matches, etc., were priced in the sample of grocery stores with the number of quotations varying from about 20 to almost 100 depending on the size of the city. Prices for each of the articles and services necessary for personal care were obtained from at least four drug stores, barber shops, etc., located in both downtown and neighborhood areas.

Prices for cigars, cigarettes, and tobacco were obtained in drug stores and in chain and independent tobacco stores.

Prices were obtained for all important newspapers in each city and admissions to movies in the downtown and neighborhood areas were also obtained.

All average prices for these groups of goods and services were simple averages of the prices reported.

Public School Supplies and Fees

To provide for school expenses which must be paid by students for instructional and recreational activities, when such expenses are not borne by the State, county, or city school system, data were obtained from city superintendents of schools and supervising principals of 500 elementary and secondary schools in the 34 cities by mail questionnaire.

For computing the budget, the average cost for each of the types of expenditures was obtained by weighting the costs in each school by the number of pupils affected.

Cost of Budget in 34 Large Cities

The cost of goods and services included in the city worker's family budget for four persons in June 1947 ranged from $2,734 in New Orleans to $3,111 in Washington, D. C., the lowest and the highest cost cities among the 34 surveyed by the Bureau of Labor Statistics. The estimated total cost of the budget for these two cities—including taxes, insurance, and occupational expenses, which add from 8 to 12 percent to the cost of goods and services—amounted to $3,004 and $3,458, respectively, in June 1947. These totals do not take account of the rise in retail prices of living essentials—especially food—which took place after June 1947.

In March 1946, when the budget was first priced, and prior to the rapid rise in prices of living essentials which accompanied the discontinuation of price controls in the summer of 1946, the total cost of goods and services ranged from $2,345 in Houston to $2,718 in Washington, D. C. Addition of taxes, insurance, and occupational expenses brought the totals at that time to $2,532 in Houston and $2,985 in Washington.

The cost of the city worker's family budget for each of the 34 cities surveyed for the Bureau's consumers' price index is shown in table 1, in which the cities are arranged in descending order of the total cost of goods and services (only) in June 1947.

The three cities in which it cost workers most to live in June 1947 were Washington, D. C., Seattle, and New York. The same three cities were among the five highest in March 1946. The three lowest-cost cities in June 1947 were New Orleans, Kansas City, and Houston. These same cities were the three lowest in March 1946, although Houston rather than New Orleans was last on the list in March 1946. Between the highest three cities and the lowest three there is considerable shifting of position, indicating that there is probably little significance to small dollar differences.

TABLE 1.—*Total cost of goods and services with estimated total cost of budget, 34 cities, March 1946 and June 1947*

City	June 1947		March 1946	
	Total cost of goods and services	Estimated total cost of budget	Total cost of goods and services	Estimated total cost of budget
Washington, D. C.	$3,111	$3,458	$2,718	$2,985
Seattle, Wash.	3,054	3,388	2,660	2,913
New York, N. Y.	3,019	3,347	2,583	2,820
Milwaukee, Wis.	2,988	3,317	2,575	2,811
Boston, Mass.	2,981	3,310	2,598	2,842
Detroit, Mich.	2,974	3,293	2,578	2,813
Pittsburgh, Pa.	2,973	3,291	2,535	2,761
Minneapolis, Minn.	2,965	3,282	2,550	2,779
Chicago, Ill.	2,965	3,282	2,561	2,793
San Francisco, Calif.	2,964	3,317	2,582	2,853
Baltimore, Md.	2,944	3,260	2,565	2,797
St. Louis, Mo.	2,928	3,247	2,580	2,824
Mobile, Ala.	2,925	3,276	2,557	2,826
Norfolk, Va.	2,919	3,241	2,563	2,804
Memphis, Tenn.	2,912	3,220	2,524	2,750
Los Angeles, Calif.	2,910	3,251	2,512	2,766
Birmingham, Ala.	2,904	3,251	2,521	2,781
Richmond, Va.	2,904	3,223	2,542	2,776
Cleveland, Ohio	2,897	3,200	2,495	2,712
Portland, Maine	2,894	3,200	2,511	2,735
Denver, Colo.	2,870	3,168	2,494	2,711
Philadelphia, Pa.	2,867	3,203	2,442	2,681
Scranton, Pa.	2,866	3,163	2,422	2,623
Savannah, Ga.	2,855	3,150	2,502	2,721
Portland, Oreg.	2,854	3,161	2,521	2,748
Atlanta, Ga.	2,853	3,160	2,475	2,691
Jacksonville, Fla.	2,843	3,135	2,466	2,677
Manchester, N. H.	2,837	3,132	2,481	2,700
Cincinnati, Ohio	2,830	3,119	2,467	2,678
Buffalo, N. Y.	2,810	3,095	2,415	2,615
Indianapolis, Ind.	2,790	3,098	2,440	2,667
Kansas City, Mo.	2,739	3,010	2,405	2,603
Houston, Tex.	2,735	3,007	2,345	2,532
New Orleans, La.	2,734	3,004	2,381	2,573

The ranks of the cities in both periods are changed slightly when they are arranged in descending order of the estimated total cost of the budget (including taxes, insurance, and occupational expenses). This is due in part to the differences in State and local income tax requirements and the existence in Alabama and California of State pay-roll tax levies for purposes of unemployment insurance.

Although the Bureau's consumers' price index is prepared for the average of all large cities as a measure of changes in prices, no national average is prepared for the city worker's family budget. Such an average would require surveys in many

additional small and middle-sized cities. Moreover, dollar totals have meaning mainly in terms of a single city and not as a national average.

Intercity Differences in Cost of Budget

Among these 34 cities there is a total difference of about $375 in June 1947 in the cost of goods and services for a four-person family. When taxes and other expenses are taken into account the difference increases to approximately $450. That the differences among most of the 34 cities are not great is clear when the 3 highest and 3 lowest are not taken into account. The difference is then reduced to less than $200. This condition was even more striking in March 1946, when the difference was slightly over $150 with the three highest and three lowest excluded from the comparison. Lack of differences is even more clear when the 10 middle cities are compared; the differences among these 10 cities range between $50 and $60 in both periods.

The relative differences in the costs of goods and services (only) among the 34 cities, with Washington, D. C., as 100, are shown in table 2.

The principal factors in these intercity differences are the cost of housing, which depends on many local circumstances, variations in fuel and clothing costs, which depend mainly on differences in climate, transportation, and taxes. Of these, the most important in explaining the differences is housing. Where the cost of housing is relatively high, the total cost of the budget for goods and services is at the upper end of the range; where it is relatively low, the cost of the budget is at the lower end of the range. The differences in the cost of housing of the specified standard among the 34 cities in June 1947 was about $300, or more than three-fourths of the total variation in the cost of the budget among the 34 cities. Thus, Washington and New York are among the high cost cities largely because the cost of housing is high, New Orleans and Houston are among the low cost cities largely because the cost of housing there is lower.

The cost of the food budget has a narrow range—less than $100—and, accordingly, does not account in any important degree for the relative position of the different cities. However, food costs at the upper end of the range helped to place Seattle and Boston in the highest cost group of cities. Food costs at the lower end of the range contributed to the relatively low position of Houston, Indianapolis, and Kansas City.

TABLE 2.—*Relative differences in the cost of goods, rents, and services in 34 cities, June 1947 and March 1946*

[Washington, D. C. = 100]

City	Total cost of goods and services		Foods		Clothing		Housing		Other	
	1947	1946	1947	1946	1947	1946	1947	1946	1947	1946
Atlanta, Ga.	92	91	100	100	90	91	82	81	92	93
Baltimore, Md.	95	94	101	101	90	94	89	88	95	95
Birmingham, Ala.	93	93	102	102	92	87	81	80	97	101
Boston, Mass.	96	96	102	105	91	89	85	84	102	104
Buffalo, N. Y.	90	89	100	102	94	90	73	71	95	95
Chicago, Ill.	95	94	101	102	98	94	91	91	91	90
Cincinnati, Ohio	91	91	96	98	96	95	79	79	94	94
Cleveland, Ohio	93	92	101	100	99	98	77	76	98	98
Denver, Colo.	92	92	100	100	94	95	79	78	96	96
Detroit, Mich.	96	95	102	102	96	94	82	81	103	105
Houston, Tex.	88	86	99	100	87	81	71	70	93	94
Indianapolis, Ind.	90	90	97	99	89	89	77	78	94	94
Jacksonville, Fla.	91	91	100	102	90	84	77	77	98	99
Kansas City, Mo.	88	88	98	100	89	89	70	71	94	97
Los Angeles, Calif.	94	92	101	102	92	87	75	75	106	107
Manchester, N. H.	91	91	102	103	89	92	77	76	94	96
Memphis, Tenn.	94	93	101	101	92	89	84	83	96	98
Milwaukee, Wis.	96	95	99	99	100	93	88	87	99	100
Minneapolis, Minn.	95	94	99	99	103	97	89	87	93	94
Mobile, Ala.	94	94	101	105	90	84	89	87	93	96
New Orleans, La.	88	88	102	104	92	89	65	65	93	95
New York, N. Y.	97	95	105	105	102	97	90	91	90	86
Norfolk, Va.	94	94	101	102	94	93	81	81	99	102
Philadelphia, Pa.	92	90	102	103	94	92	79	77	93	90
Pittsburgh, Pa.	96	93	102	101	98	94	82	82	100	97
Portland, Maine	93	92	103	104	90	91	82	80	95	95
Portland, Oreg.	92	93	98	101	90	94	77	75	100	104
Richmond, Va.	93	94	98	100	90	87	89	89	94	96
St. Louis, Mo.	94	95	100	101	91	90	88	88	96	99
San Francisco, Calif.	95	95	102	103	97	93	78	79	105	106
Savannah, Ga.	92	92	102	102	85	87	83	83	93	94
Scranton, Pa.	92	89	101	101	98	88	76	75	95	94
Seattle, Wash.	98	98	105	106	99	99	84	81	105	108
Washington, D. C.	100	100	100	100	100	100	100	100	100	100

Clothing costs do not vary greatly among cities except where climate is a factor. The range in clothing costs amounted only to $78 in March 1946 and to $85 in June 1947. Climatic differences in part explain the position of Minneapolis toward the upper end of the range and the low position of Jacksonville, the "coldest" and the "warmest" cities among the 34.

The cities of the far West—Seattle, Portland, San Francisco, and Los Angeles—ranked relatively high with respect to the cost of medical care, but the position of other cities does not appear to be related to location. New York, Chicago, and Philadelphia had lower budget costs for transportation than other cities because public transportation is used to a very great extent there and the percentage of families allowed automobiles

in the budget was determined to be lower. Miscellaneous goods and services cost the most in Seattle, San Francisco, and Detroit in March 1946, and in Milwaukee, Detroit, and Chicago in June 1947.

This and other studies of family budgets show that the relative position of a city in the cost scale does not remain fixed indefinitely. For example, before the war the cities of the Pacific Northwest were among the lower-cost cities in the United States. The rapid rise in living costs accompanying the great wartime growth of those cities brought them into the higher-cost brackets. Moreover, dollar differences in living costs between cities have narrowed greatly with increased efficiency of transportation and communications. During World War II, retail prices of living essentials went up most in southern cities and in west coast cities, where war activity was great, as shown by the consumers' price index, thus further narrowing the differential. Consequently, it is almost impossible to say of costs, except for housing, which remains comparatively stable over longer periods of time, that city A is in any permanent sense a "cheaper" place to live than city B.

Further, it is clear that the variation within a region may be as great as among all the cities in the country, and that it is impossible to come to any conclusion concerning relative differences in living costs, either by region or by size of city. Table 3 shows the number of cities in each population group by regions in the United States and the number of cities for which city worker's family budgets have been prepared, together with the differences of costs of this budget for cities in each region. It will be observed that there is very little difference between the costs by regions. In fact, the East South Central and South Atlantic cities show the greatest difference—$268. This is due to the location in this region of Washington, D. C., the highest cost city and, Jacksonville, one of the cities in the lower-cost range. It also has five cities—Birmingham, Memphis, Norfolk, Richmond, and Mobile—all with totals approximating $2,900 in the medium-cost range. Atlanta and Savannah, the 2 remaining cities of the 10, are only $10 and $12, respectively, above Jacksonville. There is a smaller difference, $200, between the highest- and lowest-cost cities in the western region, where Seattle is highest and Portland, Oreg., lowest; Denver is only $16 above Portland. Los Angeles and San Francisco, only $54 apart, are in the middle of the range of these western cities.

When arranged by size of their population, the 34 cities in June 1947 also showed substantial differences among cities of the same size. There is a difference, for instance, of $301 between the highest and lowest of all the cities with over 500,000 population. Again, Washington, D. C., is highest and Buffalo is lowest. The difference is larger, $320, in the cities in the 100,000–500,000 population group (the survey included a sample of 16 of the 78 cities in this size class), with Seattle the highest and New Orleans the lowest. The 4 cities in the 50,000–100,000 population group are not representative of this size class which includes 107 cities. The difference of $88 here represents the difference between Manchester and Mobile.

TABLE 3.—*The 34 city sample in relation to all cities in the United States of 50,000 or more population, by regions and population groups, and intercity differences in total cost of goods and services, June 1947*

Item	Number of cities by population group								Dollar differences in total goods and services in cities by regions
	All cities		500,000 and over		100,000–500,000		50,000–100,000		
	Total	Sample	Total	Sample	Total	Sample	Total	Sample	
All cities	199	34	14	14	78	16	107	4	$377
North Atlantic	67	8	5	5	25	1	37	2	209
East North Central	41	6	4	4	14	2	23	0	198
West Central	33	5	1	1	15	4	17	0	231
East South Central and South Atlantic	37	10	2	2	14	6	21	2	268
West	21	5	2	2	10	3	9	0	200
Dollar differences in total goods and services in cities by population groups		$377		$301		$320		$88	

Composition of the Budget

The relative cost of different elements in the budget can be best illustrated by the analysis of the figures for a single city. For this purpose the city of Birmingham has been chosen, because its costs are in the middle of the range of the 34 cities. In June 1947, the total budget for goods and services made up about 89 percent of the estimated total cost; taxes, insurance, contributions, etc., accounted for about 11 percent.

Within the budget for goods and services alone, food costs at June 1947 price levels took a little over 36 percent of the total. In March 1946, before the rapid rise in food costs, the proportion spent for food was closer to one-third, as shown in the second column of table 4.

TABLE 4.—*Distribution of the cost of the city worker's family budget in Birmingham, March 1946 and June 1947*

Item	March 1946		June 1947	
	Amount	Percent of total	Amount	Percent of total
Food	$824	32.7	$1,057	36.4
Housing	671	26.6	702	24.2
Clothing	357	14.2	425	14.6
Medical care	155	6.1	161	5.5
Transportation	248	9.8	261	9.0
Other goods and services	266	10.6	298	10.3
Total goods and services	2,521	100.0	2,904	100.0

Housing costs took another 24 percent, including housefurnishings, fuel, and light, in addition to rent. Clothing for the family required about 15 percent of the total, medical care, 5½ percent, transportation, 9 percent, and other goods and services, 10 percent. The only major change from March 1946 to June 1947 was the rise in the proportionate expenditure for food and the reductions in the proportionate expenditures for housing (since neither rents nor utility rates rose appreciably during this period) and for transportation.

Food.—The largest single item in the family budget is the cost of food. In the 34 cities as a group it ranged in June 1947 from about $1,000 in Cincinnati to a little under $1,100 in New York and Seattle, that is, a total of approximately $20 a week, or 23 to 24 cents a meal. This represented a substantial increase from March 1946, when the totals were $850 in New York, $854 in Seattle, and $792 in Cincinnati, or about $15 a week, or 18 cents a meal.

Food costs in the 34 cities are shown in table 5 in descending order of their costs [12] in June 1947.

TABLE 5.—*City worker's family food costs in 34 large cities*

City	June 1947	March 1946
New York, N. Y.	$1,095	$850
Seattle, Wash.	1,094	854
Portland, Maine	1,068	836
Boston, Mass.	1,064	844
Pittsburgh, Pa.	1,063	818
Philadelphia, Pa.	1,063	828
Manchester, N. H.	1,063	832
Detroit, Mich.	1,060	821
New Orleans, La.	1,058	836
Birmingham, Ala.	1,057	824
San Francisco, Calif.	1,057	830
Savannah, Ga.	1,056	826
Chicago, Ill.	1,055	820
Memphis, Tenn.	1,054	815
Scranton, Pa.	1,052	817
Baltimore, Md.	1,050	815
Los Angeles, Calif.	1,050	822
Norfolk, Va.	1,048	823
Mobile, Ala.	1,047	847
Cleveland, Ohio	1,046	810
Atlanta, Ga.	1,044	811
Buffalo, N. Y.	1,042	822
Denver, Colo.	1,040	811
Washington, D. C.	1,040	807
St. Louis, Mo.	1,036	814
Jacksonville, Fla.	1,035	820
Milwaukee, Wis.	1,029	800
Minneapolis, Minn.	1,026	799
Houston, Tex.	1,025	804
Kansas City, Mo.	1,021	803
Portland, Oreg.	1,020	819
Richmond, Va.	1,019	805
Indianapolis, Ind.	1,010	797
Cincinnati, Ohio	1,000	792

Housing. The cost of housing, which in this budget is measured by *rented* houses or apartments of 5 rooms, ranged in June 1947 from $446 in New Orleans to $756 in Washington, D. C., for the contract rent of the home, including heat and utilities. Housefurnishings added approximately $80 and household operations $30 in all the cities. Thus, the total varied from a little under $600 to about $870 in June 1947, or from $47 to $72 a month. In March 1946, the cost was only slightly lower, about $46 to $70 a month. Since June 1947, with the amendment of the Rent Control Act, rents have risen further.

Clothing. The clothing for the city worker's family of four ranged from a little under $400 to about $475 in June 1947. Clothing is the major group, in addition to housing, that reflects differences in costs due to climate. Clothing costs are therefore lowest in the warmer cities and highest in the colder cities. The difference is shown between Jacksonville, where the clothing cost in

[12] Break-downs by food groups will be available in subsequent detailed publications by the Bureau.

June 1947 was $415 a year, and Minneapolis, where it was $477.

Clothing costs are shown in this report for each of the four members of the family, not separately by items purchased. The largest clothing cost is for the husband, which ranges from $128 in Portland, Maine, to $159 in New York City. The next largest is for the wife, ranging from $111 in Savannah to $139 in Minneapolis. There is a tendency for the son's clothing costs ($80–$92) to be slightly higher than that of the daughter ($66–$91), but the differences from city to city are relatively unimportant. Differences in clothing costs are probably due, in the main, to chance factors in pricing, which are affected by style, qualities, and supplies of merchandise.

Transportation. The average cost of transportation of all kinds varied from $170 to $280 among the 34 cities in March 1946, and from $183 to $290 in June 1947. It was $258 in June 1947, for instance, in Manchester, Minneapolis, Portland (Oreg.), San Francisco, and Scranton.

Transportation covers both local transportation and travel outside of the city. It provides for travel to work, to schools, to shops, to recreation centers, and to churches; for infrequent trips "home" to visit parents and other relatives; and the travel necessary to a change of residence from one city to another for a small proportion of these families. Transportation as a group in the family budget has increased substantially in importance during the past two decades as cities have expanded and the mobility of the population has increased.

In all but the three largest cities—New York, Chicago, and Philadelphia—the budget specifies an automobile for about 7 out of 10 families. Typically, the cars owned by families at the budget level are about 8 years old and cost about $350 (after trade-in allowances) in 1941. At that time, cheap second-hand automobiles were available. This budget does not allow for the replacement of automobiles at the current high prices. It makes an allowance of only $107 a year toward the purchase of a car. If inexpensive second-hand cars do not return to the market as current inventories are scrapped, the budget pattern will necessarily be changed in the coming period toward a lower percentage of automobile owners, with related changes in all the other segments of the budget.

Medical Care. The budget allowance for medical care ranged from $127 to $202 in the 34 cities in March 1946 and from $132 to $222 in June 1947. The medical care budget, which accounts for 5 to 7 percent of the total cost of goods and services, is in the nature of insurance or even of savings for families who have good health. In any one year the majority of families do not require medical care costing as much as the budget allowance, while a few families find it necessary to spend considerably more than the annual allowance. In certain cities, particularly Birmingham and Seattle, families participating in insurance plans can finance a comprehensive medical service at a somewhat lower cost than is here specified. In other cities the insurance plans for medical service do not yet cover the essential services comprehensively enough to permit a significantly lower annual allowance for total medical service.

In Birmingham, for instance, the cost of medical care was $161 in June 1947. Of this total, $122 (about 75 percent) is for medical and dental services, $21 (or 13 percent) for hospital services, and $18 for medicines and eyeglasses. Approximately, these proportions hold for all 34 cities.

The largest budget allowance for medical care is for the wife, who gets almost uniformly in all cities about two-fifths of the total. The other three members of the family divide the remaining three-fifths almost equally, although there is a slight tendency for the husband's costs to be largest of the three, the daughter's next and the son's the smallest.

Other Goods and Services. All other goods and services, accounting for approximately one-tenth of the budget for goods and services, ranged from $235 to $285 in March 1946 and from $278 to $330 in June 1947. This group includes reading and recreation, which cost $52 to $84 in March 1946 and $63 to $95 in June 1947. It also includes personal care—for barber and beauty shop services, cosmetics, etc.—which varied in a narrow range among all the cities from $51 to $68 in June 1947. Tobacco amounted to less than $40, and gifts $70 to $80. There is a considerable variation in school expense because of the difference in the

extent to which books and supplies are furnished by the school at public expense. The allowance for gifts represents contributions to church and charity and the exchange of customary presents at a modest level.

Costs for Families of Different Sizes

Budget totals are presented in detail in this report only for families of four persons. A method for estimating costs for families of other sizes is presented in another article in this bulletin, page 49. In summary, however, the dollar costs of goods and services for a family of two persons is about 65 percent of the costs for a family of four; a family of three persons is about 84 percent of the costs for the four-person family; and for a family of five, about 115 percent of the total for a four-person family. For Kansas City, for instance, the estimated total cost of goods and services for June 1947 would be—

2-person family	$1,780
3-person family	2,290
4-person family—budget	2,739
5-person family	3,140

It should be emphasized that the cost of the budget measures the average situation in a given city, with respect to the maintenance of the specified level of living. In the experience of individual families the cost of maintaining this consumption level would vary several hundred dollars from the average within a year or over a period of years. Some families are in a position to purchase the budget level of living for substantially less than the average cost; others are compelled to spend considerably more than the average cost.

The major cause of differences in the cost to individual families is the location of their home and whether it is owned or rented. Among families who rent their homes, the cost of housing ranges widely—more than $200 above or below the average. Families that have recently moved into the city or that were forced to move from their rented homes during or since the war almost uniformly spend more than the average for housing of a specified standard, while those who have lived in the same homes over a period of years spend less.

The majority of families who own their homes have smaller current outlays for the same quality of housing than renters, except in some cases where homes have been bought in recent years. Here current costs often exceed the budget level. The outlays of home owners were not taken into account in the calculation of the budget, chiefly because the cost of renting the family home is a fairly representative figure for the families in large cities whose level of living corresponds with the budget level. In smaller communities where home ownership is almost the rule—and which were not covered by this study—the cost of housing in the budget would have to be determined from home owners' costs.

The pattern of family expenditures is also affected by the location of their home. It affects the choices among budget items and, consequently, the total cost of the budget. Families living in the suburbs spend less for housing than families living in the central part of the city and thereby manage to finance a part of the cost of an automobile. Those living in more costly dwellings, centrally located, have the advantage of convenient public transportation and do not use an automobile.

The location of the home also affects food costs. Even in the large cities there are sections where it is possible for families to have home gardens, to store home-canned products, or to use freezer lockers.

The cost of other items in the family budget depends mainly upon how skillfully the wife "shops." This is particularly true of food, where there are wide variations between prices for similar articles in various stores in different sections of the cities. Home dressmaking, which is still customary in many families, also affects the cost of the budget. Home production and home processing of foods, home sewing, and other similar economies in most cases represent a reduction in the total cost of the family budget, bringing it somewhat below the average, although they usually mean larger outlays in other segments of the budget.

TABLE 6.—*City worker's family budget—4 persons—34 large cities of the United States, March 1946 and June 1947*

Item	Atlanta		Baltimore		Birmingham		Boston		Buffalo		Chicago		Cincinnati	
	March 1946	June 1947	March 1946	June 1947	March 1946	June 1947	March 1946	June 1947	March 1946	June 1947	March 1946	June 1947	March 1946	June 1947
Food [1]	$811	$1,044	$815	$1,050	$824	$1,057	$844	$1,064	$822	$1,042	$820	$1,055	$792	$1,000
Food at home [2]	713	924	716	929	724	935	743	941	723	922	721	933	696	884
Housing [3]	678	713	740	773	671	702	702	738	599	633	762	787	664	686
Rent, heat, and utilities [4]	586	597	646	660	576	589	606	624	505	522	664	671	566	573
Housefurnishings [5]	71	85	72	81	73	81	75	81	73	80	76	85	76	82
Household operation [6]	21	31	22	32	22	32	21	33	21	31	22	31	22	31
Clothing [7]	371	414	384	415	357	425	363	420	368	434	386	451	387	444
Husband	118	135	121	131	111	140	114	132	111	133	125	149	123	141
Wife	107	117	115	125	107	120	110	121	116	135	112	133	116	128
Boy	78	82	77	80	78	88	73	84	74	82	76	87	76	83
Girl	68	80	71	79	61	77	66	83	67	84	73	82	72	92
Medical care	142	153	140	162	155	161	146	165	132	143	134	149	127	142
Medical and dental services	108	119	98	119	117	122	99	116	94	104	92	105	90	103
Husband	24	26	22	27	26	26	22	26	20	22	20	23	19	22
Wife	42	47	39	47	46	48	39	45	37	41	37	42	36	42
Boy	20	22	18	22	22	23	19	22	18	20	17	19	17	19
Girl	22	24	19	23	23	25	19	23	19	21	18	21	18	20
Hospital services [8]	16	16	24	24	21	21	30	30	20	20	24	24	20	20
Supplies and eyeglasses	18	18	18	19	17	18	17	19	18	19	18	20	17	19
Transportation [9]	234	248	251	266	248	261	280	290	246	266	184	199	232	247
Automobile owners [10]	289	307	304	322	310	327	341	354	300	327	308	335	282	301
Nonowners of automobiles	77	78	102	104	73	73	107	109	91	92	101	108	90	92
Other goods and services	239	281	235	278	266	298	263	304	248	292	275	324	265	311
Reading and recreation [11]	55	69	52	66	53	63	69	83	64	77	76	93	72	84
Personal care [12]	45	56	44	55	51	57	48	56	48	62	51	63	49	66
Tobacco [13]	33	36	29	34	39	41	35	40	32	35	33	39	33	37
Public school expenses [14]	5	5	5	5	20	20	5	5	5	5	10	10	10	10
Gifts and contributions [15]	67	78	70	80	69	79	71	81	66	76	70	81	67	77
Miscellaneous [16]	34	37	35	38	34	38	35	39	33	37	35	38	34	37
Total cost of goods and services	2,475	2,853	2,565	2,944	2,521	2,904	2,598	2,981	2,415	2,810	2,561	2,965	2,467	2,830
Other outlays [17]	216	297	232	316	260	347	244	329	200	285	232	317	211	289
Taxes [18]	82	160	97	179	98	178	108	192	66	148	97	180	77	152
Estimated cost of the budget [19]	2,619	3,150	2,797	3,260	2,781	3,251	2,842	3,310	2,615	3,095	2,793	3,282	2,678	3,119

Item	Cleveland		Denver		Detroit		Houston		Indianapolis		Jacksonville		Kansas City	
	March 1946	June 1947	March 1946	June 1947	March 1946	June 1947	March 1946	June 1947	March 1946	June 1947	March 1946	June 1947	March 1946	June 1947
Food [1]	$810	$1,046	$811	$1,040	$821	$1,060	$804	$1,025	$797	$1,010	$820	$1,035	$803	$1,021
Food at home [2]	712	926	713	920	722	938	707	906	700	893	721	916	705	902
Housing [3]	635	667	659	683	679	707	591	620	652	671	648	668	598	610
Rent, heat, and utilities [4]	538	552	565	571	581	593	498	506	560	561	557	560	505	497
Housefurnishings [5]	74	83	71	79	76	83	72	83	71	79	70	77	71	80
Household operation [6]	23	32	23	33	22	31	21	31	21	31	21	31	22	33
Clothing [7]	402	459	389	434	385	445	331	403	366	413	344	415	364	410
Husband	123	142	120	143	113	139	108	135	117	140	114	140	113	133
Wife	123	134	116	128	117	135	96	113	108	116	98	122	109	117
Boy	78	87	77	83	81	90	73	86	73	84	74	87	73	81
Girl	78	96	76	80	74	81	54	69	68	73	58	66	69	79
Medical care	154	161	143	159	172	180	150	167	128	139	170	182	146	152
Medical and dental services	116	121	103	118	123	128	107	123	93	102	128	139	107	112
Husband	26	27	23	26	27	28	23	26	20	22	29	31	24	25
Wife	46	49	41	46	49	51	42	49	37	40	51	55	43	45
Boy	21	22	19	22	23	24	20	23	17	19	24	26	19	20
Girl	23	23	20	24	24	25	22	25	19	21	24	27	21	22
Hospital services [8]	20	20	22	22	31	32	25	25	18	18	24	24	21	21
Supplies and eyeglasses	18	20	18	19	18	20	18	19	17	19	18	19	18	19
Transportation [9]	235	254	230	256	240	256	228	241	228	254	239	262	236	253
Automobile owners [10]	248	308	280	315	288	310	282	299	282	310	301	321	286	309
Nonowners of automobiles	93	100	86	88	102	104	75	76	75	93	62	94	94	95
Other goods and services	259	310	262	298	281	326	241	279	269	303	245	281	258	293
Reading and recreation [11]	63	83	71	80	80	95	61	70	71	75	58	65	68	76
Personal care [12]	53	65	49	59	52	65	44	55	50	64	45	58	44	55
Tobacco [13]	31	35	30	33	29	31	35	38	29	31	36	39	33	36
Public school expenses [14]	10	10	10	10	15	15	5	5	20	20	5	5	15	15
Gifts and contributions [15]	68	79	68	78	70	81	64	75	66	76	67	77	65	75
Miscellaneous [16]	34	38	34	38	35	39	32	36	33	37	34	37	33	36
Total cost of goods and services	2,495	2,897	2,494	2,870	2,578	2,974	2,345	2,735	2,440	2,790	2,466	2,843	2,405	2,739
Other outlays [17]	217	303	217	298	235	319	187	272	227	308	211	292	198	271
Taxes [18]	83	166	83	160	100	182	54	135	93	170	77	155	64	134
Estimated cost of the budget [19]	2,712	3,200	2,711	3,168	2,813	3,293	2,532	3,007	2,667	3,098	2,677	3,135	2,603	3,010

See footnotes at end of table.

NOTE.—The total dollars necessary to provide family health, worker efficiency, nurture of children, and social participation by all members of the family.

TABLE 6.—*City worker's family budget—4 persons—34 large cities of the United States, March 1946 and June 1947*—Con.

Item	Los Angeles		Manchester		Memphis		Milwaukee		Minneapolis		Mobile		New Orleans	
	March 1946	June 1947	March 1946	June 1947	March 1946	June 1947	March 1946	June 1947	March 1946	June 1947	March 1946	June 1947	March 1946	June 1947
Food [1]	$822	$1,050	$832	$1,063	$815	$1,054	$800	$1,029	$799	$1,026	$847	$1,047	$836	$1,058
Food at home [2]	723	929	732	941	716	932	702	910	702	907	745	926	735	936
Housing [3]	626	651	637	668	699	727	734	766	731	772	730	771	549	563
Rent, heat, and utilities [4]	529	534	542	557	604	611	640	656	635	656	634	657	449	446
Housefurnishings [5]	75	85	74	78	74	85	73	80	75	83	74	84	77	84
Household operation [6]	22	32	21	33	21	31	21	30	21	33	22	30	23	33
Clothing [7]	356	427	377	411	362	423	382	460	396	477	343	416	365	424
Husband	116	144	118	129	118	142	117	143	119	152	105	135	124	139
Wife	104	122	113	119	108	126	114	135	125	139	107	118	104	119
Boy	76	86	74	81	75	86	77	91	76	89	74	85	80	91
Girl	60	75	72	82	61	69	74	91	76	97	57	78	57	75
Medical care	202	222	133	152	155	162	131	142	139	146	129	132	144	151
Medical and dental services	154	172	91	109	112	118	95	104	94	101	91	92	107	113
Husband	34	38	20	24	25	26	21	23	21	22	20	20	24	25
Wife	60	67	37	44	44	46	38	42	38	41	36	37	42	45
Boy	29	32	17	20	21	22	18	19	17	19	17	17	20	21
Girl	31	35	17	21	22	24	18	20	18	19	18	18	21	22
Hospital services [8]	29	29	24	24	26	26	18	19	27	26	20	21	19	19
Supplies and eyeglasses	19	21	18	19	17	18	18	19	18	19	18	19	18	19
Transportation [9]	233	247	245	258	236	251	247	261	239	258	243	256	240	253
Automobile owners [10]	281	298	305	322	293	313	301	320	294	320	303	321	298	314
Nonowners of automobiles	98	101	76	77	74	75	92	92	83	84	70	71	78	79
Other goods and services	273	313	257	285	257	295	281	330	246	286	265	303	247	285
Reading and recreation [11]	78	93	71	76	59	71	82	101	60	73	56	68	56	68
Personal care [12]	58	65	44	51	46	56	48	60	49	59	46	56	48	58
Tobacco [13]	30	33	35	38	34	36	31	34	28	30	39	41	40	43
Public school expenses [14]	5	5	5	5	15	15	15	15	5	5	20	20	5	5
Gifts and contributions [15]	68	79	68	78	69	79	70	81	69	81	70	80	65	75
Miscellaneous [16]	34	38	34	37	34	38	35	39	35	38	34	38	33	36
Total cost of goods and services	2,512	2,910	2,481	2,837	2,524	2,912	2,575	2,988	2,550	2,965	2,557	2,925	2,381	2,734
Other outlays [17]	254	341	219	295	226	308	236	329	229	317	269	351	192	270
Taxes [18]	92	175	85	158	91	171	101	192	94	180	105	182	59	133
Estimated cost of the budget [19]	2,766	3,251	2,700	3,132	2,750	3,220	2,811	3,317	2,779	3,282	2,826	3,276	2,573	3,004

Item	New York		Norfolk		Philadelphia		Pittsburgh		Portland, Maine		Portland, Oreg.		Richmond	
	March 1946	June 1947	March 1946	June 1947	March 1946	June 1947	March 1946	June 1947	March 1946	June 1947	March 1946	June 1947	March 1946	June 1947
Food [1]	$850	$1,095	$823	$1,048	$828	$1,063	$818	$1,063	$836	$1,068	$819	$1,020	$805	$1,019
Food at home [2]	748	969	724	927	728	941	719	941	735	945	720	902	708	901
Housing [3]	764	783	684	703	644	683	689	716	676	708	631	672	746	772
Rent, heat, and utilities [4]	662	664	592	592	549	569	594	607	579	594	527	547	656	661
Housefurnishings [5]	79	86	71	80	74	83	74	78	75	81	74	84	70	80
Household operation [6]	23	33	21	31	21	31	21	31	22	33	30	41	20	31
Clothing [7]	397	473	381	433	376	432	384	453	372	416	384	417	357	416
Husband	133	159	122	138	120	138	121	148	112	128	126	144	116	143
Wife	119	138	113	128	110	125	118	138	113	129	115	125	105	117
Boy	75	90	75	89	77	87	77	87	72	78	80	77	77	85
Girl	70	86	71	78	69	82	68	80	75	81	63	71	59	71
Medical care	143	165	152	156	145	166	133	157	130	134	173	178	138	145
Medical and dental services	110	130	108	111	103	123	97	120	98	101	125	129	96	101
Husband	24	28	24	25	23	28	22	27	22	22	27	27	21	22
Wife	44	52	43	44	41	50	39	48	39	40	49	51	38	40
Boy	20	24	20	21	19	22	18	22	18	19	24	25	18	19
Girl	22	26	21	21	20	23	18	23	19	20	25	26	19	20
Hospital services [8]	16	16	26	26	24	24	18	18	15	15	29	29	25	25
Supplies and eyeglasses	17	19	18	19	18	19	18	19	17	18	19	20	17	19
Transportation [9]	170	183	271	286	184	207	242	265	244	267	244	258	251	266
Automobile owners [10]	323	351	322	347	307	338	295	326	296	326	299	317	311	331
Nonowners of automobiles	68	70	124	125	102	119	71	93	99	100	88	90	79	80
Other goods and services	259	320	252	293	265	316	269	319	253	301	270	309	245	286
Reading and recreation [11]	68	99	60	76	77	93	70	88	63	84	72	82	68	72
Personal care [12]	48	59	48	57	47	59	54	62	44	55	60	65	45	55
Tobacco [13]	33	36	30	32	32	38	32	39	33	35	30	32	29	32
Public school expenses [14]	5	5	10	10	10	10	10	10	10	10	15	15	10	10
Gifts and contributions [15]	70	82	70	80	66	78	69	81	69	79	69	78	69	79
Miscellaneous [16]	35	39	34	38	33	38	34	39	34	38	34	37	34	38
Total cost of goods and services	2,583	3,019	2,563	2,919	2,442	2,867	2,535	2,973	2,511	2,894	2,521	2,854	2,542	2,904
Other outlays [17]	237	328	241	322	239	336	226	318	224	306	227	307	234	319
Taxes [18]	101	191	105	185	104	198	91	181	90	169	93	171	101	181
Estimated cost of the budget [19]	2,820	3,347	2,804	3,241	2,681	3,203	2,761	3,291	2,735	3,200	2,748	3,161	2,776	3,223

See footnotes at end of table.

NOTE.—The total dollars necessary to provide family health, worker efficiency, nurture of children, and social participation by all members of the family.

TABLE 6.—*City worker's family budget—4 persons—34 large cities of the United States, March 1946 and June 1947*—Con.

Item	St. Louis		San Francisco		Savannah		Scranton		Seattle		Washington, D. C.	
	March 1946	June 1947	March 1946	June 1947	March 1946	June 1947	March 1946	June 1947	March 1946	June 1947	March 1946	June 1947
Food [1]	$814	$1,036	$830	$1,057	$826	$1,056	$817	$1,052	$854	$1,094	$807	$1,040
Food at home [2]	716	916	730	936	727	935	718	931	752	969	710	919
Housing [3]	742	762	665	678	697	720	628	659	683	725	840	868
Rent, heat, and utilities [4]	649	654	558	557	602	607	535	551	585	610	746	756
Housefurnishings [5]	71	77	79	83	74	81	72	78	75	83	72	80
Household operation [6]	22	31	28	38	21	32	21	30	23	32	22	32
Clothing [7]	369	420	382	449	355	392	358	453	404	459	409	462
Husband	116	136	128	149	115	132	108	138	126	148	125	149
Wife	110	128	112	135	107	111	110	132	130	136	127	134
Boy	74	84	75	87	76	80	73	92	79	90	83	89
Girl	69	72	67	78	57	69	67	91	69	85	74	90
Medical care	148	149	186	205	157	164	135	155	191	196	173	184
Medical and dental services	106	106	134	151	115	120	101	119	143	147	130	139
Husband	23	23	29	33	26	27	22	26	32	33	30	31
Wife	42	42	52	59	46	48	40	47	57	58	52	57
Boy	20	20	26	29	21	22	19	22	26	27	23	25
Girl	21	21	27	30	22	23	20	24	28	29	25	26
Hospital services [8]	24	24	33	33	24	25	17	17	29	29	25	26
Supplies and eyeglasses	18	19	19	21	18	19	17	19	19	20	18	19
Transportation [9]	235	254	237	258	227	243	238	258	243	260	227	250
Automobile owners [10]	285	311	286	310	283	304	290	317	297	321	276	302
Nonowners of automobiles	90	91	95	111	69	70	87	89	87	88	88	103
Other goods and services	272	307	282	317	240	280	246	289	285	320	262	307
Reading and recreation [11]	76	81	84	94	57	70	59	71	76	85	65	79
Personal care [12]	48	62	57	66	44	54	45	54	60	69	53	67
Tobacco [13]	33	36	31	33	32	36	33	39	36	39	29	31
Public school expenses [14]	10	10	5	5	5	5	10	10	5	5	5	5
Gifts and contributions [15]	70	80	70	81	68	78	66	78	72	83	74	85
Miscellaneous [16]	35	38	35	38	34	37	33	37	36	39	36	40
Total cost of goods and services	2,580	2,928	2,582	2,964	2,502	2,855	2,422	2,866	2,660	3,054	2,718	3,111
Other outlays [17]	245	319	271	353	219	295	201	297	253	334	267	347
Taxes [18]	109	182	107	186	84	157	68	160	117	198	129	210
Estimated cost of the budget [19]	2,825	3,247	2,853	3,317	2,721	3,150	2,623	3,163	2,913	3,388	2,985	3,458

[1] Includes meals and between-meal food and beverages purchased and consumed away from home.

[2] Food and beverages purchased for meals prepared at home, including lunches that are carried to work or to school.

[3] Rent, heating fuel, utilities, housefurnishings, and household supplies.

[4] Average rent paid in each city for tenant-occupied dwellings that conform to the housing standards specified for the budget plus the cost of required amounts of heating fuel, gas, electricity, and water, and refrigerator. Variations in local practices with respect to the inclusion of these items in monthly rental quotations are taken into account in computing net costs. Differences in requirements of heating fuel in relation to climate are also taken into account in calculating costs for this item.

[5] Furniture; equipment and appliances such as washing machine, electric iron, toaster, and fan; housewares such as dishes, cooking utensils, brooms, and mops; textile housefurnishings.

[6] Soaps and other supplies for house cleaning and laundry, matches, household paper supplies, charges for refuse disposal, etc.

[7] Includes shoe repairs, dry cleaning, and supplies for home cleaning and mending. Differences in requirements of heavy and light clothing due to climate are taken into account in the computation of clothing costs in each city.

[8] Cost of hospital service represents family membership in group hospitalization plan in cities where such plans exist and do not exclude any sizable proportion of the population. In other cities cost of hospital services represents costs of families not members of group hospitalization plans.

[9] Average costs of automobile owners and nonowners weighted by the following proportions of families: for cities with population over 1,900,000, 40 percent for automobile owners, 60 percent for nonowners; for cities with population of 50,000 to 1,900,000, 74 percent and 26 percent, respectively.

[10] Includes average annual allowance for automobile purchase.

[11] Newspapers, magazines, radio, movies, toys, games, pets, dues to civic and social clubs.

[12] Barber and beauty shop services, toilet soap, dentifrices, shaving supplies, cosmetics, etc.

[13] Cigarettes, cigars, pipe tobacco.

[14] Textbooks and other supplies not furnished by the public schools, and average outlay for school games and entertainment.

[15] Christmas and birthday presents to persons outside the family, contributions and community welfare.

[16] Lodging away from home, music and dancing lessons for the children, legal service, and other items. In the 34 cities, $10 of the cost of miscellaneous items represents costs of communication (telephone calls, stamps, and stationery supplies).

[17] Taxes, life insurance, employment insurance and occupational expenses such as dues to unions, business or professional associations, and special clothing and equipment required for the occupation.

[18] Personal taxes, such as poll taxes and other capitation taxes; Federal, State, and local income taxes.

[19] This grand total is called "Estimated Cost of the Budget" because insurance and occupational expenses have been estimated from national averages; taxes have been estimated after adding these costs to the Total Cost of Goods and Services, on the basis of local and national requirements. For an explanation of these estimates, see p. 16.

NOTE.—The total dollars necessary to provide family health, worker efficiency, nurture of children, and social participation by all members of the family.

Appendix.—Budget Quantities

Food Budget

FOOD AT HOME (80.4 meals per week, 4,179 meals per year)

Group	Subgroup [1] and item	Unit	Quantity per year
Baked goods and cereal products.	Bread	Pound	289. 0
	Crackers, other baked goods	do	115. 3
	Flour	do	186. 3
	Uncooked cereals, etc	do	116. 0
	Ready-to-eat cereals	do	37. 6
Milk, cream, and cheese	Fluid milk	Quart	594. 9
	Canned milk	Pound	67. 0
	Cream	Pint	8. 2
	Ice cream	Quart	15. 1
	Cheese	Pound	27. 0
Fats and oils	Butter, margarine	do	79. 0
	Peanut butter	do	14. 7
	Lard, vegetable shortening	do	58. 8
	Table, cooking oil	Pint	3. 8
	Mayonnaise, other salad dressings	do	20. 8
Meat, poultry, and fish	Stews, hamburger, frankfurters, fish, etc	Pound	272. 7
	Roasts, round steak, pork chops, etc	do	116. 9
	Steak, chops, rib roast, poultry, etc	do	33. 0
	Bacon, salt pork	do	40. 9
Eggs	Eggs	Dozen	85. 2
Vegetables: Fresh	Potatoes, sweetpotatoes	Pound	391. 0
	Lettuce, asparagus, peas, etc	do	73. 4
	Cabbage, snapbeans, carrots, etc	do	175. 9
	Celery, cauliflower, corn, etc	do	82. 4
	Onions, beets, etc	do	89. 9
	Tomatoes	do	60. 8
Canned	Peas, spinach, etc	do	78. 2
	Corn, beets, etc	do	81. 7
	Tomatoes, tomato products	do	47. 6
Dried	Beans, peas, etc	do	30. 4
Fruits: Fresh	Citrus fruit	do	238. 4
	Apples, berries, bananas, etc	do	400. 2
Canned	Grapefruit, citrus juices	do	14. 3
	Peaches, apple products, etc	do	84. 6
Dried	Prunes, raisins, etc	do	39. 1
Sugar, sweets, and desserts	Sugar [2]	do	181. 7
	Molasses, sirups, jellies, candy	do	39. 4
	Packaged desserts	do	2. 7
	Nuts	do	7. 5
Chocolate	Chocolate and cocoa	do	3. 6
Beverages	Coffee	do	36. 2
	Tea	do	3. 7
	Malted milk beverage mixtures	do	2. 8
	Other beverages (1947 dollar allocation)		$29. 25
Condiments	Condiments (1947 dollar allocation)		$2. 98

FOOD AWAY FROM HOME (3.6 meals per week, 189 meals per year)

Meals	Lunches at work	Meal	103
	Lunches at school	Meal	74
	Other meals	Meal	12
Other	Ice cream cones, sodas, sundaes, candy (1947 dollar allocation).		$9. 60
	Soft drinks, beer (1947 dollar allocation)		$12. 55

[1] For additional items included in subgroups see explanatory notes on p. 32.

[2] Since the quantity of sugar shown in the above table exceeded the 1946 ration of 5 pounds per person every 4 months, it was assumed for pricing the budget for the spring of 1946 that the sugar that could not be purchased was obtained in the form of sirup, jellies, candies, etc

Explanatory Notes:

FOOD AT HOME. Additional foods included in specified subgroups are shown below:

Major group	*Subgroup*	*Additional foods included*
Baked goods and cereal products.	Uncooked cereals, etc	Cornmeal, hominy, rice, rolled oats, wheat cereal, tapioca, sago, spaghetti, noodles, macaroni, cornstarch.
Meat, poultry, and fish	Stews, hamburger, frankfurters, fish, etc.	*Beef*, boiling, corned, canned, chuck roast; *Veal*, stew; *Lamb*, stew, roasts other than leg; *Pork*, fresh, except chops and loin roast; *Liver; Bologna.*
	Roasts, round steak, pork chops, etc.	*Beef*, roasts except rib and chuck, dried; *Veal*, roast; *Lamb*, leg; *Pork*, loin roast, smoked ham (whole, half), sausage; *Poultry*, chicken, stewing; *Canned, Cooked meats; Game.*
	Steaks, chops, rib-roast, poultry, etc.	*Beef*, porterhouse, sirloin steak; *Veal*, steak, chops; *Lamb*, chops; *Pork*, cooked ham, smoked ham slices; *Chickens*, roasting, broiling; *Turkey; Other poultry.*
Vegetables: Fresh	Lettuce, asparagus, peas, etc	Brussel sprouts, lima beans, peppers.
	Cabbage, snapbeans, carrots, etc.	Spinach, winter squash, pumpkin, broccoli, okra, kale, collards.
	Celery, cauliflower, corn, etc	Spring onions, eggplant, cucumbers.
	Onions, beets, etc.	Winter onions, parsnips, summer squash, turnips, rutabagas.
Canned	Peas, spinach, etc	Asparagus, lima beans, snapbeans.
	Corn, beets, etc	Mushrooms, sauerkraut, soup (except tomato), pickles, olives.
	Tomatoes, tomato products	Tomato juice, puree, soup, paste, chili sauce, catsup.
Dried	Beans, peas, etc	Lentils, dry corn, baked beans.
Fruits: Fresh	Apples, berries, bananas, etc	Apricots, cherries, grapes, peaches, pears, pineapples, plums, melons.
Canned	Peaches, apple products, etc	Same fruits as in preceding group and also other canned fruits, cider, grape juice, noncitrus fruit juices.
Dried	Prunes, raisins, etc	Peaches, apricots, dates, figs, currants.

FOOD AWAY FROM HOME. The budget allows 21 meals per person per week or 4,368 meals per year for the family. The quantities of food presented in the above table provide 4,179 meals to be eaten at home or 80.4 meals per week for the family. The budget includes the other 189 meals as meals eaten away from home.

Rent, Fuel, and Utilities Budget

Group	Item	Unit	Quantity per year
Rent of dwelling [1] [2]	Containing specified number of rooms and installed equipment (See description of housing standards adopted for the budget).	Month	12
Water	Water	Cubic foot	9,600
Electricity [1] [2] [3]	For lighting, refrigeration, and electrical appliances	Kilowatt-hour	1,200
Gas [1]	For cooking and hot water heating	Therm	235
Heating fuel [1] [4]	Requirements average 4,565 degree days for 34 cities but vary from city to city	B. t. u.'s	77

[1] Requirements specified for fuel and utilities do not apply when the cost of these items is included in the monthly rent figure.

[2] If mechanical refrigerator is not furnished in rented dwelling the amortized cost, equivalent to 6 percent of the purchase price, is a required addition to the annual cost of rent. It is assumed that a cook stove is normally furnished with the dwelling. If not, an amount equal to 6 percent of the purchase price must be added to the annual rent.

[3] In some cities electricity is the predominant type of fuel used for cooking and hot water heating. In these cities 3,360 kilowatt-hours should be substituted for 235 therms of gas.

[4] Heating fuel requirements vary in relation to the length and severity of the cold season, type of structure, and type of heating equipment. The variation caused by climate is measured in standard British thermal units (convertible to equivalent quantities of coal, fuel oil, etc.) and the normal number of annual degree days in a given city, as published by the U. S. Weather Bureau. The average number of B. t. u.'s required in a given city may be computed as follows:

Million of B. t. u.'s = −384.323 + 128.156 times the logarithm of the normal number of annual degree days.

For example, for Minneapolis the calculation gives 115.8 million B. t. u.'s; for Houston it gives 15.7 million B. t. u.'s.

The quantity of the most common type of heating fuel used in a given city can be determined by converting the required number of B. t. u.'s into the quantities of the type of fuel used.

Housefurnishings Budget

The quantities in this list are shown in two forms for convenience of interpretation.

Group	Item	Quantity per family	Per year per 1,000 families
Furniture:			
Living room	Upholstered davenport, chair (set)	0.058	58
	Upholstered davenport	.039	39
	Chair, upholstered seat	.068	68
	Chair, other	.077	77
	Table, occasional	.116	116
	Desk	.029	29
	Bookcase	.019	19
Bedroom	Bed, chest, dresser (set)	.048	48
	Chest	.048	48
	Bed	.106	106
	Bedspring	.150	150
	Cot	.048	48
Dining room and kitchen	Dinette set	.020	20
	Kitchen table	.048	48
	Kitchen cabinet	.019	19
	Kitchen chair	.309	309
Other	Porch furniture, other unspecified items	[1]	[1]
Equipment, appliances, tableware and housewares:			
Electrical equipment and appliances.	Cook stove	[2].06	60
	Refrigerator	[2].06	60
	Washing machine	.07	70
	Ironing machine	.01	10
	Sewing machine	.01	10
	Vacuum cleaner	.06	60
	Lamp	.20	200
	Fan	.03	30
	Toaster	.04	40
	Iron	.09	90
	Waffle iron	.03	30
Tableware and housewares	Dishes, dinner set	.15	150
	Water glasses	6.00	6,000
	Pressure cooker	.01	10
	Pots, pans	.79	790
	Garbage pail	.50	500
	Carpet sweeper	.03	30
	Broom	1.40	1,400
	Floor mop	.40	400
	Ironing board	.10	100
	Clothespins, box of 2 dozen	1.00	1,000
	Clock	.13	130
	Electric light bulbs	8.00	8,000
	Flat silver, kitchen utensils, insurance on furnishings, other unspecified items.	[3]	[3]
Textile housefurnishings:			
Rugs	Axminster, 9′ x 12′	.06	60
	Wool, scatter, 27″ x 45″	.25	250
	Cotton, scatter, 24″ x 48″	.50	500
Blankets	Wool, 50 percent or more	.24	240
	Wool, less than 50 percent	.15	150
	Cotton	.20	200
Other bedding	Sheets	2.16	2,160
	Pillowcases	1.98	1,980
	Pillow	.03	30
	Bedspread	.29	290
	Mattress	.21	210
	Mattress pad	.20	200
Bathroom linen	Bath towel	3.17	3,170
	Hand towel	1.29	1,290
	Face cloth	2.00	2,000

[1] Porch furniture and other unspecified items: Cost of this group of items is 9 percent of annual allowance for the itemized furniture items.
[2] Included in rent if furnished by landlord. See footnote 2, p. 32.
[3] Flat silver, kitchen utensils, etc.: Cost of this group of items is 15 percent of annual allowance for the itemized equipment, appliances, tableware and housewares.
[4] Slip covers, yard goods, etc.: Cost of this group of items is 9 percent of annual allowance for the itemized textile housefurnishings.

Housefurnishings Budget—Continued

Group	Item	Quantity per family	Per year per 1,000 families
Textile housefurnishings—Con.			
Dining room and kitchen linen	Luncheon set (cloth, napkins)	0. 64	640
	Kitchen towel	1. 58	1, 580
	Dish cloth	1. 00	1, 000
	Pot holder	2. 00	2, 000
Window curtains	Pair	1. 66	1, 660
Other	Slip covers, yard goods, other unspecified furnishings	(4)	(4)

See footnotes on preceding page.

Household Operation Budget

Group	Item	Unit	Quantity per year
Laundry supplies	Laundry soap, bar	Bar	72. 7
	Laundry soap, flakes, powder	24-ounce package	30. 5
	Laundry starch	Pound	8. 3
	Bluing	Box	4. 9
Cleaning supplies	Scouring powder	Can	26. 3
	Scouring balls, copper	Ball	3. 4
	Polish, furniture	14-ounce bottle	. 7
	Ammonia, household	Quart	1. 5
	Moth preventative	Cake	2. 6
Household paper	Toilet paper	Roll—650 sheets	51. 0
	Wax paper	Roll—125 feet	3. 7
	Shelf lining	Roll	. 4
	Napkins	Package of 80	4. 1
Matches	Matches	Box	37. 5
Other	Refuse disposal. (Depends on city.)		

Clothing Budget

Group and item	Quantity per year		Group and item	Quantity per year	
	Husband	Boy		Husband	Boy
Hats:			Trousers, slacks, overalls—Continued		
Felt	0. 76	0. 29	Cotton, work (boys', corduroy)	0. 30	0. 51
Straw	. 16	. 02	Rayon	. 03	------
Cap, wool	. 34	. 30	Overalls	. 50	------
Cap, cotton		. 08	Coveralls	. 33	------
Coats:			Shirts:		
Overcoat	. 15	. 18	Cotton, work (boys', polo)	2. 21	1. 00
Topcoat	. 10	. 03	Cotton, other	2. 69	2. 68
Raincoat	. 08	. 08	Rayon and cotton	. 12	------
Sweaters, jackets:			Wool	. 10	------
Sweater, wool	. 35	. 83	Sportswear:		
Jacket, wool	. 19	. 24	Slack suit	. 29	. 54
Jacket, leather	. 06	. 06	Shorts	. 05	. 16
Jacket, cotton	. 04	. 10	Bathing suit or trunks	. 13	. 35
Suits:			Underwear:		
Wool, heavy weight	. 44	. 19	Undershirt, cotton	3. 07	2. 32
Wool, light weight	. 33	. 25	Undershirt, part-wool	. 17	. 04
Tropical worsted	. 05	------	Underdrawers, cotton	3. 41	2. 77
Cotton	. 07	------	Underdrawers, part-wool	. 15	. 14
Trousers, slacks, overalls:			Union suit, cotton	. 46	. 58
Wool	. 35	. 89	Union suit, part-wool	. 26	. 14
Cotton, dress	. 31	1. 19			

Clothing Budget—Continued

Group and item	Quantity per year	
	Husband	Boy
Nightwear:		
Pajamas, cotton	0.71	0.54
Pajamas, flannelette	.13	.13
Bathrobe, wool	.08	------
Socks:		
Cotton, dress	5.84	10.36
Cotton, heavy	4.79	
Rayon	2.38	------
Wool	.51	.11
Shoes:		
Leather, work	.80	2.87
Street	1.23	
Fabric	.04	.12
Boots	.06	.15
House slippers	.17	.04
Rubbers, arctics:		
Rubbers	.29	.23
Arctics	.08	.21
Accessories:		
Gloves, cotton	3.95	.12
Gloves, leather	.35	.29
Gloves, wool	.26	.33
Handkerchiefs	6.42	3.23
Tie	3.05	1.36
Belt	.50	1.00
Suspenders	.50	------
Shoe repairs:		
Half soles and heels (number)	1.50	2.00
Heels only (number)	.20	------
Dry cleaning:		
Dry cleaning, pressing (garment)	9.00	------
Other:		
Cleaning supplies (1947 dollar allocation)	$0.25	$0.15
Miscellaneous accessories	(1)	(1)

Group and item	Quantity per year	
	Wife	Girl
Hats:		
Felt	1.06	0.45
Straw, fabric	.61	.28
Cap, beret	.13	.27
Head scarf	.23	.20
Coats:		
Heavy, with fur	.16	------
With no fur	.12	.32
Light, wool	.23	.33
Snow suit	------	.37
Raincoat	.01	.14
Sweaters:		
Wool	.31	.59
Cotton	.06	.04
Jackets:		
Wool	.04	.13
Cotton	------	
Suits: Wool	.11	------
Dresses:		
Wool	.18	.13
Cotton, street	1.10	3.08
House dress	1.17	------
Rayon	1.72	.24
Skirts:		
Wool	0.16	0.40
Cotton	.06	.08
Blouses:		
Cotton	.20	.88
Rayon	.28	.07
Housewear, sportswear:		
Apron, smock	.55	------
Overalls, slacks	.27	.46
Shorts	.11	------
Playsuit	------	.80
House coat, cotton (girls' bathrobe)	.18	.13
House coat, rayon	.06	------
Bathing suit	.13	.28
Underwear:		
Slip, rayon	2.11	.34
Slip, cotton	------	1.22
Panties, cotton	.47	3.30
Panties, rayon	2.44	1.37
Panties, part-wool	.08	.23
Underwaist, cotton	.25	1.26
Underwaist, part-wool	------	.37
Union suit, cotton	.05	.42
Union suit, rayon	.08	------
Union suit, part-wool	.03	.09
Brassiere	1.21	------
Girdle, corset	.72	------
Nightwear:		
Nightgown, pajamas, cotton	.46	.39
Nightgown, pajamas, rayon	.69	.31
Nightgown, flannelette	.19	.24
Bathrobe, wool	.05	.08
Hosiery:		
Stockings, rayon [2]	.99	------
Stockings, nylon [2]	10.09	------
Stockings, cotton	.19	------
Socks, anklets, cotton	1.61	11.80
Socks, anklets, wool	------	.34
Socks, anklets, rayon	------	.40
Shoes:		
Leather	2.18	3.24
Fabric	.38	.15
House slippers	.46	.29
Rubbers, arctics:		
Rubbers	.05	.03
Arctics	.17	.51
Accessories:		
Gloves, cotton	.52	.15
Gloves, leather	.21	.03
Gloves, rayon	.16	------
Gloves, wool	.04	.63
Handbag	.86	.24
Handkerchief	3.44	1.95
Umbrella	.14	.06
Yard goods, cotton (yards)	3.00	3.00
Shoe repairs:		
Half soles and heels (number)	.50	1.50
Heel lifts (number)	2.50	------
Dry cleaning, pressing (garment)	8.00	------
Other:		
Cleaning supplies (1947 dollar allocation).	$0.20	$0.10
Miscellaneous accessories	(1)	(1)

[1] Miscellaneous accessories: Cost of this group of items is a specified percent of the annual allowance of clothing per person. The percents are as follows: Husband and wife, 3 percent; boy and girl, 2 percent.

[2] Estimated allocation for spring of 1946 was 10.01 rayon stockings and 1.07 nylon stockings.

Explanatory Notes:

Method of adjusting annual purchases of clothing for intercity variations caused by climatic factors:

The basic clothing budget is the average for United States cities. For each city, the quantities of specified clothing articles, grouped as "heavy" and "light" items, are adjusted upwards or downwards in accordance with local climatic conditions. The basis of the adjustment is the normal number of annual degree days. Degree days are defined as the sum of the deviations below 65° in the daily mean temperature, as published by the U. S. Weather Bureau. The adjustment factors are stated as percentages of the average for all cities. For the group of "heavy" articles, the percentage adjustment factors for a given city are related to the number of degree days as follows:

Men and boys: 64.4+0.0072 × normal number of annual degree days.
Women: 54.2+0.0093 × normal number of annual degree days.
Girls: 18.7+0.0165 × normal number of annual degree days.

For the group of "light" articles, the adjustment factors are obtained as follows:

Men and boys: 148.8−0.0099 × normal number of annual degree days.
Women: 107.9−0.0016 × normal number of annual degree days.
Girls: 111.3−0.0023 × normal number of annual degree days.

The clothing articles classified as heavy and light are listed below.

Heavy Items of Clothing

Husband	Boy	Wife	Girl
Hat, felt.	Hat, felt.	Hat, felt.	Hat, felt.
Overcoat.	Cap, wool.	Coat, wool, heavy weight, with fur.	Snow suit.
Topcoat.	Overcoat.	Coat, wool, heavy weight, no fur.	Coat, wool, heavy weight, no fur.
Jacket, wool.	Topcoat.	Dress, wool.	Dress, wool.
Jacket, leather.	Jacket, wool.	Arctics.	Panties, part-wool.
Suit, wool, heavy weight.	Jacket, leather.	Rubbers.	Underwaist, part-wool.
Trousers, wool.	Suit, wool, heavy weight.	Gloves, cotton.	Unionsuit, part-wool.
Shirt, wool.	Trousers, wool.	Gloves, leather.	Nightgown, pajamas, flannel.
Undershirt, part-wool.	Undershirt, part-wool.	Gloves, rayon.	Socks, wool.
Underdrawers, part-wool.	Underdrawers, part-wool.	Gloves, wool.	Arctics.
Unionsuit, part-wool.	Unionsuit, part-wool.		Rubbers.
Pajamas, flannelette.	Pajamas, flannelette.		Gloves, wool.
Rubbers.	Rubbers.		Gloves, cotton.
Arctics.	Arctics.		Gloves, leather.
Gloves, cotton.	Gloves, cotton.		
Gloves, leather.	Gloves, leather.		
Gloves, wool.	Gloves, wool.		

Light Items of Clothing

Hat, straw.	Hat, straw.	Hat, straw, fabric.	Hat, straw, fabric.
Raincoat.	Cap, cotton.	Coat, wool, light weight.	Coat, wool, light weight.
Jacket, cotton.	Raincoat.	Raincoat.	Raincoat.
Suit, wool, light weight.	Jacket, cotton.	Overalls, slacks.	Play suit.
Suit, tropical worsted.	Suit, wool, light weight.	Bathing suit.	Overalls.
Suit, cotton.	Trousers, cotton.	Shorts.	Bathing suit.
Trousers, cotton, dress.	Shorts.		
Trousers, cotton, work.	Shirt, cotton, polo.		
Shorts.	Shirt, cotton, other.		
Shirts, cotton, work.	Slack suit.		
Shirts, cotton, other.	Bathing trunks.		
Shirts, cotton and rayon.	Undershirt, cotton.		
Slack suit.	Underdrawers, cotton.		
Bathing suit.	Unionsuit, cotton.		
Undershirt, cotton.	Pajamas, cotton.		
Underdrawers, cotton.			
Unionsuit, cotton.			
Pajamas, cotton.			

Medical Care Budget

Group and item	Unit	Quantity per year				
		Family of 4 persons	Husband	Wife	Boy	Girl
Medical, surgical procedures:						
Physicians' calls—home [1]	Each	4.458	0.775	1.569	0.864	1.250
Physicians' calls—office [1]	do	11.476	3.087	4.552	1.806	2.031
Tonsillectomy, adenoidectomy	do	.133	.018	.014	.035	.066
Appendectomy	do	.027	.004	.007	.010	.006
Other surgical procedures	do	.187	.040	.067	.047	.033
Nursing care:						
Private nurse—graduate	Day	.391	.000	.217	.088	.086
Private nurse—practical	do	.644	.042	.452	.081	.069
Eye care:						
Refraction	Each	.332	.059	.120	.086	.067
Lenses	Pair	.316	.059	.118	.079	.060
Frames	do	.133	.021	.042	.040	.030
Dental care:						
Prophylaxis	Case	1.596	.328	.451	.462	.355
Extractions	Each	1.104	.272	.442	.164	.226
Fillings	do	4.066	.762	1.277	1.152	.875
Crowns	do	.155	.065	.081	.008	.001
Bridges and dentures	Case	.170	.058	.108	.003	.001
X-ray	Case	.236	.081	.109	.028	.018
Hospital service:						
Group hospitalization insurance plan [2]	Family membership.	1.000				
X-ray	Case	.059	.012	.022	.011	.014
Laboratory services	do	.247	.058	.090	.045	.054
Physiotherapy services	do	.013	.004	.005	.002	.002
Anaesthesia	Each	.347	.062	.088	.092	.105
Other medical services, not in hospital:						
X-ray	Case	.126	.027	.035	.027	.037
Laboratory services	do	.105	.026	.031	.018	.030
Physiotherapy services	do	.076	.019	.028	.012	.017
Prescriptions	Each	2.979	.566	.818	.690	.905
Drugs and medical supplies [3] (1947 dollar allocation)		$12.60				

[1] Physicians' office calls include clinic calls, both public and private, specialists' calls and calls of nonmedical practitioners, such as osteopaths, faithhealers, etc.

[2] The budget includes one family membership in a group hospitalization insurance plan in cities where such plans exist and do not exclude any sizable proportion of the population. In places where plans are not available to all families the budget allows the following days of hospital care:

	Days per year
Husband	0.525
Wife	1.019
Boy	.594
Girl	.495

Group hospitalization insurance plans vary as to the extent of X-ray, laboratory, physiotherapy, and anaesthesia services which they offer. When a group hospitalization plan is included in the budget, the following qualifications apply to the hospital X-ray, laboratory, and physiotherapy weights presented in the above tables:

(a) When a group hospitalization plan includes complete coverage of X-ray, laboratory, and physiotherapy services, the budget excludes separate weights for hospital services of this type.

(b) When a group hospitalization plan offers no X-ray, laboratory or physiotherapy services, the budget includes separate weights for hospital services of this type.

(c) When a plan offers some but not all of these services, the budget includes the portion of hospital services not covered by the plan.

In places where hospital plans are not available, the budget includes separate weights for hospital X-ray, laboratory, physiotherapy, and anaesthesia.

[3] Included as medical supplies are bandage, gauze, ice bag, thermometer, etc.

NOTE.—Where "case" has been entered as a unit of quantity, it represents the various services attendant upon an illness, operation, etc., for a family member. A case of X-ray, for example, may involve one or a series of visits, either for diagnosis or treatment.

Transportation Budget

Group and item	Unit	Quantity per year in cities with population of—	
		50,000 to 1,900,000	1,900,000 or more
Automobile owners—1,000 families		*740*	*400*
Automobile:			
Gasoline	Gallon	435.00	435.00
Oil	Quart	43.5	43.50
Tires [1]	Each	1.18	1.18
Tubes	do	.47	.47
Insurance [2]	Annual policy	.45	.45
Registration		1.00	1.00
Inspection [3]			
Operator's permit, renewal		2.00	2.00
Repairs and replacements [4] (1947 dollar allocations)		$15.14	$15.14
Parking and garage rent		(5)	(5)
Tolls, fines, damages, accessories, and automobile association dues		(6)	(6)
Allowance for automobile purchase (1947 dollar allocations)		$106.75	$106.75
Public transportation:			
Local	Ride	145.00	295.00
Trips out of city [7]	Railroad mile	98.80	98.80
Moving household effects—			
Local [8] (1947 dollar allocations)		$4.66	$4.66
To another city [9]	Mile	16.38	16.38
Nonautomobile owners—1,000 families		*260*	*600*
Public transportation:			
Local	Ride	855.00	925.00
Trips out of city	Railroad mile	235.60	372.40
Moving to another city [7]	do	16.38	16.38
Moving household effects—			
Local [8] (1947 dollar allocations)		$4.66	$4.66
To another city [9]	Mile	16.38	16.38

[1] *Tires.*—Includes 0.97 new and 0.21 recapped tires. Estimated allocation for the spring of 1946 was 0.88 new tires and 0.30 recaps for tires owned by automobile owner.

[2] *Insurance.*—The weight of 0.45, i. e., 45 percent of the automobile owners, is applicable to all cities of 50,000 or more in States where automobile insurance is not compulsory. In cities in States where it is compulsory, a weight of 1.00 is substituted.

[3] *Inspection fee.*—Periodic inspection of automobiles is required in some but not all cities. For each city in which inspection is required and a fee charged, the appropriate weight is to be used, e. g., if semiannual inspection is required a weight of 2.0, etc.

[4] *Repair and replacement.*—$15.14 is the average cost in 1947 of 34 cities. This total varies for individual cities according to differences in cost of labor and parts.

[5] *Parking and garage rent.*—Cost of this group is a specified percent of the total of operating costs listed above, as follows: 3.7 percent for cities with populations 50,000 to 1,900,000; and 6.5 percent for cities with populations 1,900,000 or more.

[6] *Tolls, fines, etc.*—Cost of this group is 1 percent of the total of operating costs listed above.

[7] *Trips out of city.*—The number of miles shown represents one trip, totaling 760 railroad miles each year, for the following proportions of families: Automobile owner: all cities, 13 percent; nonautomobile owner—cities with population 50,000 to 1,900,000, 31 percent, and cities with population 1,900,000 or more, 49 percent.

[8] *Local moving.*—$4.66 is the average cost in 1947 of 34 cities. This total varies for individual cities according to regional differences in moving rates.

[9] *Moving to another city.*—The number of miles shown represents one move of 390 miles each year for 4.2 percent of the families.

Reading and Recreational Budget

Group	Item	Quantity per year
Reading materials	Newspapers	365. 0
	Magazines	32. 0
	Books	1. 0
Paid admissions	Movies, adults	34. 4
	Movies, boy	26. 1
	Movies, girl	17. 3
	Plays, concerts, sport events	4. 0
Radio	Purchase	. 11
	Repairs	(1)
Other	Unspecified recreational items	(2)

[1] *Radio repairs.*—Cost of this item is 45 percent of the annual allowance for radio purchase.
[2] *Unspecified recreational items.*—Cost of this group of items is 28.5 percent of total cost of reading material, movie admissions, and radio purchase.

Explanatory Notes:

Additional items included in specified subgroups are as follows:

	Subgroup and additional items included	
Paid admissions.	Plays, concerts, sport events.	Bowling, dances, tennis, golf, etc.
Other	Unspecified recreational items.	Hobbies, toys, games, social and recreational club dues; party favors and accessories; supplies, equipment, and licenses for pets.

Personal Care Budget

Group and item		Unit	Quantity per year
Services:			
Husband	Haircut		14. 6
	Shave		1. 7
Wife	Haircut		4. 2
	Finger wave		2. 9
	Permanent wave		. 6
	Shampoo		. 8
Children	Haircut, boy		9. 5
	Haircut, girl		4. 7
Commodities:			
Husband	Razor		. 2
	Razor blades	Package of 5	7. 7
	Shaving brush		. 2
	Shaving cream	5-ounce tube	2. 2
	Shaving soap	Cake	3. 2
	Shaving lotion	5-ounce bottle	. 2
Wife	Face powder	2.5-ounce box	1. 0
	Cold cream	3.5-ounce box	1. 0
	Rouge compact	Large size	. 5
	Lipstick	Small	1. 0
	Hand lotion	13½-ounce bottle	. 2
	Nail polish	Small size	1. 0
	Deodorant	1¼-ounce jar	1. 5
	Sanitary supplies	Box of 12	10. 0
	Cleansing tissues	Box of 200	4. 0
All family members	Toilet soap	Cake	67. 1
	Toothpaste	3-ounce tube	10. 2
	Tooth powder	4.5-ounce can	1. 0
	Mouth wash	14-ounce bottle	1. 4
	Toothbrush		6. 0
	Hairbrush		. 5
	Comb		1. 0

Tobacco Budget

Item and unit	Quantity per year
Cigarettes (pack)	166. 8
Cigars (each)	38. 5
Pipe tobacco (1¼-ounce)	20. 1

Communication Budget

Item	Quantity per year
Telephone calls, coin box	145
Stamps, 3-cent	65
Writing supplies (1947 dollar allocation)	$1. 25

Gifts, Contributions, and Miscellaneous Budgets

Gifts and Contributions. This group includes Christmas, birthday, and other presents to persons outside the immediate family and contributions to church and charities. Cost is 2.7 percent of total cost of goods and services.

Miscellaneous Items. This group includes lodging away from home, music and dancing lessons for the children, legal expenses, and other unspecified items. Cost of these items is 1 percent of total cost of goods and services.

School Expense Budget

Item:
Instructional supplies
Athletic supplies
Associations, entertainment
Quantity per year:
As required in each community for boy (in ninth grade) and for girl (in third grade)

Explanatory Notes:

(1) The budget assumes both children attend public school and purchase only those items third and ninth grade pupils are expected to have and which are not supplied free by the school.

(2) Additional items included in specified subgroups are as follows:

	Additional items in subgroup
Instructional supplies.	Textbooks, writing supplies, maps, crayons, laboratory fees, workshop supplies, classroom subscriptions to periodicals, instructional trips and excursions.
Athletic supplies	Fees for gymnasium locker, lock, towels; athletic equipment and clothing.
Associations, entertainment.	Student body associations, school entertainments in which pupils participate.

Occupational Expenses, Insurance, and Taxes

Occupational Expenses. Dues to unions, business or professional associations; special clothing and equipment required for the occupation. These items, which are included in the estimated total cost of the budget as an average outlay of $22, should be determined for each individual situation.

Insurance. A life insurance policy to provide for the family during a period of adjustment in event of the death of the breadwinner. The premium should be determined for individual situations by taking into account the group insurance in effect. Insurance is included in the estimated total cost of budget at the average outlay of $85.

Taxes. Personal taxes, poll taxes, and other capitation taxes; income taxes, Federal, State, and local taxes are included in the estimated total cost of the budget as legally required in each city.

Family Budgets: A Historical Survey

DOROTHY S. BRADY [1]

THE LEVEL OF LIVING expressed in a family budget, of course, varies from time to time, and from place to place, according to the customs and standards of the society and the productivity of the economy. That the level of living necessary for social satisfaction does not rest on material needs alone was recognized by Aristotle:

> Man, nevertheless, being human, needs some external prosperity. His nature alone is not sufficient to support his thinking; it needs bodily health, food, and care of every kind. We must not however suppose that, because one cannot be happy without some external goods, a great variety of such goods is necessary for happiness. For neither self-sufficiency nor moral action demands excess of such things. We can do noble deeds without being lords of land and sea, for moderate means will enable a person to act virtuously.[2]

Yet the slow progress of economic development, and the recurrent plagues and famines had left unsatisfied so many of the basic wants that as late as the fourteenth century Langland supposedly sang in Piers Plowman:

> These three, no more; but three are needful,
> The one is clothing to save thee from chill,
> The one is meat, for thy health's sake,
> The third is drink when thou driest. [3]

By the sixteenth century, Sir Thomas More had visions in Utopia of a level of living that would include windows in every cottage and meat once a week; but he realized that these might be among the "many things in the Utopian weal publique, which in our cities I may rather wisshe for then hoope after." This was simply a recognition of the reality of want in a world where the simplest requirements could not be realized. Sir Thomas, even in his Utopian dreams, could not look forward two centuries to the time when freedom and invention had made much more than his wish possible; to the time when English social scientists compared estimates of family needs and actual living patterns with all the assurance that their studies revealed not only the need but also the possibility for social action to eliminate levels of living below acceptable standards.

During the seventeenth century England became the most advanced country in Europe in mining and manufacturing, with a general level of living higher than in any other country. The living conditions of wage earners were improving but the agricultural population remained at a low level of subsistence. It was in this period of growth in material welfare that the "political arithmeticians" began to describe the economy in statistical terms and to measure the minimum level of living. Gregory King [4] prepared his remarkable picture of the economic level of western countries toward the end of that century. France and other countries sent technical experts to study English methods of manufacturing and these observers returned with the conviction that freedom, invention, and high levels of living among all population groups were interrelated.

Development of Statistical Studies

Statistical studies of family living began in the nineteenth century as the advance of modern industrialism promised improvement in living conditions of the masses of the population. Significantly it was two engineers who gave lasting impetus to this kind of study at a time when the European nations were again trying to imitate the the progress of England. Frederic Le Play began a long series of intensive studies of individual families in the 1830's. Ernst Engel, a student of

[1] Of the Bureau's Prices and Cost of Living Division. Mrs. Brady also prepared the article on Budget Levels for Families of Different Sizes (p. 49)

[2] Aristotle: On Man in the Universe, Ethics Book VII.

[3] Piers Plowman, Passus 1, 20. Circa 14th Century.

[4] King, Gregory: Natural and Political Observations and Conclusions upon the State and Condition of England, 1698.

Le Play's, analyzed the data collected by Le Play and E. Ducpetiaux [5] and formulated his theory of the relationship between income and the proportionate expenditures on food, which was published in 1895.

The intense belief in the possibility and desirability of improvement in living conditions began to stimulate statistical studies of living conditions in the United States during the years after the Civil War. State bureaus of labor statistics made more than 100 studies of family living between 1870 and 1900 and the United States Bureau of Labor Statistics began making such studies in 1888, as instructed by the Congress.

The bureau of statistics of labor of the State of Massachusetts, under the guidance first of Henry Kemble Oliver and then of Carroll D. Wright, carried through many studies which became the pattern for the work of other States and the Federal Government. The results of a survey on housing conditions in Boston were presented in the first annual report of that agency in language to arouse the public conscience.[6] In the seventeenth annual report (1886), Wright published a study of Food Consumption in which Prof. W. O. Atwater studied the data in terms of nutrition; and in a cost-of-living section in the fifteenth annual report (1884), he presented statistical analyses of the Massachusetts surveys made in 1875 and 1879, comparing the results with Engel's analyses of Belgian data and with English studies.

Carroll D. Wright, as the first Commissioner of Labor, was responsible for investigations of family living on a scale scarcely matched since that time.

The adequacy of the level of living displayed in these statistical studies was generally appraised by the simple financial criterion, the balance between income and expenditures. If the average worker's family at a certain income had managed to "save" something out of that income over the course of the year, it was concluded that that income was sufficient to provide the family needs.[7] At the same time, a large number of the studies introduced observations on the adequacy of the housing conditions of the workers' families, and accordingly helped to focus public attention on the need for improving urban housing.

Because of significant changes in the price level and a growing awareness of the substantial differences in the prices of the same goods and services in different places, it was realized around the beginning of this century that the uses of budget levels (such as the balance of expenditures and income), based simply on studies of family expenditures, were definitely limited. Such determinations could not be applied to later dates if the price level had changed. They could not be applied to different localities without first ascertaining whether the prices in the different places were the same. Studies of family living expenditures began in the twentieth century to include more and more data on the *quantities* of goods purchased. The comprehensive survey made by the U. S. Department of Labor in 1901 included data on the quantity and cost of the important foods purchased. The survey made by the Bureau of Labor Statistics in 1917–19 included data on quantities of foods, clothing, furnishings, and some miscellaneous articles. The studies made by Federal agencies since 1930 have further increased the information recorded on the quantities of goods and services purchased.

Quantity Budgets of Goods and Services

This development in the basic studies of family living made possible the construction of quantity budgets (lists of goods and services) in a realistic manner. While budget lists have been based on an individual's experience, only those with a basis in statistical fact have been given any widespread recognition. To a large extent, in this country,

[5] Ducpetiaux, in charge of a questionnaire study conducted by the Belgian Statistical Bureau, made many comparisons of the adequacy of worker's family living with other population groups.

[6] An example: "Now the owners of the heathenish dens which we have visited, reeking with pestilent filth, and germinating the spores of disease—dens contrived and constructed as with a purposed stoppage of light and air, God's free, priceless gift to all, yet given to all without money and without price, seem not only to act on the principle of getting the most money for the least good supplied, with little regard to weal of individual or of society, but to act, also, on the principle of shutting out, besides, all the light and air of wholesome morals, thus robbing the soul of its normal rights, as they have the body of the decencies of life."

[7] A large number of the studies compared their findings with those of Ernst Engel. The writers appeared to be groping for a position in the scale of expenditure percentages that could be used as a norm. Such an idea has persisted to the extent that recent discussions of the housing problem have made use variously of a figure of 20 or 25 percent as the "standard" proportion of income that should be spent on housing. For a discussion of the indefinite basis for such "standards," see Helen M. Humes: Rent and Income, What Is the Relationship? in The Journal of Housing, April 1946 (pp. 72, 73).

quantity budgets [8] were constructed initially upon request of some legal authority; and the determination of the budget level was, to a considerable extent, dependent upon the immediate use to be made of the results.

In accordance with an act of Congress approved in 1907, which provided for an investigation of the condition of women and child workers, the Commissioner of Labor prepared, with other information, a study of living conditions and the cost of a "minimum standard of living" and the cost of a "fair standard of living" in cotton-mill communities. These were the first budgets in this country expressed in quantities of goods and services to which prices were applied in the determination of the total cost of the budget.

In 1917, Prof. William F. Ogburn of the University of Washington on the request of the Arbitration Board for the Seattle Street Railway Industry, prepared a detailed budget for families of street railway employees which became known as a "minimum comfort budget."

In 1915, the New York City Bureau of Personal Service in cooperation with the Bureau of Municipal Research prepared a budget for the purpose of standardizing the salaries of city employees. For the same reason the Bureau of Municipal Research of Philadelphia prepared a budget with calculations of its cost in 1917.

At the request of the Joint Reclassification Committee of the Congress in 1919, the Bureau of Labor Statistics prepared "tentative" quantity and cost budgets for a Government worker's family of five persons and for a single man and single woman in Government service.

Professor Ogburn presented an adaptation of the Government worker budget for coal mining families with calculations of its cost, for the U. S. Bituminous Coal Commission, in January 1920. For the calculation of the cost of the budget, Professor Ogburn used prices collected by agents of the Bureau of Labor Statistics in several coal mining communities.

In June 1920, the Bureau published a quantity budget for a worker's family of five but did not present any calculations of its cost.

In 1921, the California State Civil Service Commission appointed a special committee to prepare budgets for laborers', clerks', and executives' families and for unmarried clerks, male and female. These budgets were the forerunners of those prepared and priced annually by the Heller Committee for Research in Social Economics of the Department of Economics of the University of California. Arbitration boards and commissions in the period immediately after World War I were responsible for many determinations of the cost of family budgets, which sometimes were adaptations of the Bureau of Labor Statistics budgets and sometimes budgets specially developed.

Beginning in 1919, the National Industrial Conference Board prepared budgets and estimated their cost for a number of specific industrial communities.

All of these budgets recognized nutritional needs in the construction of the list of foods; most of them accepted the generally available housing in determining the housing cost; all of them included some provision for recreation and education. Most of them were developed by "common sense judgment" from data on family expenditures in the area.

Change in Budget Concept

The remarkable center of all the discussions of family budgets in the period after the First World War was the unexpressed faith that the United States economy could approach a level unmatched in all of human history in providing a tolerable level of living to all families. Employers and employers' organizations also made budgets for specific situations and these budgets fundamentally agreed more than they differed with the budgets prepared by Government agencies or academic groups. When it appeared that budget totals implied a far greater national income than existed at the time, the reaction was not an echo of Sir Thomas More's pessimism but rather a puzzled "something must be wrong with our calculations." Perhaps it was wrong to compare the budget with the earnings of one individual, especially in view of the pressures to allow women to enter the labor force in almost all occupations with equal pay for equal work. Perhaps it was wrong to assume that all workers support four or five persons on their earnings.

Many of these conceptual problems might have

[8] Except those constructed by welfare agencies for use in determining family allowances.

been solved before now but for the depression of the 1930's which presented a new and difficult challenge. In 1936, the Works Progress Administration published Quantity Budgets for Basic Maintenance and Emergency Standards of Living. The very names of these budgets convey the outlook during most of the decade, and the reasons for [to quote the report] "an effort to set up a technique for determining the cost of maintaining an adequate standard of living at the lowest economic level, and to establish quantity estimates of goods and services necessary to maintain that standard, on the basis of which costs at an identical standard in different localities may be compared. Because of the economic situation prevailing during the period within which this budget was constructed, an attempt was also made to ascertain how cuts below this basic maintenance standard may be made under emergency conditions, with least harm to individuals and the social group. While the approach to this study has necessarily been from the standpoint of relief, the resulting budgets are applicable generally, with little or no modification, to low-cost living in urban areas, and should be of service in any field where information of this nature is required."

Although these budgets served their purpose of appraising relief, in both the original calculations of their cost in March 1935 and the later estimates prepared by the Bureau of Labor Statistics they presented a problem of long standing: the variations in the cost of the same goods and services [9] from place to place.

After the Nation entered the Second World War and workers were induced to migrate to centers of war production, these place-to-place variations became important. The budgets typical of the depression decade point of view proved an inadequate tool to use for measuring place-to-place differences or for the determination of budget levels for such purposes as an appraisal of income tax exemptions. Congressman Albert Engel of Michigan expressed in remarks on this subject a dissatisfaction [10] with the lack of information on this subject, and later the Congressional Subcommittee of which he was a member instructed the Bureau of Labor Statistics to supply the necessary information. The budget the Bureau has prepared in accordance with this directive is being presented under circumstances similar to those when the budget was prepared by the Bureau in 1919: prices had increased to a high level compared to the experience of the previous two decades. The same uses will be made, the same questions will be asked, and the search for a solution to the conceptual problem interrupted by the depression and the Second World War will have to be resumed.

After the First World War, far-reaching changes occurred in the variety and abundance of goods available to the great majority of families in the United States. Such foods as milk, citrus fruits, and canned juices became important in customary diets. Electric power and indoor plumbing were installed in the ordinary urban household. Small electric appliances as well as mechanical refrigerators and washing machines and automobiles came within the buying range of the average family. Ready-made clothing at reasonably low prices made its appearance and silk hose were transformed from a luxury to a necessity. Similar developments in this period after the Second World War may well assure the continuation of our progress toward providing all families with the "necessaries of life."

The budget describes in statistical terms the challenge to our economic order. At the present time, this country comes close to providing all groups in the population with at least the necessaries of life that are the prerequisites of an inventive and productive population. Is it possible to continue to progress until there are no households living in want and insecurity? Or will the cost of the essential goods and services become so prohibitive that large segments of the population will, here as in other times and places, sink to a level of mere subsistence?

[9] With proper recognition of the climatic factor.

[10] "Unless the Labor Department can give us cost of living figures based on the right of every American to a decent living, including decent food, decent housing and decent clothing, it had better discontinue publishing information along this line." Congressional Record, 79th Congress, 1st Session, Vol. 91, Part 2, pp. 2442-2449.

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Family Incomes and Cost of Family Budgets

ABNER HURWITZ [1]

A MEASURE of the sufficiency of family incomes is obtained from the cost of family budgets representing a satisfactory level of living. Most budgets, and, in particular, the one presented in this issue, are a reflection of community experience and, as such, do not represent a level of living far beyond the reach of the great majority of families. They are then useful in pointing out areas where programs can be developed to eliminate unsatisfactory levels of living. They serve to gauge the effect of a rise in prices when there is no corresponding increase in family income. The budgets thus provide the basis for estimating the number of families that would under these conditions, fall in the group whose purchasing power is too low to provide the level of living described by the budget.

Before a completely valid general comparison of incomes with the costs of family budgets can be made, it would be necessary to develop budgets for all the common types of family, to assemble accurate figures on the distribution of income for each size of family, and to estimate the cost of the budgets in communities of different sizes throughout the country. The Bureau of Labor Statistics has constructed a budget for a family of four living in large cities. To complete the work would require, at the least, budgets for single persons, budgets for families of 2 at different points in the age scale, budgets for families of 3, 5, and 6 persons of the most usual age composition, and collection of prices in representative cities under 50,000 population. To assemble the data on income distribution would require continuous collections of data from various sources and then combining these collections into the best possible series of figures showing the number of families of each type in each income bracket.

In the absence of valid figures on cost of budgets for families of different size and age composition and the distribution of their incomes, it is desirable to use rough estimates for both series for a typical large city in order to appraise the budget level and to gauge the effect of its cost at current prices. For this purpose, ratios [2] of an equivalent level of living for different size family groups have been applied to the cost of the budget for families of four persons in Indianapolis, Ind., in March 1946, to estimate the budget level for single individuals and families with male heads. Data available do not permit the estimation of the budget for families of two or more with female heads. An estimate of the distribution of 1945 annual family incomes for Indianapolis was prepared from data obtained in connection with the Bureau's survey of prices paid by families in that city in early 1946. These estimates were made for incomes and for budget costs, excluding personal taxes and occupational expenses, and are shown in the accompanying table. The estimated percent of families below the budget level shown on the last line of the table is a measure of the adequacy of incomes with respect to the level of living described by the budget.

This estimated income distribution, based on a sample too small to be completely reliable, is supported by the findings of all recent studies of income distributions, that the larger families are at higher levels on the income scale. Increases in income with size of family, as shown by the median incomes, are to a large extent an automatic reflection of the age cycle in earning power. Large proportions of the single persons and the two-person families are either young, just starting development in earning capacity, or old people [3] with small pensions, many of whom are partially supported by contributions from their children. The heads of larger families are in their middle

[1] Of the Bureau's Prices and Cost of Living Division.

[2] See Budget Levels for Families of Different Sizes, p. 49.

[3] See City Family Composition in Relation to Income, 1941 and 1944, in the February 1946 issue of the Monthly Labor Review.

years. For example, heads of four-person families are, in the greatest number, between the ages of 35 and 55. They are, in all likelihood, well advanced in their trades or skills and will typically have earnings somewhat higher than the average. Also, families higher in the age cycle are more likely to include secondary earners and receive part of their income from sources other than the earnings of the head.

It is apparent that, on the average, the relative income position of the family size group is roughly proportionate to the relative cost of maintaining the family.

While at early 1946 prices, 22 percent of the Indianapolis families of two or more with male head were below the budget line, single individuals with insufficient incomes were proportionately more numerous (over 30 percent). While only 20 percent of single males were below the budget line, more than one-third of all single women had incomes too low to maintain the budget level of living. This group, it must be remembered,

Estimated percentage distribution of Indianapolis, Ind., families, by 1945 income and family size, in relation to the city worker's family budget for March 1946

Item	Single persons			Families of 2 or more with—				
				Male head				Female head, all sizes
	Male	Female	Total	2	3	4	5 or more	
Percent of families of each size	4.1	12.2	16.3	27.7	17.9	15.8	11.9	10.4
Money income less taxes and occupational expense:								
Under $1,000	12.4	28.0	24.0	10.5	1.9	1.0	.7	6.6
$1,000 to $2,000	43.4	39.8	40.7	25.7	15.3	2.0	7.4	40.5
$2,000 to $3,000	23.0	23.6	23.5	31.3	26.8	22.1	17.0	31.0
$3,000 to $4,000	12.4	4.2	6.3	18.1	33.7	34.8	26.9	13.2
$4,000 and over	8.8	4.4	5.5	14.4	22.3	40.1	48.0	8.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Median income	$1,850	$1,550	$1,650	$2,400	$3,100	$3,700	$3,950	$2,100
Estimated cost of budget, less taxes and occupational expenses	$1,170	$1,170	$1,170	$1,660	$2,140	$2,552	$3,110	----------
Estimated percent of families below budget level	20	35	31	28	20	12	28	----------

includes a large number of old people on pensions or supported by others, and many young persons still receiving aid from their parents. Nevertheless, a substantial number are "on their own"[4] and point to the need for community action toward the improvement of their incomes or their earning power through increased retirement benefits, increased minimum wage, better training for employment, and other measures.

About 10 percent of all families and single individuals in Indianapolis were families of two or more persons with female heads. This group has been separated from families of other types because neither the cost of the budget nor the implications of the comparison of the budget with incomes are strictly applicable. Among families with male heads are those with disabled breadwinners and others probably in need of aid from welfare programs. On the other hand, this group also includes a substantial number of multiple-earner families in which the wife or other members contribute to the total family income. These families should, if possible, also have been eliminated from the tabulations. The development and application of budgets for families in which one or more members are not engaged in normal activities, or in which the male breadwinner is absent, should be taken as a separate problem.

It appears that about two out of every nine families with male heads were below the budget line in a "typical" large city in early 1946. This fraction of the population presents a problem to the community that cannot be fully formulated until information is assembled on their economic and social characteristics. The Bureau's surveys, while too small to yield the necessary information in quantitative terms, nevertheless suggest the complexity of the problem. The male heads of families "below the budget line" included many self-employed (store keepers, tavern keepers, garage operators, urban farmers, cleaners, tailors, shoemakers, painters, and paperhangers) and workers employed in small shops and other small

[4] According to the 1940 census, 62 percent of all single females and 86 percent of single males were in the labor force.

businesses; domestic, personal service, and similar workers (cooks, waiters, chauffeurs, elevator operators, janitors, watchmen); clerks and salesmen, on salary and on commission; some professional workers; some government employees; some persons dependent on pensions or on rents; as well as some laborers and skilled workers. The diversity of these groups is so great that each represents a different problem in terms of social activity.

To trace the effect of the rise in the price level it is necessary to observe the concentration of incomes just above the budget line. If incomes do not increase with prices, large numbers of families with "sufficient" incomes find themselves below the budget line after a rapid rise in prices. About 8 percent more Indianapolis families, whose incomes in 1945 allowed the budget level of living in early 1946, would have been faced with a reduction below the budget level in June 1947 if their incomes did not increase proportionately to the rise in prices which occurred during that period. Most families do not have sufficient resources outside current income, in savings or property, to use in financing rapid additions to living costs. The budget level is, by definition, the level of living from which further reductions meet the greatest resistance.[5] The many families forced below the budget line by price increases are, accordingly, the strongest center of dissatisfaction with the level of prices in relation to income.

This group is broadly representative; it includes wage and salary workers—wage earners, clerical workers, and professional workers employed in every type of industry and those who are self-employed in characteristic small businesses. The problem of meeting the price situation faces all groups in the community and will be solved only by developments that affect all groups in the community.

[5] See p. 13, under Method of Determining Family Budget.

Budget Levels for Families of Different Sizes

THE COST OF FAMILY BUDGETS has been used as a convenient measure of the adequacy of incomes to support a satisfactory level of living in an entire population or in any segment of it. When the distribution of families according to the amount of their incomes is known, the cost of the budget can be used to estimate the number of families with incomes above, and the number with incomes below, the amount necessary to support the level of living described by the budget.[1]

Usually, such estimates have depended upon the selection of a specific family type which is taken as representative of a population in which both incomes and expenditures vary widely according to the size and composition of families. Thus, for example, it has often been assumed that a "typical" family of man, wife, and two school children could be used to represent all families in the population; and that while many families were smaller and many larger, the proportions of families above and below the budget level of living would be about the same for all family types as for the "typical" family.

This assumption cannot be justified, because neither family incomes nor the costs of family maintenance vary in direct proportion with the size of the family. Even if it were possible to describe an "average" family, in terms of the numbers and ages of its members, the costs of maintaining such a family would not prove to be the average for all family types.

[1] The latest calculations of this type in this country appear in the Twentieth Century Fund's report, "America's Needs and Resources."

Living costs, in relation to size of family, may be considered of two kinds: First, those which vary more directly with differences in the number and ages of family members; and second, those which are in the nature of "overhead" costs and vary comparatively little among different family types. Food, clothing, personal care, medical care, and movies are typical of costs that vary directly with family size. On the other hand, expenditures for household equipment, much of the home furnishings, and even the cost of housing itself are at least partly "overhead" costs. Accordingly, the cost of maintaining a family at a given level of living does not increase in direct proportion to the size of family. Successive additions to the family result in smaller and smaller additions to the cost. Although it is not true that "two can live as cheaply as one," it is quite clear that it does not cost twice as much for two as for one.

To determine accurately a scale of the cost of maintaining families of different sizes at the same level of material well-being, budgets analagous to the one presented in this bulletin should be prepared for the most representative types of each family size. These should include, at least, the single individual, both under and over 60 years of age, perhaps separately for men and women; the couple, under and over 60; the husband-wife family with two children and with three children; and the broken family with one and with two children. Such a scale of budgets, all expressing the same level of living, may eventually be completed.

In the meantime, there are pressing needs for estimates that will approximate the scale of differences in budget costs for families of different sizes. Such estimates, developed by the Bureau of Labor Statistics, are presented here.

Measures of Family Well-Being

Lacking over-all budget costs for different family types at the same level of living, we can infer the differences from characteristics which are themselves measures of general material well-being. For example, if the adequacy of diets is such a measure, the income or expenditure levels at which families of different types attained the same percentage of adequate diets can be compared; and from the

relationships between these income or expenditure levels, the differences between budget costs among family types at a given level of living can be deduced. Thus, if 50 percent of single-person families had adequate diets at $1,200 incomes, and 50 percent of two-person families at $1,800, and 50 percent of three-person families at $2,400, we might deduce that the costs of budgets at the same level of living would be about half again as much for two persons and twice as much for three persons as for one.

The last two decades have provided a wide variety of data by which we can relate one or more aspects of family living to the amount of family income. These range from general consumption studies to detailed studies of dietary adequacy, medical needs and medical care, and housing and household facilities. Comparisons of families of different sizes with respect to their actual expenditures would not yield a scale of differences in budget costs because they would include families at many different levels of living. On the other hand, families attaining the same degree of adequacy of diet or housing or medical care may be considered as at the same level of living; and the income levels at which families of different sizes attain the same degree of adequacy may be used to approximate the scale of differences between family types in the costs maintaining a given level of living. Other measures might be used, such as the percent of families owning various types of durable equipment; or the percentage of income spent on food or housing; or the percentage of income saved. Any one or a combination of these measures of family well-being could be used as a basis for determining a scale of equivalent incomes for families of different sizes at the same level of living.

Indexes of Family Welfare

Two separate scales have been developed, one based on the percentage of families with good or fair diets in terms of nutrition and another based on the percentage of income allocated to savings. These two indexes of family welfare are probably more independent of each other than any other pair that could be selected from the available information.

Analysis of the data revealed that the different family sizes tended to have the same set of percentage differences in income at each level of the index of family welfare.[2] For example, when four-person families managed to allocate 10 percent of their incomes to insurance, bonds, and other savings at an income level of about $3,200, three person families "saved" 10 percent of their incomes at an income level of about $2,700 and five person families "saved" 10 percent of their incomes at an income level of about $3,600. The relation between the income positions for families of different size was approximately the same when other levels of savings, such as 5 percent, were used in the calculation.

The percentage differences are shown in the table, in which the income of families of four persons is taken as 100. It should be noted that the two indexes of family welfare yielded quite similar scales of percentage differences.

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[2] The data on the percentage of familes in each income bracket having good or fair diets appear in table 16 in Miscellaneous Publication No. 452 (U. S. Department of Agriculture), Family Food Consumption and Dietary Levels. The incomes at which the same percentage of the families of several types achieved good or fair diets were determined from the table values by interpolation. Five levels were used, 60, 65, 70, 75, and 85 percent of families with good or fair diets. The incomes at which each size of family reached the specific percentage with good or fair diets were then related to the size of family and were found to be straight lines on a logarithmic scale. Furthermore, these lines were approximately parallel so that it may be concluded that the same relative scale for different sizes of family applies at each level of the indicator. The average relationship found was in algebraic form as follows:

$$\log y = a + .62 \log x$$

Where "y" is family income, "x" is the size of family and "a" depends on the level of the indicator.

The data on the percentage of income saved by families of different size are found in tables 3 and 4 of Serial No. R.1818 (Bureau of Labor Statistics), Expenditures and Savings of City Families in 1944; in table 19, Bulletin No. 822 (Bureau of Labor Statistics), Family Spending and Saving in Wartime, and in the bulletins on family expenditures from the Consumer Purchase Study. The incomes at which families of different sizes had savings or deficits amounting to the same percentage of income were determined from the table values by interpolation. Seven levels were used, deficits of 15 percent, 10 percent, and 5 percent; no savings or deficit; savings of 5 percent, 10 percent, and 15 percent. As in the case of the quality of diets, the incomes at which each size of family reached the specified level on the savings scale were found to be logarithmic straight lines in relation to the size of family and the lines were approximately parallel. The average relationship in this case was in algebraic form—

$$\log y = a + .59 \log x$$

Where "y" is the family income, "x" is the size of family and "a" depends on the level of savings.

Family incomes providing the same level of well-being among families of different sizes relative to incomes of 4-person families

Size of family	Relatives based on—	
	Adequacy of diets	Amounts of savings
1 person		46.0
2 persons	65.1	66.4
3 persons	83.7	84.4
4 persons	100.0	100.0
5 persons	114.8	114.1
6 persons	128.6	127.0

Although earlier budget studies have sometimes provided the basis for determining the quantities in the budget among families of different sizes, there have been only a few calculations of the cost of such budgets in the same place at the same time. It is of some interest to compare such calculations with the scale derived in this analysis. In its study, The Cost of Living Among Wage Earners in Cincinnati, Ohio, May 1920, the National Industrial Conference Board presented the cost of budgets for families of three to six persons. The costs of these budgets in relation to the four-person family were as follows:

Size of family:	*Cost of budget*
3 persons	81.0
4 persons	100.0
5 persons	113.9
6 persons	127.8

The scale derived through the simple analysis of the data on family living agrees very well with this scale determined by calculating the cost of family budgets.

The estimated scale can, accordingly, be used to estimate the cost of budgets for families of different sizes until more precise determinations are made available. Since the scale does not differentiate families by the age of the family head, it should be noted that the relative position of the one-person and two-person families is an averaging of the young and the old. It is quite possible that there are significant differences between "young" families and "old" families in the amount of income required to maintain the same level of living. Such differences need to be explored in further analyses of family living data and further development of budget studies.

State Budgets for Single Women Workers

HAZEL KEFAUVER [1]

STATE COST-OF-LIVING BUDGETS for working women are an outgrowth of certain provisions in State minimum-wage laws, and are primarily designed to show the annual income necessary to maintain a self-supporting woman in health. In nearly all the State laws that provide for the setting of minimum rates by administrative action, cost of living is one of the factors that the wage board must consider in recommending rates; in about half of them it is the only factor. Therefore, ever since 1913, when the first State minimum-wage law became effective, States have used a variety of means to arrive at an estimate of the money necessary for minimum-adequate living. Although none of the laws actually requires the construction of a budget, 11 States have found that special-purpose budgets are the most effective means of showing the needs of working women.

These budgets, developed by the States to meet this special situation, show the actual goods and services needed to maintain a woman in health and the amount of money necessary to purchase them at retail prices. With one exception they are built around the needs of an employed woman living alone. The current budget of Massachusetts, however, is unusual in that it is based on pricing for both men and women. Its official figure is for a "single person," a combination of separately priced budgets for the employed man and the employed woman, the total costs of which were in very close agreement.

[1] Of the Women's Bureau, U. S. Department of Labor.

The hypothetical woman (or person) for whom the State budgets are built is conceived to be completely self-supporting, i. e., she is not subsidized by her parents, by organized charity, or by any other source. She has no dependents. She has a job and leads a normal life, living in a respectable neighborhood, reasonably close to some form of public transportation. She eats nourishing food, properly prepared, and she is clean and well groomed, dressing in the same manner as her co-workers and her friends. The minimum-wage woman has the same expectancy as to the need for medical, dental, and optical care as does any other person. She participates in the life around her, reads newspapers and magazines, enjoys some type of recreation, and takes vacations. She eats candy and sodas and smokes cigarettes. She exchanges gifts with her friends on appropriate occasions and contributes annually to some charitable organization. In other words, the cost-of-living figure arrived at in these budgets represents the minimum needed by an employed worker without dependents to live adequately in terms of contemporary ideas and practices.

Annual Budgets

Cost-of-living budgets have been developed in 11 minimum-wage jurisdictions: Arizona, Colorado, Connecticut, District of Columbia, Kentucky, Massachusetts, New Jersey, New York, Pennsylvania, Utah, and Washington. Selected figures from each of these budgets are given in the accompanying table. However, no strict comparisons should be made of the figures of one State with those of another, as there are too many variables in the data to permit anything but a general comparison. For example, the living arrangements on which the budgets are set up differ and the costs of the different modes of living are not comparable in detail. Variations in the commodity and quantity allowances from budget to budget must also be taken into consideration when analyzing the figures. In addition, the differences in the insurance, savings, and tax allowances, which are not calculated on an entirely uniform basis, will bias a strict comparison of the total costs. Of particular significance in a period of rapidly changing prices is the fact that the money totals of these budgets relate to vari-

ous dates in the past 2 years. The effect of the differences in prices at those dates is apparent from changes in the Bureau of Labor Statistics consumers' price index. This index shows a 25.8 percent increase in prices from March 1946, the date of the earliest budget here presented, to September 1947, the date of the latest cost-of-living estimate contained in the table.

Annual cost of a minimum adequate budget for a self-supporting woman without dependents

State	Date of pricing or estimate	Commodities and services					Private insurance and savings	Taxes	Total budget
		Total	Housing	Food	Clothing	Other living essentials			
Arizona	March 1947 [1]	$1,563.00	$234.00	$651.00	$276.00	$402.00	$42.82	$247.53	$1,853.35
Colorado	March 1947 [1]	1,444.00	201.00	589.00	261.00	393.00	30.29	217.67	1,691.96
Connecticut	March 1946	1,258.55	252.76	593.02	167.55	245.22		202.61	1,461.16
District of Columbia	June 1947 [1]	1,363.44	824.72	[2]	264.68	274.04	177.78	236.58	1,777.80
Kentucky [3]	March–April 1946	1,340.97	274.79	560.56	237.20	268.42	22.39	198.86	1,562.22
		1,253.87	748.25	[2]	237.20	268.42	22.39	178.65	1,454.91
Massachusetts [4]	September–October 1946	1,336.38	233.48	617.07	168.99	316.84			1,336.38
New Jersey	December 1946 [1]	1,746.99	[5]	[5]	[5]	[5]	97.30	318.24	2,162.53
New York	September 1946	1,348.85	666.75	[2]	299.25	382.85	211.16	236.34	1,796.35
Pennsylvania	December 1946 [1]	1,610.83	198.39	729.26	276.00	407.18	81.03	273.09	1,964.95
Utah	September 1947 [1]	1,512.90	755.82	[2]	277.97	479.11	228.88	289.87	2,031.65
Washington	May 1947	1,721.64	321.36	681.87	244.56	473.85	[6] 50.00	276.85	2,048.49

[1] Revised estimate of budget priced at an earlier date.
[2] Food costs included with housing.
[3] Second set of figures for Kentucky represent costs for woman who lives in boarding house where all meals are provided.
[4] Figures apply to both men and women.
[5] No break-down available.
[6] Insurance only.

NOTE.—Reprints showing detailed money allowances for each category of each budget and tabulations of the commodity and service allowances for selected categories may be obtained from the Women's Bureau, U. S. Department of Labor.

The budgets of Connecticut, Kentucky, Massachusetts, New York, and Washington are the results of recent surveys. Five of the budgets [2] are estimates arrived at through application of appropriate components of the Bureau of Labor Statistics index to the surveys made in 1937, 1938, or 1939. New Jersey's budget is a revision of a 1942 survey. Although from time to time revisions and additions will be required to keep the lists of commodities and services current, the revised estimates based on the original studies are still valid and useful.

[EDITOR'S NOTE: An interesting commentary on the budget for a single working woman in the District of Columbia is afforded by comparison of the total cost of commodities and services with the total for commodities and services found in the Bureau of Labor Statistics' City Worker's Family Budget for the District in the table on page 30. Both were priced in June 1947. If the appropriate factor of .46 (see p. 51) is applied to the District total for the 4-person city worker's family to obtain the equivalent cost of commodities and services for one person, a total of about $1,430 is obtained. This compares with a $1,363 total required by a single working woman in the District.]

[2] Arizona, Colorado, District of Columbia, Pennsylvania, and Utah.

Basis for Pricing Budgets

In addition to the presumption of self-support and minimum-adequacy, each of the budgets makes use of available scientific and technical knowledge in the fields of nutrition, medicine, housing, and clothing, for the purpose of setting standards and ascertaining the worker's needs. Each budget is built around a given type of living arrangement. The budgets for Arizona, Colorado, Connecticut, Kentucky, Massachusetts, New Jersey, Pennsylvania, and Washington base costs of food and housing on prices of a furnished room and three restaurant meals a day. Utah, and Kentucky in its alternate budget, priced a furnished room in a boarding house where all meals are furnished. The District of Columbia bases costs for food and lodging on the average cost for a room in a boarding house where two meals a day are furnished and provides a supplemental food allowance for lunches eaten in restaurants. New York determines the budget for a woman living as a member of a family group, the woman's costs being derived from pricing food and housing as items of family expense, and allowing in the

budget the employed woman's proportionate share of the family expense for rent; for fuel used for lighting, heating, cooking, and refrigeration; for expense connected with replacement of household equipment; and for expense involved in laundry and other household operations, the latter incorporating the cost of the mother's services in connection with marketing and preparation of meals. The food allowance provides also for lunches eaten in restaurants.

Under "Other living essentials" all of the budgets provide for clothing upkeep, which is related to the clothing allowance; for personal care, which includes beauty-parlor services; for medical, dental, and optical care; recreation; education and reading; transportation; and miscellaneous expenses, such as contributions and gifts, candy and cigarettes, stationery, and postage. Only Kentucky does not specifically provide for vacation as part of recreation. The budgets for Arizona, Pennsylvania, and Washington make special allowances for occupational expense.

Private insurance, savings, and tax items are usually considered an integral part of a budget reflecting minimum needs. All but two of the States include private insurance and/or savings, and all but one of the States provide for taxes. Failure to include compulsory taxes would bring the actual standard of living below the adequacy level.

Usefulness of Budgets

Budgets are not meant to dictate the way in which a worker should spend her income. Differing preferences will result in different patterns of expenditure. Budgets serve their purpose if they provide an amount sufficient to permit a single working woman to keep her job and maintain her health and self-respect.

Although these 11 cost-of-living budgets were developed especially by minimum-wage agencies for use in the administration of their respective laws, they have been very useful for other purposes as well. Unions have used them to show the need for a higher contract rate in an industry to meet the cost of living. Personnel offices of both Government agencies and business houses have used them to indicate whether wages are adequate and to counsel with individual employees as to how earnings can be allocated to the best advantage.

Consumer Finances, July 1947[1]

AN INTERIM SURVEY of consumer finances was made by the Board of Governors of the Federal Reserve System in July 1947. It covered approximately 700 spending units [2] residing in 20 counties and 5 metropolitan areas scattered throughout the country. The methods and procedures were largely similar to those followed in the second annual survey conducted earlier in 1947, which was summarized in the September (p. 329) and November (p. 558) 1947 issues of the Monthly Labor Review. Since the sample was considerably smaller in July 1947 than in the previous surveys, however, the sampling error is larger and the findings less reliable than in the larger surveys. Nor was there as much information obtained as in the previous surveys.

Financial Status of Consumers

Almost two-fifths of the spending units interviewed indicated that their incomes were larger than a year earlier; only about one-fourth of the units said they were making less money. Frequent indications of wage-rate and salary increases in this survey, together with increases shown during the year in the Department of Commerce aggregate data for the rate of personal income, make it appear likely that the median income of all spending units increased further from 1946 to 1947.

Liquid asset holdings (U. S. Government bonds and bank accounts) of large numbers of spending units were reduced during the first 7 months of 1947, although other units continued to augment their holdings. Most consumers who spent their liquid assets, particularly those in the lower income groups, used them to meet general living expenses. The purchase of houses and other types of investments was next in frequency.

Consumer Expectations

Consumers were generally optimistic about their future financial status. The majority of spending units expected good times to continue during the next year, and more units expected their incomes to increase than to decrease.

Price expectations changed considerably during the period of these surveys. In February 1946, 53 percent of the spending units expected prices to go up and only 8 percent expected a decline; by the beginning of 1947 these attitudes were largely reversed—13 percent expected price increases and 46 percent, price decreases. By midyear 1947, a greater proportion of the spending units (32 percent) again anticipated rising prices and relatively fewer (29 percent) expected prices to decline. However, it seems that many consumers' price expectations have not had any substantial effect on their buying plans, particularly for consumer durable goods.

Consumer Expenditures and Plans to Buy

About two-thirds of the spending units interviewed reported that they had spent more for food since the beginning of the year, and about three-fifths felt that they were buying less clothing than usual. The proportion of spending units that had bought automobiles and other selected durable goods in the first 7 months approximated the percentage which had indicated intentions to do so in the previous survey. However, home purchases through July totaled only about half of the prospective purchases of houses at the beginning of the year.

In general, this survey does not indicate that the level of prices in July had discouraged consumer plans for purchase of durable goods or houses in the year following July 1947 to such a degree as to suggest an early decline in expenditures for these items. Nevertheless, a considerable number of spending units stated that they were not planning to purchase automobiles or houses in the next year because of high prices.

[1] Federal Reserve Bulletin, October 1947. The article summarized gives the results of the interim Survey of Consumer Finances of the Board of Governors of the Federal Reserve System, based on interviews taken during the last 2 weeks of July 1947. The results of the first annual Survey of Consumer Finances, made early in 1946, and the second survey in early 1947 were published in the June, July, and August issues of the Federal Reserve Bulletin for those years.

[2] Defined as all persons living in the same dwelling and belonging to the same family who pooled their incomes to meet their major expenses.

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