Report:

COST OF LIVING IN 1980 FOR LOW-INCOME FAMILIES IN WASHINGTON STATE

ANALYSIS and INFORMATION SERVICES DIVISION

06-15

COST OF LIVING IN 1980

FOR LOW-INCOME FAMILIES

IN WASHINGTON STATE

Russell M. Lidman, Ph.D.
Thomas M. Sykes, Ph.D.

Alice Wing Jordan
Elise Highberger
David Pavelchek
Nam Dinh Le

January 1981

Office of Research
Analysis & Information Services Division
Department of Social and Health Services
Olympia, Washington 98504

STATE OF WASHINGTON
John Spellman, Governor

DEPARTMENT OF SOCIAL AND HEALTH SERVICES
Gerald E. Thomas, Acting Secretary

ANALYSIS AND INFORMATION SERVICES DIVISION
Katherine S. Sherman, Director

OFFICE OF RESEARCH
Gary W. Johnson, Chief

Olympia, Washington 98504

January 1981

Library of Congress
Catalog Card Number
81-620005

ACKNOWLEDGEMENTS

This study was conducted with the assistance of many people in addition to those employed on the project.

Howard Maxwell, Office of Information Systems - DSHS, did the computer work on much of the data collected by project staff. Data runs from files maintained by other government agencies were done for us by: David Armstrong, Bonneville Power Administration (Portland); Ed Fu, U. S. Department of Labor (Washington, D.C.); and Brian Limotti, Washington State Department of Transportation.

John Taylor, area economist for the U. S. Department of Housing and Urban Development, Region X - Seattle, assisted in many ways with data for the housing cost component.

Terry Esvelt and Mark Roberts, Bonneville Power Administration, assisted by providing data from their household survey of energy utilization in the Northwest. Their assistance was invaluable to the completion of this study.

Wayne Johnson, Oregon Department of Human Resources, advised us in the early stages of the study and provided detailed information from the 1977 Oregon study.

A consulting committee within DSHS assisted in setting the scope of the study and reviewing its progress. The assistance of the following individuals is appreciated: Dave Andersen, Laurie Evans, Ruth King, Dick Ritchie, Betty Rutten, Cathy Wiggins and Dick Wright.

The work of Mark Worthington (Urban Systems Research and Engineering), Charlene Martinsen (University of Washington), Joanne Ross (Washington State University and U. S. Department of Agriculture), and Lance Jensen (Jensen Price Surveys, Inc.) was critical to the development of the project and its successful conclusion.

Lee Bomberger, Chief, Office of Research and Data Analysis, and Gary Johnson, Chief, Office of Research, spent considerable time in liaison work for the project and assisted in editing the final report.

Many other persons, too numerous to name, provided information or suggested other sources of data. We followed many of these leads with productive results.

Finally, the production of a report of this kind requires the efforts of those who type it. For typing perhaps too many versions, we thank Terry Otto, Kathy Erickson, Gaylea Morris, and Dana Cooper in the Office of Research and Darlene Anderson and Kathy Edenstrom from the Word Processing Center. For assistance in coordinating this work we thank Paula Good.

TABLE OF CONTENTS

	Page
EXECUTIVE SUMMARY	1
CHAPTER 1: INTRODUCTION	5
A. Objectives	5
B. Legal and Administrative Requirements	5
C. Concept and Measurement of a Low-Income Living Standard	6
D. Outline of the Report	7
CHAPTER 2: METHODS	9
A. The Market Basket Approach	9
B. Scope of the Survey: Units of Analysis, Sample Counties and Equivalence Scales	10
C. Data Collection: Determining Consumption Standards	11
D. Data Collection: Pricing Methods	15
E. Data Processing	16
CHAPTER 3: SUMMARY OF FINDINGS	17
A. Cost of Living: Family of Four	17
B. Cost of Living: Elderly Individual	17
C. Cost of Living: Other Sizes of Families	18
D. Resources Available to Low-Income Families on Assistance	18
CHAPTER 4: BASIC REQUIREMENTS	27
A. Food	27
B. Shelter: Housing	33
C. Shelter: Fuel	37
D. Transportation	40
E. Household Maintenance, Clothing and Personal Care/ Medicinal Supplies Components	44

Page

1. Introduction 44

2. Household Maintenance 46

a. Utilities 46
b. Household Supplies 47
c. Household Operations 47
d. Housewares and Linens 48

3. Clothing 49

4. Personal Care and Medicinal Supplies 50

5. Miscellaneous 50

6. Cost Data 51

CHAPTER 5: SUPPLEMENTARY COMPONENTS 55

A. School Fees and Supplies 55

B. Toys, Games, and Gifts 57

C. Minor Home Appliances and Home Furnishings 57

D. Summary 58

CHAPTER 6: UPDATING THE COST OF LIVING STUDY 63

A. How a Living Standard Can Obsolesce 63

B. Means of Adjusting the Living Standard 63

C. Proposed Procedure 65

APPENDICES 67

APPENDIX A: Food Component 67

APPENDIX B: Shelter: Housing 95

APPENDIX C: Shelter Fuels: Calculation of Heating Costs . . . 99

APPENDIX D: Transportation 101

APPENDIX E: Household Maintenance, Clothing, Personal Care, and Medicinal Supplies 107

Telephone Rates 108
Adjustment for Electrical Consumption by Washers and Dryers in BPA Data 109
Household Supplies 110
Sewing Supplies 111
Household Management 112

Page

Laundry 113
Housewares 114
Household Linens 116
Clothing 117
Personal Care 124
Medicinal Supplies 125

APPENDIX F: School Supplies Building Block 127

APPENDIX G: Data Analysis Codes 129

LIST OF TABLES

		Page
Chapter 2:		
Table 2.1	Weights to Calculate Statewide Cost of Living	12
Table 2.2	Equivalence Scale for Adult Households	13
Table 2.3	Equivalence Scale for Families with Children	13
Chapter 3:		
Table 3.1	Cost of Living: Family of Four and Elderly Individual	19
Table 3.2	Family of Four: Basic Requirements	20
	Family of Four: Supplementary Components	21
Table 3.3	Elderly Individual: Basic Requirements	22
	Elderly Individual: Supplementary Components	23
Table 3.4	Cost of Basic Requirements for Families of Different Types and Sizes (Weighted, Statewide Average Costs)	24
Table 3.5	Resources Available to Families on Public Assistance	25
Chapter 4:		
Table 4.1	Monthly Cost Data for Food Component	32
Table 4.2	Cost Data for Shelter-Housing	36
Table 4.3	Cost Data for Shelter-Fuels	39
Table 4.4	Transportation Costs by Private Automobile	43
Table 4.5	Family of Four: Monthly Cost Data for Household Maintenance, Clothing, Personal Care, Medicinal Supplies, and Miscellaneous Components	52
Table 4.6	Elderly Individual: Monthly Cost Data for Household Maintenance, Clothing, Personal Care, Medicinal Supplies, and Miscellaneous Components	53

Page

Chapter 5:

Table 5.1 Cost Data for School Supplies/Fees Building Block . . 59

Table 5.2 Cost Data for Minor Appliances Building Block 60

Table 5.3 Family of Four: Supplementary Components 61

Table 5.4 Elderly Individual: Supplementary Components 62

APPENDICES

Table A.1 Original Thrifty Food Plan. 68

Table A.2 Revised Thrifty Food Plan 73

Table A.3 Food Plan for One 78

Table A.4 Monthly Consumption Quantities for Three Food Plans . 83

Table A.5 Average Prices of Food Items. 89

Table A.6 Cost of the Original Thrifty Food Plan 93

Table B.1 Fair Market Rent (FMR) Calculations 96

Table B.2 Comparison of Rent Estimates, Family of Four: Two Bedroom Units 97

Table B.3 Comparison of Rent Estimates, Elderly Household: Studio-Type Unit. 98

Table C.1 Calculation of Fuel Cost from BPA Data. 100

Table D.1 Private Transportation - Family of Four 103

Table D.2 Private Transportation - Elderly Individual 104

Table D.3 Public Transportation 105

Table E.1 Minimum Residential Telephone Rates for Four-Party Phone Service 108

Table E.2 Household Supplies. 110

Table E.3 Sewing Supplies 111

Table E.4 Household Management. 112

Table E.5 Laundry - Dry Clean Rates 113

Table E.6 Housewares 114

Page

Table E.7 Household Linens. 116

Table E.8: Quantity Standards for Clothing: Child, 3 Years Old 118

Table E.9 Quantity Standards for Clothing: Girl 9 Years Old. . 119

Table E.10 Quantity Standards for Clothing: Male 13 Years or Older 120

Table E.11 Quantity Standards for Clothing: Woman - Adult . . . 121

Table E.12 Quantity Standards for Clothing: Woman - Elderly . . 123

Table E.13 Personal Care 124

Table E.14 Medicinal Supplies. 125

Table F.1 School Supplies Price Data. 128

EXECUTIVE SUMMARY

Washington State law requires that the development of a need standard for public assistance recipients use objective budgetary guides based upon actual living cost studies.[1] To meet this requirement, a study was conducted by the Office of Research, Department of Social and Health Services, between July 1, 1980 and December 31, 1980.

Objectives

The primary goal of the study was to develop detailed information on a minimal but adequate cost of living for low-income persons in Washington State. Its specific objectives were:

1. To revise and document the procedures and techniques used to develop estimates of such costs;

2. To develop detailed costs of specific budget components for low-income families;

3. To identify differences in requirements based upon family size, geographic area, age, sex, and economies of scale; and

4. To establish methods for periodic adjustment of the estimates to reflect changes in the cost of living in Washington State.

Methods

Four general approaches were used in the 1980 Cost of Living Study: (1) consumption categories were specified for basic requirements and some supplemental needs; (2) a market basket approach was used to determine costs of these goods and services in October 1980 prices; (3) two model families (a family of four and a single, elderly individual) were used as archetypal consumption units and equivalence scales were used to estimate costs for families of different sizes; and (4) seven sample counties were selected in which to collect cost of living data. Each of these is discussed below.

Basic and Supplemental Requirements: Consumption categories were specified after thorough review of studies conducted in Washington (1974), in Oregon (1977-78), in New Jersey (1980), and in Maryland (1979). These data were compared to information in the Bureau of Labor Statistics (U.S. Department of Labor) Lower Level Living Standard.

In this study, a list of basic requirements was developed that comprised these components: food, shelter (housing), shelter (fuel), transportation, household maintenance (utilities, supplies, operations, housewares/linens), clothing, personal care, and medicinal supplies.

---

[1] RCW 74.08.040 and WAC 388-29-010.

The basic categories did not include expenditures for restaurant meals; home ownership; exterior or interior home repair or decoration; furniture or appliance purchase or repair; television or other home entertainment equipment purchase or repair; vacation or local recreational travel; admissions to movies, plays, school or other sporting events; medical services; magazine subscriptions; charitable or religious contributions; purchase of toys, games, and gifts; alcohol or tobacco; and basic school fees and supplies. Four of these expenditure categories -- school fees and supplies, small appliances, home furnishings, and toys, games, and gifts -- were identified as supplemental components.

The costs of medical care were not included in the estimate. Although medical care is obviously a part of basic requirements, developing a pricing methodology for such care was not feasible. Data on utilization of medical services and related costs for low-income families are not available by family size and type. Consequently, any dollar amount that could have been produced for our model family types would have been subject to substantial error. Medical care needs for the model family units were assumed to be met through Medicaid and related programs administered through DSHS, through county-level public health programs and services, or through private resources, both community and individual.

Market Basket Method: Washington is one of approximately 20 states that rely primarily on the market basket approach in determining a minimal but adequate cost of living. This approach in principle is relatively uncomplicated. Consumption estimates of basic requirements, in terms of the quality and quantities of specific goods and services, were developed after a systematic review of other cost of living studies and after consultants advised on appropriate consumption norms for the items in each category. These lists of items were then priced in retail outlets or from service providers from which the low-income population would be expected to purchase.

Costs of the goods and services that comprise the consumption categories reflect market prices. While some families may themselves produce some or all of these goods and services, these families constitute exceptions. Collecting market price data is part of the methodology of the market basket approach. Decisions were made on what the low-income population ought to be able to consume, regardless of the actual consumption choices they might make. This normative approach reflects the conventional market basket methodology. These decisions, however, were based on both research findings and the advice of consultants. Individual opinions and judgments of project staff were minimized.

Units of Analysis: As the result of a decision to limit the range of the pricing study, two model low-income families were chosen for three reasons. First, this approach allowed the research team to devote a larger block of time to developing and pricing each market basket.

Second, the Bureau of Labor Statistics has devoted considerable attention to households of four persons, and other data producers have followed their lead. The data for a four-person household was extensive. Third, measures which indicate equivalent levels of income for families of different size are available, and the accuracy of these equivalence scales has been carefully examined.

The two model family units consisted of (a) a female-headed family of four (a mother aged 35, and three children, ages 13, 9, and 3), and (b) a single elderly woman, aged over 65, and living alone. This allowed us to represent accurately the costs of households of low-income families with children and of households comprised of low-income elderly persons. The alternative would have been to construct a large number of model families, reflective of age, sex, employment status, location of residence, type of residence and household size variations.

Sample Counties: Four criteria were used to select seven representative counties for pricing the two market baskets. Western and eastern divisions of the state were reflected in the choice of King, Pierce, Thurston, and Whatcom counties in Western Washington and Spokane, Franklin, and Yakima counties in Eastern Washington. Urban-rural divisions were also reflected in the choices. These counties included approximately 64 percent of welfare client caseloads in October 1980. Finally, all six DSHS regions were represented in the sample. Calculations on a statewide basis give costs in the more populous counties more weight than costs in the less populous ones.

Findings

What is a minimal but adequate cost of living in Washington State, in October 1980 prices? For a family of four and an elderly individual, the cost of living for basic requirements is, respectively, $707.53 and $372.85. If supplementary components were also included, costs would increase to $728.93 and $379.30.

If these model families were receiving public assistance at the levels in effect on November 1, 1980, their benefits, excluding medical assistance, would total $628.55 and $355.64, respectively.

What are the costs associated with maintaining families of different sizes? Using the appropriate equivalence scales, costs for families of different types and sizes may be determined. For example, the typical AFDC-R family in Washington State has three members -- a mother and two children. Using the equivalence scale, we find that costs associated with maintaining a family of this size at a minimal but adequate level are $566.02 per month. If a family of three (a mother and two minor children) were receiving public assistance at the November 1, 1980 levels, the statewide, weighted average benefits would be $531.55. These estimated benefits consist of basic grant, food stamps, and energy assistance. Medical benefits were not calculated; neither were medical costs. Family units of other sizes have costs in proportion to the number and kinds of persons in each.

Future Use of the Study

In a time of escalating prices and changing consumption patterns, the accuracy of a cost of living study diminishes with time. The final report examines possible methods of updating the information and recommends procedures to follow every year, every five years, every ten years, and as needed. The estimates of costs of basic necessities can be updated on a regular basis at relatively low cost.

CHAPTER 1: INTRODUCTION

Standards for public assistance to needy families and individuals are determined by the Department of Social and Health Services. State law requires that DSHS establish such standards after conducting periodic studies of the cost of living. The Office of Research, DSHS, undertook a study of the cost of living for low-income families between July 1 and December 31, 1980.

A. Objectives

The primary goal of this study was to develop detailed information on the costs associated with a minimal but adequate living for low-income persons in Washington State. Its specific objectives were:

1. To revise and document the procedures and techniques used to develop estimates of such costs;

2. To develop detailed costs of specific budget components for low-income families;

3. To identify differences in requirements based upon family size, geographic area, age, sex, and economies of scale; and

4. To establish specific methods for periodic adjustment of the estimates to reflect changes in the cost of living in Washington.

B. Legal and Administrative Requirements

State law requires the Department of Social and Health Services to establish public assistance standards that reflect recipients' living requirements and include "...reasonable allowances for shelter, fuel, food, clothing, household maintenance and operation, personal maintenance and necessary incidentals."[1] The law further requires the Department to establish "...objective budgetary guides based upon actual living cost studies of the items of the budget." This law, and its accompanying administrative regulations,[2] require a market basket survey to determine the quality and quantity of consumption items and the monthly cost of these items.[3]

[1] RCW 74.08.040.
[2] WAC 388-29-010.
[3] Federal law had no impact on state need standards prior to 1967. The Social Security Act Amendments of that year, Section 402(a) (23) of the Act, required states to update their AFDC need standards by July 1969 to reflect cost of living increases. The amendment was less stringent than Washington State law in that it required only a one-time cost of living adjustment. Neither federal law nor two U.S. Supreme Court rulings which touch on the need standard issue describe how states ought to devise or construct their need standards. Rosado v. Wyman (1970) holds that the update required by the 1967 Amendments must be accurate, even if a state's grants do not meet the need. In Jefferson v. Hackney (1972) the Court commented that an outcome of Section 402(a) (23) would be to require a state to acknowledge publicly the extent to which its AFDC programs fall short of need.

According to a comprehensive study of need standards,[4] Washington is one of 20 states using the market basket approach. Other states rely on expenditure surveys, custom, and the Lower Level Living Standard of the Bureau of Labor Statistics (U.S. Department of Labor). The need standard was reviewed twice in the recent past in Washington State: once in order to comply with the 1967 Social Security Act Amendments and later, in 1974-75, in order to assess the impact of grant consolidation activities.[5] The effort described in this report provides the cost of living study required to develop a need standard.

C. Concept and Measurement of a Low-Income Living Standard

The key question to which this study is addressed is: how much do low-income families in Washington State need in order to live at a minimal but adequate level? This concept of need guided the research of this study.

Researchers who have worked on the subject of need and poverty income generally adopt one of two general positions. Some argue that only relative deprivation is significant. Those in this school state that as a society we have long since passed the point where the paying public can afford to meet only the most elemental survival needs of the indigent. This was a function of the alms house of the last century. Rather, they suggest that the most sensible approach to defining need is with reference to the consumption opportunities of middle income households. A committee charged by the Bureau of Labor Statistics to look into issues related to levels of living has recently proposed that the social minimum ought to be considered to be roughly half of the median income, adjusted for family size.[6] They contend that need will be acute whenever the relative income gap between those at the bottom and those at the middle of income distributions is large.

Whatever the theoretical merits of the above position, the more common approach has been to measure absolute needs. Adherents to this approach argue that particular levels of living require definable incomes. A well-known practitioner of this approach is the Bureau of Labor Statistics (BLS). This agency has constructed and annually prices out market basket, or workers' family budgets, for urban families of four at lower, middle, or higher levels of living. Their three levels describe modest variations around a middle income living standard.

---

[4]Mark Worthington, et. al., AFDC Standards of Need: An Evaluation of Current Practices, Alternative Approaches and Policy Options (Report prepared by Urban Systems Research and Engineering, Inc., for the Office of Research and Statistics, Social Security Administration, U.S. Department of Health and Human Services) (Cambridge, Massachusetts, 1980), Chapter 4.

[5]Office of Program Analysis and Standards, Planning and Research Division, DSHS, Review of Standards for Grant Assistance (Olympia: 1975).

[6]University of Wisconsin, Institute for Research on Poverty, New American Family Budget Standards (Report by the BLS Expert Committee on Family Budget Revisions) (Madison, Wisconsin, 1980). See also Harold W. Watts, "Panel suggests changes in BLS Family Budget Program," Monthly Labor Review, 103 (December 1980), pp. 3-10.

The calculation of official federal Office of Management and Budget poverty lines also proceeds from the absolute approach. First devised by Mollie Orshansky in 1965, the cost of an essential food budget is first calculated. The basis of the calculation was the U.S. Department of Agriculture (USDA) Economy Food Plan and is now the Thrifty Food Plan. The families' food needs are then scaled up by a multiplier to reflect the cost of a complete market basket of necessities. The multiplier of 3, which has been used, was developed from work on the 1962-63 Consumer Expenditure Survey, which showed that the lowest income groups spent at least one-third of their incomes on food.

The BLS Expert Committee on Family Budgets challenged absolute need standards in their report. They questioned the degree to which the calculation of absolute standards relies on expert judgments. They contended that only for food and housing is there a consensus among experts on essential requirements. However, a dissenting member of that committee took issue with this position. Anne Draper, an economist with the AFL-CIO, argued that the quantity (market basket) approach serves a number of useful purposes. She contended that detailed consumption lists are useful in determining necessary costs for various standards of living. Lists help answer the questions of how much a family needs to buy and how much basic requirements cost.

The adoption of a market basket which meets minimal, but adequate, needs requires that the basket be subjected to three tests. First, it should reflect the best available studies of consumption patterns and of the responsiveness of these patterns to relative and absolute price changes. Second, the market basket should reflect the best judgment of experts in those areas, such as food and housing, where an expenditure shortfall is apt to have an adverse impact on the low-income population. Third, it should make sense. The typical citizen should be able to understand the appropriateness of the market basket, absent his or her exposure to the technical consumption studies which underlie it. These tests have been applied to the research, data collection and data analysis that have gone into this report.

D. Outline of the Report

Chapter 2 presents an overview of methods used in the Cost of Living Study. Chapter 3 summarizes the findings of the study and calculates a living standard for low-income family units of various sizes. Chapter 4 presents in detail the calculation of the components that comprise the basic necessities. Chapter 5 examines supplementary components that might be included in building blocks. Chapter 6 presents a method for updating the study. Details of the items in consumption categories and of pricing methods are reported in the Appendices.

CHAPTER 2: METHODS

A. The Market Basket Approach

Washington is one of approximately 20 states which rely primarily on the market basket approach to determine the cost of living for low-income households. This approach is relatively uncomplicated in principle. One first compiles a list of items that meet basic needs and reflect the consumption choices that prudent low-income families might make. One then prices these items in the retail outlets or among the service providers from whom the low-income population would be expected to purchase. The simplicity of the principle contrasts with the practical problems one faces in computing the living standard.

There is no widely agreed upon methodology to assist in developing a market basket list. Each state follows a different procedure, often based on custom. Washington's prior studies proved to be of only limited value, since supporting documentation proved difficult to locate and better measurement procedures have since become available. After carefully reviewing the previous work, we determined that Washington's market basket lists ought to be freshly compiled.

The determination of the components of the market basket follows, in part, a normative process. Decisions have been made on what the low-income population ought to be able to consume, regardless of the actual consumption choices they might make. The market basket approach requires that these value judgments be made. For example, it is quite likely that many heads of households smoke cigarettes. Following an empirical approach, one would include an allowance for cigarettes in the list. However, cigarettes are not a biological or even a social necessity. Therefore, we did not include them. The question of whether a family consumes exactly the market basket we have defined is not the central issue.

At the same time, the market basket cannot deviate dramatically from the actual consumption practices of the target population. Nearly all of the components reflect some combination of what people ought to consume and what they actually do consume, though the weight applied to each approach varies. Several examples illustrate this. The food component was based on the Thrifty Food Plan of the U.S. Department of Agriculture (USDA). The Thrifty Food Plan is the basis for the food stamp allotment. It is the least costly of the four food plans designed by the USDA to serve as model family diets. It was designed to meet fully the nutritional needs of low-income families (a normative approach) and to reflect food consumption preferences of that population (an empirical approach). This plan was designed for a national low-income population and, as such, contains food choices that may be inappropriate for Washington's population. In addition, research and analyses subsequent to its issuance in 1974 have pointed out shortcomings in it. Therefore, modifications of the Thrifty Food Plan were required in the present study.

The shelter housing component was based on the Fair Market Rent (FMR) studies of the U.S. Department of Housing and Urban Development (HUD). Many low-income households are renters. In determining the appropriate size of the allowance, one could take simply the median monthly rent paid by low-income families on public assistance. The shortcoming of this approach is that some households live in dilapidated or otherwise substandard housing. Assuming such housing is inexpensive, a downward bias in median rental costs would be introduced.

The preferred approach is to obtain a measure of the median cost of that housing which meets basic standards of health, safety, and decency. To calculate FMRs, HUD conducts annual surveys of housing quality and costs. From these surveys, one can obtain measures of the median cost of housing which meets HUD's minimum standards of adequacy. It is a normative decision that rental cost estimates should not include substandard units. Following HUD, we excluded from our calculation that housing which was substandard with respect to vermin, plumbing, wiring, or other safety and health concerns. As described in Chapter 4, we took as the rental cost for the housing component the HUD Fair Market Rent; this value is at the 50th percentile in the distribution of residential rents for standard or better units, controlling for number of bedrooms. (The appropriate number of bedrooms is a function of household size.) Fair Market Rents are published for each county in Washington State.

The discussion of these two large components describes the general approach we followed. We found more research had been done or more data were available for these components than for some others such as household supplies, clothing, and personal care items. Part of the explanation for this involves the lesser significance of the latter items. Beyond that, the standards for delineating a precise necessity/nonnecessity boundary for components such as these remain subject to debate.

B. Scope of the Survey: Units of Analysis, Sample Counties, and Equivalence Scales

1. Units of Analysis

We chose to limit the number of possible family configurations for which we developed market baskets. We selected two model family units: a female-headed family of four (a mother aged 35, and three children, ages 13, 9, and 3); and a single elderly woman, aged over 65, and living alone. This allowed us to represent accurately the costs facing low-income households with children and those comprised of elderly persons.

Limiting the number of market baskets to two was preferable for three reasons. First, it allowed the research team to devote a larger block of time to each. Second, the Bureau of Labor Statistics has devoted considerable attention to households of four persons, and other data producers have followed their lead. The data for a household of four was extensive. Third, the measures which indicate equivalent levels of income for families of different size have been developed on a sound and reasonable basis. If the relationship between our market baskets for

different family sizes differed by very much from these equivalence scales, we would suspect an error. The accuracy of existing equivalence scales was carefully explored before using them in this study.

2. Selection of Sample Counties

Four criteria were used to select seven representative counties for pricing the two market baskets. Western and eastern divisions of the state were reflected in the choice of King, Pierce, Thurston, and Whatcom counties in Western Washington, and Spokane, Franklin, and Yakima counties in Eastern Washington. Urban-rural divisions were also reflected in the choices. These counties included approximately 64 percent of the welfare client caseload in October 1980. Finally, all six DSHS regions were represented in the sample.

All calculations of cost data on a statewide basis give costs in the more populous counties more weight than costs in the less populous ones. These weights are shown in Table 2.1. Average costs for consumption categories are multiplied by the appropriate county weight; results are summed for a statewide, weighted average cost for each consumption category.

3. Use of Equivalence Scales

Having decided to use two model family units, we devised a method to calculate the cost of living for families of varying sizes. The equivalence scale used is one developed by the Bureau of Labor Statistics Expert Committee on Family Budgets. Their research on equivalence scales led to slight revisions of previous ones used in establishing poverty-line cut-off figures. In their work, the Expert Committee pegged the single aged person at 0.5 of the family of four. We determined the scale for the one aged/one nonaged family unit by interpolation of their work. Two sets of scales (Tables 2.2 and 2.3) were used in this study to provide cost of living estimates for families of different sizes than the model families.

C. Determining Consumption Standards

Choosing a market basket survey methodology demands the specification of a bundle of consumption goods, quantities to be consumed and prevailing market prices. Any market basket survey can be criticized for the individual judgments made in specifying both the types and quantities of items. In the current study, external validation was sought for the quality and quantity choices that were made. External validation came from two specific sources: previous cost of living studies and expert advice from knowledgeable consultants. Thus, the subjective judgments of individual project staff were minimized.

TABLE 2.1: WEIGHTS TO CALCULATE STATEWIDE COST OF LIVING

	COUNTY*	FAMILY OF FOUR	SINGLE WOMAN
1.	King	.3255	.3675
2.	Pierce	.1965	.1382
3.	Thurston	.1731	.1593
4.	Whatcom	.0471	.0501
5.	Spokane	.0947	.0902
6.	Franklin	.0955	.1018
7.	Yakima	.0676	.0929
		1.0000	1.0000

*These weights were calculated according to the proportions of the AFDC-R and SSI client populations represented by the seven sample counties. The sample counties and the areas they represent are: King: King and Snohomish counties; Pierce: Pierce and Kitsap Counties; Thurston: DSHS Region 6; Whatcom: DSHS Region 3, excluding Snohomish county; Spokane: Spokane and Whitman counties; Yakima: Yakima and Kittitas counties; Franklin: remaining counties in DSHS Regions 1 and 2.

TABLE 2.2: EQUIVALENCE SCALE FOR ADULT HOUSEHOLDS

PERSONS	SCALE VALUE
1 aged	1.00
1 nonaged	1.08
2 aged	1.22
1 aged/1 nonaged	1.28
2 nonaged	1.34

TABLE 2.3: EQUIVALENCE SCALE FOR FAMILIES WITH CHILDREN

PERSONS	SCALE VALUE
1*	.54
2	.67
3	.80
4	1.00
5	1.20
6	1.39
7	1.57
8	1.74
9	1.90
10	2.05
11	2.19
12	2.32
13+	2.32 + .12 for each over 12

*Expectant mother

In recent years only two states have done extensive market basket surveys. The 1974 study in Washington State reviewed the standards then in effect. The methodology of that study provided one of the comparison bases for the present study. The 1977 Oregon Public Assistance Standards Pricing Study, conducted by staff of its Department of Human Resources, Income Maintenance Section, provided another source of comparison data. Approaches and lists developed for a study currently being conducted in New Jersey by the National Social Science and Law Project were also examined. Data from these studies were buttressed with information from the BLS Lower Level Living Standard. For the food component, the Thrifty Food Plan developed by the U.S. Department of Agriculture provided the basic document. All lists were compiled and contrasted to provide reference points for consultants who provided expert advice.

Mark Worthington, an economist at Urban Systems Research and Engineering (Cambridge, Massachusetts), recently conducted an evaluation of need standards for the Office of Research and Statistics of the Social Security Administration and a separate, but related, study for the Governor's Commission on Welfare Grants in Maryland. Mr. Worthington reviewed our general methodology and provided advice on alternative approaches. As a person who has reviewed other market basket studies, he provided the kind of expert review necessary in formulating an appropriate methodology.

Dr. Charlene Martinsen undertook two tasks: to review the nutritional adequacy of the Thrifty Food Plan and to provide appropriate "minimal but adequate" food plans for a family of four and a single, elderly woman. As a nutritionist experienced in extension and research work with low-income families, Dr. Martinsen brought the kind of expertise needed to evaluate and revise the existing food plan. Her work on the food component was complemented by that of Mr. Lance Jensen of Jensen Price Surveys, a firm that analyzes pricing patterns in the grocery industry in Washington State. Mr. Jensen advised on the statewide availability of items, size and quantity specification, and methods for pricing food items on a statewide basis. Staff from his firm conducted the data collection for the items available in supermarkets.

A fourth person was hired to review lists of clothing, household operations, housewares and linens, and personal care items. Ms. Joanne Ross, a clothing expert with the Washington State University/U.S. Department of Agriculture Extension Service, provided advice on the types of items and the annual quantities needed. Her work yielded the details of components that were then priced in retail outlets in each of our sample counties.

In this study, a list of basic requirements was developed that comprised these components: food, shelter (housing), shelter (fuel), transportation, household maintenance (utilities, supplies, operations, housewares/linens), clothing, personal care, and medicinal supplies.

The basic categories <u>did not</u> include expenditures for restaurant meals; home ownership; exterior or interior home repair or decoration; furniture or appliance purchase or repair; television or other home

entertainment equipment purchase or repair; vacation or local recreational travel, admissions to movies, plays, school or other sporting events; medical services; magazine subscriptions; charitable or religious contributions; purchase of toys, games, and gifts; alcohol or tobacco; and basic school fees and supplies. Four of these expenditure categories -- school fees and supplies, small appliances, home furnishings, and toys, games, and gifts -- were identified as supplemental components.

The costs of medical care were not included in the estimate, although medical care is obviously a part of basic requirements. A pricing methodology for such a medical care standard, were it to be developed, would be difficult to apply. Data on utilization of medical services and on costs for low-income families are not available by family size and type. Consequently, any dollar amount that could have been produced for our model family types would have been subject to substantial error. Medical care needs have been assumed to be met through Medicaid and related programs administered through DSHS, through county-level public health programs and services, or through private resources, both community and individual.

D. Pricing Methods

Once lists of items and quantities of these items in each consumption category were agreed upon, price data were collected on a statewide basis. Prices on components were determined in two ways.

First, those for food, clothing, household supplies, and personal care items were collected in supermarkets and department stores across the state. Food items were priced in three supermarkets in six of the seven sample counties. Urban, suburban, and rural stores were selected in each county. Nine stores (three urban, three suburban, and three rural) were selected in King County, because of its population and significance in developing budget estimates. Supermarket sites were selected in consultation with DSHS staff from local Community Services Offices. Some personal care items and household supplies were also priced in these supermarkets.

Upon the recommendation of our consultant, most nonfood items were priced in K-Mart department stores. Price data were collected in one outlet in each of the seven sample counties. A few items were priced from a Sears catalog and from a discount drug store.

Second, calculation of expenditures for goods and services not available in supermarkets or discount stores (housing, utilities, fuels, transportation, laundry, and dry cleaning) relied on other methods: analysis of survey data, Washington State Utility and Transportation Commission rate schedules, industry sources, and a variety of published data sources. The methods used for the various components are outlined in detail in Chapter 4.

Whatever the method of data collection used, the goal was to produce an accurate measure of the cost of each component in October 1980 prices. These costs were calculated for each of the two archetypal family units in each of the seven sample counties. A weighted, statewide average cost for each component was also calculated.

E. Data Processing

Members of the project staff and staff from the Office of Informaton Systems did all data analysis on the DSHS UNIVAC system.

CHAPTER 3: SUMMARY OF FINDINGS

What are the costs associated with a minimal but adequate standard of living? Chapters 4 and 5 present details on the methods of data collection and analysis and on the means used to compute monthly and annual quantities. The data discussed here summarize these chapters and more detailed material in the appendices.

There are four parts to this chapter. First, a summary breakdown of the costs of the basic and supplementary components is provided for our model family of four: a mother and three children, ages 3, 9, and 13. Second, a similar breakdown is provided for our model elderly individual: a single woman over the age of 65 who is self-sufficient and living alone. Third, equivalent budget totals for variations of both model units have been calculated and presented. Fourth, if the model families were low-income families on public assistance, resources available to them have been calculated. Many questions that might arise concerning these summary data should await a careful reading of Chapters 4 and 5. All costs reflect October 1980 prices, including appropriate taxes.

A. Cost of Living for a Family of Four

Data presented in Tables 3.1 and 3.2 illustrate costs of each major consumption category necessary to provide a minimal but adequate standard of living for a family of four. Costs of the four supplementary building blocks are also presented in the table. In the basic standard, major expenditure items are food and housing, and the energy-related categories of fuels, utilities, and transportation. These categories account for 85 percent of the estimate for a family of four.

The supplementary needs (school fees and supplies; toys, games, and gifts; small appliances; and home furnishings) together would add $21.40 per month to the cost of living of a family of four. A complete package of basic and supplementary costs would then total $728.93 in October 1980 prices.

B. Cost of Living for an Elderly Individual

Data presented in Tables 3.1 and 3.3 illustrate costs of each major consumption category necessary to provide a minimal but adequate standard of living for an elderly individual. Major expenditure items are food and housing, and the energy-related categories of fuels, transportation, and utilities. These categories account for 88 percent of the estimate for an elderly individual.

Only two of the supplementary building blocks are applicable here: small appliances and home furnishings. The supplementary needs (small appliances and home furnishings) would add $6.45 per month to the cost of living for an elderly individual. A complete package of both basic and supplementary costs would then total $379.30 in October 1980 prices.

C. Cost of Living for Other Family Sizes

The basic requirements of the two model families are used in calculating the requirements of other family units. Equivalence scales apply only to the summary figures, not to the figures for each of the components. That is, Table 2.3 (Chapter 2) indicates that a typical family of three should have 80 percent of the requirements of a family of four to live at the same level. The family of three might spend more or less than 80 percent of the amounts shown in each consumption category in Table 3.2.

Equivalence scales ignore the slight variations which might occur among different types of families of the same size. These are summary measures and, as such, lose some fine detail. However, equivalence scales do capture the significant variation attributable to economies of scale. The costs of basic requirements by family size and type are presented in Table 3.4.

D. Resources Available to Low-Income Families on Assistance

If the model low-income families were receiving public assistance, their benefit levels, as of November 1, 1980, would fall somewhat short of the estimated living standard. Data on estimated benefits (excluding medical assistance) are shown in Table 3.5.

For example, the typical AFDC-R family in Washington State has three members -- a mother and two children. Using the equivalence scale, we find that costs associated with maintaining a family of this size at a minimal but adequate level are $566.02 per month. If a family of three (a mother and two minor children) were receiving public assistance at the November 1, 1980 levels, the statewide, weighted average benefits would be $531.55. These estimated benefits consist of basic grant, food stamps, and energy assistance.

Table 3.1

Cost of Living:

Family of Four and Elderly Individual

(Weighted, Statewide Average Costs)

	Family of Four		Elderly Individual	
A. Basic Requirements:	$	Percent of Budget	$	Percent of Budget
1. Food	$254.69	36%	$ 80.24	21%
2. Shelter: Housing	266.08	38	185.90	50
3. Shelter: Fuels	25.07	4	22.29	6
4. Transportation	29.72	4	24.86	7
5. Household Maintenance	66.44	9	32.91	9
6. Clothing	37.68	5	10.76	3
7. Personal Care	20.05	3	8.84	2
8. Medicinal Supplies	1.42	*	.66	*
9. Miscellaneous	6.38	1	6.38	2
Basic Requirements: TOTAL	$707.53	100%	$372.85	100%
B. Supplementary Components:				
1. School Fees/Supplies	$ 4.52		- 0 -	
2. Toys, games, gifts	7.08		- 0 -	
3. Minor appliances	2.72		2.72	
4. Home furnishings	7.08		3.73	
Supplementary Components: TOTAL	$ 21.40		$ 6.45	

*Less than one percent

TABLE 3.2: FAMILY OF FOUR: Basic Requirements (Monthly Amounts)

COMPONENTS	KING	PIERCE	THURSTON	WHATCOM	SPOKANE	FRANKLIN	YAKIMA	STATEWIDE
1. Food	$253.87	$251.16	$252.72	$256.95	$258.65	$264.39	$253.12	$254.69
2. Shelter: Housing	297.00	248.00	242.00	240.00	267.00	279.00	230.00	266.08
3. Shelter: Fuels	23.10	24.51	24.64	25.64	30.45	26.89	26.77	25.07
4. Transportation	26.12	30.08	34.49	31.83	27.29	34.61	28.83	29.72
5. Household Maintenance	67.56	66.33	66.98	66.15	64.56	65.56	64.15	66.44
a. Utilities	(21.97)	(21.43)	(20.80)	(20.94)	(21.52)	(21.16)	(20.92)	(21.42)
b. Household Supplies	(9.65)	(9.02)	(9.87)	(9.34)	(8.87)	(9.72)	(8.77)	(9.42)
c. Household Operations	(25.29)	(25.28)	(25.06)	(24.79)	(23.03)	(23.54)	(23.56)	(24.73)
d. Housewares/Linens	(10.65)	(10.60)	(11.25)	(11.08)	(11.14)	(11.14)	(10.90)	(10.87)
6. Clothing	37.54	37.99	37.61	38.02	37.66	37.45	37.75	37.68
7. Personal Care	20.38	19.74	20.28	20.29	19.67	19.70	19.65	20.05
8. Medicinal Supplies	1.47	1.45	1.41	1.30	1.36	1.43	1.34	1.42
9. Miscellaneous	6.75	6.25	6.75	6.50	6.00	5.50	5.75	6.38
TOTAL	$733.79	$685.51	$686.88	$686.68	$712.64	$734.53	$677.36	$707.53

TABLE 3.2: FAMILY OF FOUR: Supplementary Components (Monthly Amounts)

COMPONENTS	KING	PIERCE	THURSTON	WHATCOM	SPOKANE	FRANKLIN	YAKIMA	STATEWIDE
1. School fees and supplies	$ 5.00	$ 4.51	$ 4.21	$ 3.85	$ 4.77	$ 4.27	$ 3.49	$ 4.52
2. Toys, games, and gifts	7.34	6.86	6.87	6.87	7.13	7.34	6.67	7.08
3. Minor appliances	2.72	2.72	2.72	2.72	2.73	2.73	2.73	2.72
4. Home furnishings	7.34	6.86	6.87	6.87	7.13	7.34	6.67	7.08
TOTAL	$22.40	$20.95	$20.67	$20.31	$21.76	$21.64	$19.56	$21.40

TABLE 3.3: ELDERLY INDIVIDUAL: Basic Requirements (Monthly Amounts)

COMPONENTS	KING	PIERCE	THURSTON	WHATCOM	SPOKANE	FRANKLIN	YAKIMA	STATEWIDE
1. Food	$ 80.00	$ 78.49	$ 80.68	$ 81.32	$ 81.06	$ 83.04	$ 78.62	$ 80.24
2. Shelter: Housing	211.00	174.00	171.00	178.00	187.00	185.00	134.00	185.90
3. Shelter: Fuels	20.55	21.80	21.92	22.81	27.09	23.92	23.82	22.29
4. Transportation	23.17	25.15	27.35	26.02	23.74	27.40	24.51	24.86
5. Household Maintenance	33.67	32.93	32.66	32.40	32.24	32.48	31.64	32.91
a. Utilities	(15.32)	(14.78)	(14.15)	(14.29)	(14.87)	(14.51)	(14.27)	(14.79)
b. Household Supplies	(3.64)	(3.45)	(3.78)	(3.55)	(3.39)	(3.69)	(3.28)	(3.58)
c. Household Operations	(9.61)	(9.57)	(9.47)	(9.33)	(8.67)	(8.92)	(8.94)	(9.35)
d. Housewares/Linens	(5.10)	(5.13)	(5.26)	(5.23)	(5.31)	(5.36)	(5.15)	(5.19)
6. Clothing	10.79	10.72	10.76	10.62	10.77	10.72	10.85	10.76
7. Personal Care	9.03	8.67	8.82	8.84	8.78	8.87	8.45	8.84
8. Medicinal Supplies	0.68	0.67	0.68	0.63	0.64	0.66	0.62	0.66
9. Miscellaneous	6.75	6.25	6.75	6.50	6.00	5.50	5.75	6.38
TOTAL	$395.64	$358.68	$360.62	$367.14	$377.32	$377.59	$318.26	$372.85

TABLE 3.3: ELDERLY INDIVIDUAL: Supplementary Components (Monthly Amounts)

COMPONENTS	KING	PIERCE	THURSTON	WHATCOM	SPOKANE	FRANKLIN	YAKIMA	STATEWIDE
1. Minor appliances	$ 2.72	$ 2.72	$ 2.72	$ 2.72	$ 2.73	$ 2.73	$ 2.73	$ 2.72
2. Home furnishings	3.96	3.59	3.61	3.67	3.77	3.78	3.18	3.73
TOTAL	$ 6.68	$ 6.31	$ 6.33	$ 6.39	$ 6.50	$ 6.51	$ 5.91	$ 6.45

Table 3.4

Cost of Basic Requirements for

Families of Different Types and Sizes

(Weighted, Statewide Average Costs)

Number of Persons	Adult Only Households	Number of Persons	Households With Children
1 aged	$372.85	1*	$ 382.07
1 nonaged	402.68	2	474.04
2 aged	454.88	3	566.02
1 aged/1 nonaged	477.25	4	707.53
2 aged	499.62	5	849.04
		6	983.47
		7	1,110.82
		8	1,231.10
		9	1,344.31
		10	1,450.44
		11	1,549.49
		12	1,641.47
		13+	1,641.47 plus $84.90 for each additional

*Expectant mother

Table 3.5

Resources Available to Low-Income

Families on Public Assistance
(as of November 1, 1980):

(Statewide, Weighted Average)

		AFDC-R Family of Four	SSI-Aged Individual
1.	Public Assistance Grant*	$505.24	$273.80
2.	Food Stamps**	107.05	61.87
3.	Low-Income Energy Assistance Program (LIEAP) Benefit***	16.26	19.97
	TOTAL	$628.55	$355.64

* For AFDC, the grant is the weighted average of Area I and Area II payment levels. For SSI, the grant combines the SSI grant and the state addition; a weighted average is also used.

** Food Stamp benefits were calculated by Bureau of Income Maintenance, based upon rent costs in the estimated living standard. The dollar figure here represents a weighted average.

*** LIEAP benefits were calculated according to a formula developed by Bureau of Income Maintenance staff. The dollar figure here is a weighted average.

CHAPTER 4: BASIC REQUIREMENTS

Summary data on the costs of a minimal but adequate living standard have been presented in Chapter 3. Chapter 4 examines in some detail the standards and criteria of measurement, data collection methods, and cost data for the components of basic requirements.

A. Food

1. Standards and Criteria of Measurement

The U.S. Department of Agriculture's Thrifty Food Plan was the benchmark for the food component of the present study.[1] It was chosen primarily because it serves as the basis for the Food Stamp Program. The Thrifty Food Plan also reflects the actual food consumption patterns of low-income populations. Although the Thrifty Food Plan has been judged nutritionally adequate, it has been criticized on both quality and quantity dimensions. Partly in response to these criticisms, USDA personnel are revising the plan.[2] The new plan will not be completed until June 1981 at the earliest, and data from it were unavailable to this study.

The need for close scrutiny of the original Thrifty Food Plan for use in the present study was apparent. Dr. Charlene Martinsen, a nutritionist at the University of Washington, reviewed that plan and the food lists used in developing the need standards in the Oregon and New Jersey studies. She evaluated the adequacy and appropriateness of the Thrifty Food Plan for a low-income population of Washington State. She concluded that some revisions were necessary, based upon nutritional analyses and empirical testing of both the serving quantities and types of items listed. She identified four general shortcomings in the original plan:

1. Single servings: All food amounts in the original plan were calculated with an assumption of only one serving of each item per person at each meal.

2. Low wastage: A margin of only five percent waste was included.

3. Snacks: Snacks, in terms of quantities, were limited.

4. Special meals: No allowances were made for holiday meals or special family events.

---

[1] U.S. Department of Agriculture, Agricultural Research Service, USDA Family Food Plans, 1974 (by Betty Peterkin); _____, Consumer and Food Economics Institute, Agricultural Research Service, The Thrifty Food Plan (September 1975); _____, Science and Education Administration, Food for Thrifty Families (September 1978); _____, Science and Education Administration, Family Food Budgeting: Bulletin No. 94 (by Betty Peterkin) (Washington, D.C.: Government Printing Office, July 1979).

[2] "USDA to Revise Thrifty Food Plan," Community Nutrition Institute Weekly Report, Vol. X, No. 40 (Washington, D.C., October 9, 1980) pp. 2-3.

Dr. Martinsen developed a modified version of the Thrifty Food Plan for a family of four and, based on that model, developed a food plan for a single woman over 65 years of age.[3]

a. Food Plan for a Family of Four

In developing the food plan for a family of four, Dr. Martinsen made three types of modifications to the Thrifty Food Plan:

1) Quantity and quality changes: The wastage in the cheaper cuts of meat (regular ground beef, pot roast) was greatly underestimated in the original plan. In some instances, serving sizes for meat were at variance with quantities specified in a more recent U.S. Department of Agriculture publication.[4] Where discrepancies were found, serving sizes were amended to comply with the new USDA standards.

   Quantities of fruits, vegetables, and fruit juices were increased to provide variety in the main diet and to reduce opportunities for snacking on less nutritional and more costly food items.

2) Allowance for special meals: The quantities for the Sunday midday meals were increased to reflect modestly larger portions, approximately two extra servings for the family unit of each food item. This provides some flexibility in the plan for special family events and holidays, allowing two extra meals per week per family.

3) Change in lunches: Some of the weekday lunches in the original Thrifty Food Plan were not portable. Lunch menus were altered to accommodate children attending school.

b. Food Plan for an Elderly Individual

The food plan developed for a woman over 65 years of age, mobile, and living alone, required an extensive revision of the Thrifty Food Plan which had only been compiled for a family of four. In developing the modified plan, Dr. Martinsen, in consultation with staff of the King County Nutrition Project, considered special conditions common among the senior population: hypertension, mobility difficulties, use of dentures and food preparation patterns of single person households. The following modifications were made to the Thrifty Food Plan to meet these needs:

---

[3]The detailed menus and lists of monthly food quantities for the two food plans are in Appendix A. The modified food plans are not prescriptive. No family is required to observe the dietary choices contained in them. However, from a nutritional perspective, these revised plans represent modest but adequate food consumption patterns.

[4]U.S. Department of Agriculture, Science and Education Administration, Your Money's Worth in Foods: Bulletin No. 183 (by Betty Peterkin and Cynthia Cromwell Junker) (Washington, D.C.: Government Printing Office, April 1979) pp. 4, 11-12.

1) Quantity and quality changes: As in the Food Plan for a family of four, individual serving sizes of meat were increased to comply with recent standards recommended by the U.S. Department of Agriculture. Quantities of fruits, vegetables, and fruit juices were also increased to provide variety in the main diet and to reduce opportunities for snacking on less nutritional and more costly food items.

2) Low-salt: Foods with high sodium content were either eliminated or reduced in quantity.

3) Food preparation for one person: Menus were designed to permit multiple meals from a single main dish.

4) Caloric balance: In order to maintain blood sugar on an even level, the caloric values of meals were more evenly balanced throughout the day. The quantities of food were increased for the midday meals and decreased for the evening meals.

5) Allowance for special meals: The quantities for Sunday midday meals were increased to include one extra serving of each food item, thus providing some flexibility in the plan for special family events and holidays by adding one meal per week.

c. Modification for Ethnic Groups

Specific menu plans and food lists were not devised for the various ethnic groups in Washington's low-income population. The food plans include items that can be replaced with comparable amounts of ethnic foods without altering the cost or nutritional value of the plans. This allows flexibility for individual families choosing to include more ethnic foods in their meals.

2. Data Collection Methods

The food component was priced on the basis of quantities consumed in one month by a family of four and by a single, elderly woman, as indicated in the two revised plans. Minor adjustments were made in the plans to alleviate problems in seasonal or geographic availability of specific food items. For example, some fresh seasonal fruits and vegetables were replaced by canned and frozen fruits and vegetables of comparable nutritional value.

The food items were priced in 27 sites in the seven sample counties. In each county, the social services staff of the DSHS Community Services Office provided lists of supermarkets likely to be patronized by the low-income population. Project staff chose the sample sites from these lists. In every county except King, three sites were chosen, one each in rural, urban, and mixed locales. In King County, because of its size, nine sites were chosen: three each in rural, urban, and mixed locales. Because many of the large grocery chains standardize their prices within a geographical region, an effort was made to avoid pricing two sites of the same chain in a county. This alleviated the problem of relying too heavily on a single chain for the price data.

Jensen Price Surveys was contracted to price the food items included in the two revised plans. This company, which provides price data for the grocery industry in Washington State, was chosen because of its experience in grocery pricing surveys. Jensen already had trained staff in each of the sample counties and was able to collect food cost data more rapidly, more accurately, and at a lower cost than would have been possible otherwise.

To obtain an accurate assessment of price differentials across the state, all food pricing was done between October 6 and 16, 1980. Distortions caused by inflationary price fluctuations were thus minimized.

For most items, data were collected on the lowest prices available in each store for the package size specified. "Week-end special" sale prices were not recorded, because they represent short-term reductions in prevailing local prices. Such bargains cannot be assumed to be available to all low-income people at all times. Sale items offered on a continuing basis were priced, however, because these represent the kinds of bargains that are usually available.[5]

Package sizes were chosen to reflect the quantities most likely to be purchased and consumed by the two target populations. Thus, whenever it was feasible, the package sizes priced for the single elderly woman were smaller than those for the family of four. In some instances, when package sizes were not all standardized for an item, a brand name as well as package size was specified and a price collected on that brand. Meats and some fresh fruits and vegetables were priced per pound.

Occasionally the package sizes specified were not available in individual stores. When this occurred, a price was recorded for the closest size available. The unit price was then calculated and multiplied by the number of units desired to get an approximate price for the item as specified. For example, if a 16-ounce can of baked beans was specified, but a particular store carried only 21-ounce cans at $.83 per can, the $.83 price was recorded. Subsequently the unit cost of the larger can, $.0395 per ounce, was multiplied by 16 and that price, $.63, was used in our calculations.

3. Cost Data for Food Component

The monthly costs for the revised food plan for a family of four and the plan for an elderly individual were calculated for every site, for each sample county, and for the state as a whole. The site costs were calculated by multiplying the price of each item by the number of packages required per month and totalling the results. The county costs, as listed in Table 4.1, represent the mean costs for all sites

---

[5]Items such as "Bonus Buys" or "Green Specials" were priced because other items of the same kind will be on sale in successive weeks. For example, canned pears will be reduced one week, canned peaches the next. Advertised "week-end specials" were not priced because they may be offered infrequently for any category of items.

in each county. The statewide totals were calculated by multiplying the county costs by the respective county caseload population weights and totalling the results. Details on quantities in each food plan and a statewide, weighted average price for each food item are provided in Appendix A.

TABLE 4.1: MONTHLY COST DATA FOR FOOD COMPONENT

PLAN	KING	PIERCE	THURSTON	WHATCOM	SPOKANE	FRANKLIN	YAKIMA	STATEWIDE
Food Plan for Family of Four	$253.87	$251.16	$252.72	$256.95	$258.65	$264.39	$253.12	$254.69
Food Plan for Elderly Individual	80.00	78.49	80.68	81.32	81.06	83.04	78.62	80.24

B. Shelter: Housing

According to recent data on low-income people receiving public assistance, approximately 82 percent of Washington's AFDC-R recipients and 56 percent of the independent, SSI - Aged recipients were living in rental housing.[6] We concluded that rental housing was the appropriate form to price for the shelter component of the study.

1. Criteria and Standards of Measurement

In calculating shelter cost for our two families, we assumed that the family of four occupied a two-bedroom rental unit and the single, elderly woman occupied a studio ("zero" bedroom) apartment. Annual Housing Survey data, published by the U.S. Department of Housing and Urban Development (HUD), indicate a two-bedroom rental unit is the mode among low-income families. Rental units with three or more bedrooms are in any event a small portion of the available rental housing stock.[7] It should be emphasized, however, that a family of four living in subsidized housing would be approved for a three-bedroom unit and an elderly woman for a one-bedroom unit. By describing a shelter component of two-bedroom and "zero"-bedroom units, we have calculated housing costs conservatively.

Each year HUD publishes a list of Fair Market Rents (FMRs) for every county and Standard Metropolitan Statistical Area (SMSA) in the United States. One purpose in producing these rental figures (a dollar amount for each county and SMSA) is to provide a cut-off figure for their Section 8, subsidized, rental housing program.

The HUD calculation of the FMR for each county requires a substantial number of steps.[8] The general thrust is to apply the counties' historic rental differentials, evidenced from decennial census figures, to aggregated regional (i.e., the Western region of the U.S.) data. The most recently available data are for 1977. Next, these differentials are updated to the current year, using the appropriate Consumer Price Index (CPI) for rents. The rental figures that result from this process are the median (50th percentile) rental costs of units with 0, 1, 2, 3, and 4 bedrooms (including utilities) which meet the "decent, safe and sanitary" criteria for housing eligible for Section 8 subsidies. These figures are published provisionally in the Federal Register, a 30-day comment period ensues, rental figures are revised if appropriate, and the revised figures are published in the Federal Register. These revised figures constitute HUD Fair Market Rents for the entire year.

---

[6] Gilmore Research Group, The Needs of the Elderly in Washington State: A Summary Report (prepared for the Planning and Research Division, Department of Social and Health Services) (Olympia: 1977) and the 1979 AFDC Characteristics Study conducted by the Office of Research, DSHS.

[7] In the 1977 Annual Housing Survey, West Region, two-bedroom units accounted for 53 percent of the 1.84 million units renting between $200-249 per month. Three or more bedroom units were 11 percent of the total.

[8] The procedure is described in Federal Register, vol. 44, no. 122 (June 22, 1979).

2. Data Interpretation Methods

The HUD Fair Market Rent provides the best available measure of the gross cost of rental housing which meets basic standards of quality. Substandard units are not included in the calculation of FMRs. These data are based on historic housing market characteristics in each of the counties and on recent market characteristics for the Region as a whole. Fair Market Rent data were obtained for our seven sample counties from the Federal Register of March 1980.[9]

Ideally, the determination of the cost of shelter should be based on a survey of a large number of randomly selected rental units in each of our seven sample counties. Given that the cost of such an approach was prohibitive, we selected among readily available data sources. The HUD approach, designed to generate the type of data we were seeking, is sound. Moreover, the HUD FMRs are close to the results of a survey of classified ads which we conducted.

An adjustment was made to the FMRs. Published data describe the gross rent for recently occupied units. The gross rent includes the cost of all utilities, including heat, light, garbage, water and sewer. The data generated by the Bonneville Power Administration on electricity and fuel charges are preferable for these two utilities. Therefore, we have used the original contract rents (net of utilities) for our seven sample counties.[10] Thus, the shelter rent component we report does not include electricity and fuel; it does include charges for the other utilities or services.

The shelter component at the level of the Fair Market Rent makes available housing whose rent is at or below the prevailing rate. A median figure, such as the FMR, describes the price paid by households in the middle of the distribution; approximately half the units will pay more than this and half will pay less. The amount any household would pay is in part a function of the resources it has available. Beyond that, it depends on the family's knowledge of the housing market, locational preferences or requirements, the nature of the

---

[9] Federal Register, vol. 45, no. 6 (March 26, 1980).

housing available when it is conducting its market search and, of course, individual requirements, such as the absence of barriers. While not every family will be paying the median amount, this figure is most representative of the costs facing those in the rental housing market.[11]

For comparison purposes, data on housing costs were collected from an additional source. Average prices of publicly advertised rental housing were collected from a newspaper survey in August and September 1980 in each of the seven sample counties. These rents approximate the published FMRs for each county. These comparative data are listed in Appendix B.

3. Cost Data for Shelter: Housing Component

Table 4.2 illustrates shelter cost data for our two model family units in the seven sample counties and a weighted statewide average for each family. These do not include heat and light expenses, but do include water, sewer and garbage.

---

[11]There are those who argue that the FMRs are too low for Washington State, particularly for rural areas. This point was made in phone conversations with Susan Peck of the private, Washington, D.C.-based, Housing Assistance Council, August 6, 1980, and with Don Downing of the USDA Farmers Home Administration's State Office, Wenatchee, August 6, 1980. HUD staff, including area economist John Taylor, Region X-Seattle, respond that data supporting this view submitted during the comment period are reviewed and considered in setting the FMR. Taylor observes that county data may not be representative of every locale within a county and cannot be expected to be.

TABLE 4.2: MONTHLY COST DATA FOR SHELTER: HOUSING

COMPONENT	KING	PIERCE	THURSTON	WHATCOM	SPOKANE	FRANKLIN	YAKIMA	STATEWIDE
1. Fair Market Rent (50th percentile) for Family of Four: (2 br unit)	$297	$240	$242	$240	$267	$279	$230	$266.08
2. Fair Market Rent (50th percentile) for Elderly Individual (studio unit)	$211	$174	$171	$178	$187	$185	$134	$185.90

C. Shelter: Fuels

1. Criteria and Standards of Measurement

A survey of energy consumption in four Pacific Northwest states, conducted for the Bonneville Power Administration (BPA) and the Pacific Northwest Utilities Conference Committee, was the data source for determining fuel (home heating) costs.[12] Only data from the Washington State subsample (N=1468) were used in our study.

From the Washington subsample, data from single-person family units with annual incomes of less than $10,000 (N=64) and from family units of three or more with annual incomes of less than $15,000 (N=136) were used to estimate costs for home heating. For each of these groups, the cost of electricity for heating only, the cost of natural gas, and the cost of fuel oil were calculated for the 12-month period between August 1, 1978 and July 31, 1979. These baseline data were used as consumption estimates for our two model families.

2. Cost Data for Shelter: Fuels Components

Fuel costs were updated to October 1980 in several stages. The average monthly levels of the Consumer Price Index (U.S. City Average) for fuels were calculated for the 12 months beginning August 1978.[13] The price index for each fuel in October 1980 was obtained, and its ratio relative to the 1978-79 average was calculated.[14] These ratios were multiplied by the average heating expense, for each fuel, obtained from the BPA survey in order to determine costs as of October 1980.

The heating expenses for our model families were determined by a weighting procedure. Using as our sample Washington households with incomes under $10,000, we determined the proportion using each type of fuel. The proportions were applied to the updated, October 1980 heating expenditures to determine the statewide mean expenditure for each of the model households (see Appendix C).

---

[12] Elrick and Lavidge, Inc., Pacific Northwest Residential Energy Survey (Report for Bonneville Power Administration and Pacific Northwest Utilities Conference Committee) (July 1980).

[13] U.S. Department of Labor, Bureau of Labor Statistics, Monthly Labor Review (Washington, D.C.: September 1980) The U.S. City Average CPI for fuels was used instead of that for the Seattle - Everett SMSA upon the recommendation of David Weig, Washington State Office of Financial Management. The U.S. City average is more likely to be representative of the state as a whole.

[14] The October update of the CPI was provided by the San Francisco regional office of the Bureau of Labor Statistics, U.S. Department of Labor.

We attempted to allow for differences in heating requirements for individual counties. The heating costs for each of the seven sample counties for the two family types were estimated from the statewide cost by using "Annual Heating Degree Days (HDD)" as an indicator of heating cost.[15] For each of the seven sample counties, the average HDD over a 30-year period was used.[16] The annual statewide HDDs were calculated by multiplying the county caseload weights for the family of four times the HDDs for each sample county and totalling the results. Assuming that, across all counties, unit costs of fuel are uniform and that roughly the same proportions of the population as in the BPA study use each of the fuels for heating, the following relationship was used to determine approximate county costs:[17]

$$\frac{\text{Heating cost (county)}}{\text{Heating cost (statewide)}} = \frac{\text{HDD (county)}}{\text{HDD (statewide)}}$$

This relationship suggests that the number of Heating Degree Days is directly proportional to the heating cost.

Table 4.3 shows the ratios of county to statewide heating costs and presents the heating costs by county for the model families. These are average monthly heating costs, over a 12-month period.

---

[15] A heating degree is the difference between the average daily outside temperature and 65 degrees F -- the temperature at which no heat will be required to maintain human comfort indoors. If the average daily temperature was 45 degrees, the heating degrees for the day would be 20. "Annual Heating Degree Days" (HDD) is the sum of all such days over a one-year period.

[16] U.S. Department of Commerce, "Climatology of the United States: Monthly Normals of Temperature, Precipitation, and Heating Degree Days, 1941-70," August 1973.

[17] This relationship is commonly used to evaluate fuel consumption in energy planning studies. See Procedures for Evaluating the Energy Conservation Programs of the Washington State Energy Office, Communications Design (Seattle, Washington: August 1980).

TABLE 4.3: MONTHLY COST DATA FOR SHELTER-FUELS

COMPONENT	KING	PIERCE	THURSTON	WHATCOM	SPOKANE	FRANKLIN	YAKIMA	STATEWIDE
Annual Heating Degree Days (HDD)	5185	5501	5580	5754	6835	6035	6009	5626
Heating cost (county) / Heating cost (statewide)	92.16%	97.78%	98.29%	102.28%	121.49%	107.27%	106.81%	100%
Average Monthly Heating Costs*								
Family of Four	$23.10	24.51	26.64	25.64	30.45	26.89	26.77	$25.07
Elderly Individual	$20.55	21.80	21.92	22.81	27.09	23.92	23.82	$22.30

* This dollar amount represents the average monthly heating cost, derived from dividing the annual cost by 12.

D. Transportation

1. Criteria and Standards of Measurement

Public transportation is not available in all areas of Washington State. For this reason, the cost of minimal use of a private automobile was estimated on an annual basis as the standard for transportation. The cost of minimal use of public transportation, where available, was also calculated and is reported in Appendix D.

In determining the cost of operating an automobile, it was assumed that each of the model families already owns a car, which is six to ten years old.[18] The U.S. Department of Transportation's (DOT) "Cost of Owning and Operating Automobiles and Vans 1979" served as a guide for determining the cost of transportation, using a standard four-door automobile for the family of four and the single elderly individual.[19]

Four types of adjustments were made to the costs reported in the DOT study to represent more closely the premises underlying this study:

a) Essential Ownership Costs Only: Some types of costs included in the DOT study were not deemed essential and were eliminated from the estimates for the low-income population in Washington State. The components excluded were depreciation, insurance, title, garaging, accessories, and parking.

b) Essential travel only: The annual mileage estimated for the family of four and the single elderly person was substantially reduced from the DOT annual mileage to reflect only essential trips for shopping or medical care.

c) Local prices: The costs of gasoline, oil, tires, registration, and driver's license renewal in Washington State were substituted for those costs reported in the DOT study for Baltimore, Maryland.

d) 1980 Update: The scheduled maintenance costs and the per mile unscheduled maintenance rate reported in the DOT study were updated to reflect a 16 percent increase in the Consumer Price Index for transportation costs between July 1979 and September 1980.[20] Other items were priced locally in November 1980.

---

[18] U.S. Department of Labor, Bureau of Labor Statistics, 3 Standards of Living for an Urban Family of Four Persons, (Bulletin 1570-5) (Washington, D.C.: U.S. Government Printing Office, Spring 1967).

[19] U.S. Department of Transportation, Federal Highway Administration, Cost of Owning and Operating Automobiles and Vans 1979 (Joseph E. Ullman) (Washington, D.C.: U.S. Government Printing Office, 1980).

[20] U.S. Department of Labor, Bureau of Labor Statistics, Monthly Labor Review Washington, D.C.: September 1980).

2. Data Collection Methods

a. Operating Costs

Calculation of the annual mileage traveled by the family of four and the elderly individual is critical in determining the per mile expenses. The 1980 GMA Research Corporation (Bellevue) survey for the Washington State Department of Transportation served as a data source for the distance to the store traveled by persons with incomes under $10,000.

A 1976 survey of the needs of the elderly was used as the source for the number of trips to "the store, doctor, bank, or visiting friends" made by persons over 60 in Washington State.[21] For elderly persons receiving SSI benefits who use a car as their primary means of transportation, the mean number of weekly trips was 2.3. Thus, the transportation allowance for essential trips per week allocated 2.3 two-way trips to the elderly person and 4.6 two-way trips to the family of four. For each family type and in each of the seven counties, the annual mileage was calculated using estimates of the distance traveled and number of trips required (see Appendix D).

The price of regular grade gasoline was obtained from a September 1980 statewide survey conducted by the Automobile Club of Washington.[22] The prices of oil filters, oil changes, and tires were obtained from the same discount store where clothing and houseware prices were obtained. The lowest prices for oil, filter, and tires were used. Washington State Department of Transportation staff were consulted in determining the frequency of oil change and tire replacement. These frequencies are appropriate for the age and type of car and mileage in this study.

b. Ownership Costs

The driver license renewal fee (biennial) was obtained from the Washington State Department of Licensing. 1980 car registration fees obtained from the Washington State Department of Revenue for a 1971, 1972, 1973, 1974 Ford Galaxy were averaged. Scheduled maintenance costs included those items shown in the owner's manual. The cost of scheduled maintenance on a four-door standard car in its 7th, 8th, 9th, and 10th year (DOT Study) were averaged and updated to reflect the CPI increase.

---

[21] Washington State Department of Social and Health Services, Office on Aging, Report: An Indepth Analysis of the Needs Assessment of the Elderly (Olympia: 1978).

[22] Auto Club of Washington, News Release, October 21, 1980.

3. Cost of the Transportation Component

The annual and monthly costs for essential transportation for the family of four and the elderly individual by private automobile were calculated for each of the seven sample counties. Car ownership costs were the same in all counties, since there is no variation in the costs of a driver's license or vehicle registration from county to county. Scheduled maintenance costs were calculated from nationwide figures; thus, there was no within state variability in these costs either. The total ownership costs were $175.27 annually for both model families. Annual operating costs ranged from a low of $102.74 in King County for a single individual to $239.99 in rural areas (represented by Franklin County) for a family of four. In rural counties where the estimated annual mileage is greatest, less than 1,400 miles per year were allotted. Thus, it is clear that only minimal, essential trips are included (see Appendix D).

The statewide average cost of transportation by private automobile was calculated by multiplying the county costs by the respective county caseload population weights and totalling the results. The monthly weighted cost for the family of four is $29.72 and for the single individual $24.86 (see Table 4.4).

TABLE 4.4: TRANSPORTATION COSTS BY PRIVATE AUTOMOBILE

COMPONENT	KING	PIERCE	THURSTON	WHATCOM	SPOKANE	FRANKLIN	YAKIMA	STATEWIDE
Family of Four								
Annual Operating Costs	$138.21	$185.70	$238.66	$206.74	$152.18	$239.99	$170.69	
Annual Ownership Costs	175.27	175.27	175.27	175.27	175.27	175.27	175.27	
Total Annual Costs	$313.48	$360.97	$413.93	$382.01	$327.45	$415.26	$345.96	
Total Monthly Costs	$ 26.12	$ 30.08	$ 34.49	$ 31.83	$ 27.29	$ 34.61	$ 28.83	$29.72
Elderly Individual								
Annual Operating Costs	$102.74	$126.47	$152.96	$137.00	$109.62	$153.52	$118.87	
Annual Ownership Costs	175.27	175.27	175.27	175.27	175.27	175.27	175.27	
Total Annual Costs	$278.01	$301.74	$328.23	$312.27	$284.89	$328.79	$294.14	
Total Monthly Costs	$ 23.17	$ 25.15	$ 27.35	$ 26.02	$ 23.74	$ 27.40	$ 24.51	$24.86

E. Household Maintenance, Clothing, and Personal Care/Medicinal Supplies Components

1. Introduction

Determination of the cost of the remaining categories of goods and services was based on comparative analysis of other studies and consultation with Joanne Ross, a home economist specializing in clothing and household goods. Separate quantity budgets were estimated for a one-year period for the family of four and an elderly woman. For clothing and personal care items, separate quantity budgets were calculated for each member of the two households. For other items, quantity budgets were calculated for each of the two households as a whole.

All quantity budgets indicate replacement rates rather than stocks expected to be on hand. It is assumed that low-income families already possess minimal quantities of these goods. The annual and monthly quantity budgets represent replacement rates -- that is use, turnover, or consumption rates for an existing stock -- and not the size of a stock deemed to be adequate.

a. Development of Quality and Quantity Standards

Based on existing studies of need and consumption patterns, the consultant prepared recommendations of quantities and qualities of clothing and other household goods for a minimal but adequate standard. In addition to prior studies, she consulted research literature on existing consumption patterns, visited several stores to check on the availability of items, and interviewed residents at a senior citizen complex to determine items and quantities appropriate to the elderly individual.

Items with the lowest prices were not always selected in the components. The consultant advised that moderate quality items were the best buys, representing the optimum combination of durability and thrift. To obtain an accurate assessment of geographic price differentials, very low priced goods not widely available were avoided. Finally, for some very visible and style-sensitive items (e.g., women's dresses), the lowest priced items were avoided in order to permit some consumer choice of style and color.

b. Collection of Price Data

Since these categories included not only retail goods but also some services, different pricing methodologies were required. The market basket of goods was priced in each of the sample counties. Services were priced in several ways. The method used for each service is listed in the appropriate subsection.

In the market basket method, actual retail price data were gathered on lists of items and, as with food, on regular rather than sale prices. Sale prices represent temporary shifts in prevailing price

patterns and are not available at all times to all persons. While at any given time some merchandise will be sale-priced, it should not be assumed that available bargains always include items needed for minimal but adequate subsistence, or that the timing of sales on specific items coincides with the occurrence of needs.

Price data utilized for these components come from four types of sources:

i) Some items widely available in supermarkets were priced along with food items. (See food component for full description.) These items consisted largely of consumable household supplies such as paper products, cleaning agents, and medicinal supplies. Brand names were specified for many of these items.

ii) The majority of the items in these categories were priced in stores of a nationwide discount chain - K-Mart - which was selected for several reasons. The consultant advised that their merchandise was from the same manufacturers who supply national department store and mail order retail chains. Price data would more accurately reflect geographical price differentials if pricing could be carried out on the same or very similar goods. The large number of K-Marts and their distribution throughout the state met this requirement. Also, K-Mart prices are competitive with those of other retail outlets. Thus, K-Mart prices should reflect the level of prices generally prevailing in the sample counties for similar goods.

Prices were collected at one K-Mart in each of the seven sample counties between October 15 and October 31, 1980. Initial selection of the articles or types of articles to be priced was done in a Pierce County K-Mart under the direction of the consultant to match closely the price data with the durability standards implicit in the annual quantity budgets. The same article or same quality of article was priced in each locale.

Where items were out of stock, an attempt was made to obtain a list price from store management. In a few cases in which a price for a particular item was not available in a store, an average of the prices from the other stores was used.

iii) Some items were not consistently available in K-Marts, so that accurate price data could not be derived. The alternative pricing method used for most of these items was to locate them in a major mail order catalogue: Sears Fall and Winter 1980 as the first choice, Sears Spring and Summer 1980 as the second choice. The lowest priced item matching the physical description specified by the consultant was selected from the catalogue for pricing.

Shipping costs were included based on the UPS/USPS schedule in the catalogue: all Western Washington counties were calculated at the Zone 1 & 2 rate and all Eastern Washington counties at the Zone 3 rate. For items of less than two pounds in shipping weight, it was

assumed they would be ordered as part of a larger parcel to minimize shipping costs. The shipping costs for such items were the appropriate fraction of the cost of shipping a two-pound parcel.

iv) A small number of items could not be satisfactorily priced by any of the above three methods. These items, which represent a tiny portion of the total budget, were priced in Thurston County at one of two drug/discount stores.

Notes identifying the pricing method used for all items in every component are included in the appendices.

2. Household Maintenance

A. Utilities

Water, sewer, and garbage service costs are assumed to be included in housing rent, in keeping with common practice. Fuels or electricity for heating were estimated in a previous section. The remaining utilities consist of telephone service and electricity for nonheating uses, including lighting and appliances.

Recent telephone rate data were obtained from the Washington Utilities and Transportation Commission. These rates, effective August 21, 1980, reflect the mid-1980 statewide increases. Within each of the seven sample counties, the rate selected was the lowest party-line rate prevailing in the largest municipal area. Applicable taxes were included, as well as federal tax at two percent. The minimum rates used are for a four-party line.

Nonheating electrical costs were estimated using the same energy expenditure survey data obtained from the Bonneville Power Administration which was utilized to calculate home heating costs. A sample of households of one person with incomes of less than $10,000 served as the basis for estimating costs for the elderly individual. A sample of households of three or more persons with incomes of less than $15,000 was used for the family of four. The median electrical expenditure of households without electrical heat was derived for both samples. We assumed that nonheat electrical use would be similar for all sample households. These figures were then updated from the survey period (August 1978 through July 1979) to October 1980 prices using the national Consumer Price Indices for energy.

A further adjustment of the utility cost was made to compensate for the assumption that the two households use laundromats for washing clothes. Based on energy utilization data for appliances[23] and statistics on the percentage of households in the Washington State sample owning washers and dryers, electrical use for laundry in the

[23]Supplied by the Office of Community Relations, Seattle City Light.

BPA low-income sample was estimated and deducted from the updated utility estimates for the two household types. The net estimated electrical utility usage, exclusive of heat and laundry, is the basis for the cost estimate.

b. Household Supplies

The distinguishing characteristic of this group of goods is that they are all household items regularly consumed over fairly short periods of time. All cleaning agents except those appropriate to the personal care category are included. Incidental kitchen supplies, such as paper towels, food wrap, and light bulbs, also are in this category.

c. Household Operations

Goods and services essential to the operation of a household are in this category. They include sewing supplies, stamps and stationery, and allowances for laundry and checking account fees.

i) Sewing Supplies/Clothing Repair

The combination of low to moderate quality clothing and limited budgets required a capability for clothing repair. This need is amplified by the wear on children's clothing and the change in the fit of children's clothes due to growth. Small but repairable defects, such as weak or incomplete seams, are not uncommon in lower-priced merchandise. The small expense of this budget category is justified by the longevity and versatility it contributes to the clothing stock. This component has been scaled for repair and alteration of clothing, not for the hand-sewing of garments from yardgoods.

ii) Household Management

A small selection of stationery and miscellaneous repair supplies was included under this heading, along with an allotment for postage stamps. Stamps, stationery, and envelopes were provided to cover payment of bills and other necessary correspondence. Repair supplies were cellophane tape and white casein-type glue.

iii) Laundry

Prevailing prices for laundromat washers, dryers, and bulk dry cleaning were determined by a telephone poll of laundromat equipment distributors and selected laundromats in our seven sample counties. Some geographical variation was found, and prices used in calculating this component varied from county to county.

Color-fast fabrics were assumed to account for a majority of the clothing. A minimal but adequate laundry standard was estimated to be four loads per week for a family of four and 1.5 loads for an elderly individual. This item includes only the cost of coin-operated laundry; detergent costs are included under household supplies.

The unit of dry cleaning service priced was an eight-pound bulk load, unpressed. To allow for annual cleaning of heavier garments, two eight-pound loads were included in the annual budget for a family of four, one for an elderly person.

iv) Checking Account Fees

Before the cost of maintaining a checking account was included in the budget, the alternative of relying on money orders was considered. Data indicated that the cost of four money orders per month exceeded the cost of ten checks per month.

A telephone survey of banks in the sample counties was used to determine prices. Prevailing prices were a $2.50 per month account fee, plus $.028 per check for check printing. Free checking was available to seniors in enough banks that elderly persons over age 65 can easily obtain such services. Therefore, monthly costs were calculated for a rate of ten checks per month as $2.78 for the family of four and $.28 for elderly individuals. Special free services to seniors do not normally include free check printing.

d. Housewares and Linens

This category includes two groups of essential goods which, while perhaps more durable than the items in other categories, require continual replacement to maintain an adequate household.

i) Housewares

Housewares include kitchenware, eating utensils, and more durable items required for cleaning and household maintenance (e.g., broom, dishpan, and ironing board cover). While the list of items is extensive, the replacement cycles are generally long. Based on previous studies and our consultant's advice, this quantity budget represents a minimal standard of living and provides kitchen equipment adequate for efficient preparation of a reasonable variety of economical meals. It should be remembered in evaluating replacement cycles that price data were collected on low-cost housewares which are often less durable than more expensive goods.

ii) Linens

This component consists primarily of bed linen and bathroom towels, along with a variety of other items such as tablecloths, dishtowels, and shower curtains. As our model families are renters, neither curtains nor carpeting were included.

3. Clothing

One's need for clothing is easier to anticipate than other needs. Also, extensive markets exist for a wide range of used clothing of good quality. Many articles of used clothing are commonly available in both public and private markets (e.g., thrift stores and garage sales). In addition, since young children tend to outgrow clothing more often than they wear it out, a certain amount of handed-down clothing would be available in our model family of four. This is particularly true for toddlers for whom clothing is unisex, growth is rapid, and peer pressure in clothing style is insignificant.[24]

The consultant's examination of the quantity budgets used in previous studies indicated there were considerable variations in many categories. The quantities were insufficient in some cases and overly generous in others. The quantity budget used here represents a compromise among previous studies.

The quantity budgets were then priced for each individual in a K-Mart in each sample county. Annual replacement costs for every item were calculated. These item costs were summed, and the total became the initial annual clothing budget, assuming all new clothing.

A portion of these budgets was replaced with used clothing. First, for all members of the family of four, except the toddler, and for the elderly woman, one-third of the clothing need[25] was assumed to be met through the purchase of used clothing. Our consultant researched the pricing of used clothing and determined that purchase of used clothing in optimum condition resulted in a saving of approximately 50 percent over the cost of new clothing. The optimal used clothing purchase is usually a garment with about 75 percent of its usable life remaining, which sells for one-half or less of its original cost. Therefore, the clothing cost for these individuals was reduced by one-sixth.

Second, all of the toddler's clothing needs--except for shoes, socks, underwear, and mittens--were assumed to be met by clothes handed down from older children.[26] The excepted items were assumed to be new purchases.

---

[24] Only clothing handed-down within the model household was considered for inclusion.

[25] As measured in dollars of new clothing.

[26] Due to the construction of valid equivalence scales, this does not translate to the assumption that a toddler in a two-person household has no budget for those clothing items assumed to be handed-down in larger family units.

Even greater reliance on used clothing was considered and rejected for several reasons: some items are not extensively sold in second-hand markets (underwear, socks); some items, particularly footwear, are difficult to obtain used in sizes providing a comfortable fit; and not all clothing needs can be anticipated enough in advance to be met through second-hand markets. Similarly, additional reliance on handed-down clothing was also rejected. Differences in sex, wear, style, and growth patterns render this possibility less reliable for older children than for toddlers.

This clothing requirement departs from previous studies only in that it is assumed to be met by a mixture of new purchase, used purchase, and handing-down. Only the means of meeting the need have been adjusted; the amounts of clothing needed (quantity budgets) are comparable to previous studies.

4. Personal Care & Medicinal Supplies

a. Personal Care

All of the items in this category are goods, with the exception of haircuts. Among the goods included are both consumable items, such as hand soap, toothpaste and toilet paper, and semi-durable articles, such as a comb and nailfile.

Personal care quantity budgets were calculated to allow adequate supplies for maintenance of personal appearance for a person seeking work, although they are not adequate for a person working five days a week over an extended period of time.

Dental care supplies for an elderly person were based on the assumption that the individual has a partial plate.

Haircuts were priced at union scale on the assumption that an adult or aged female would require three haircuts per year, a nine year old female would require two haircuts per year and an adolescent male would require six haircuts per year. Prices per cut quoted by the local union in Pierce County were $8 for females and $5 for males.

b. Medicinal Supplies

This category covers the cost of maintaining normal medicine chest supplies adequate to deal with routine minor health problems and immediate household first aid needs. It is not intended to cover major illness or injury.

5. Miscellaneous

In keeping with past studies, a subscription to a daily newspaper was included under this heading. In light of the assumptions that a substantial portion of the low-income population is seeking work and has virtually no recreational budget, a daily home-delivered subscription, including Sunday, was priced. Prices were determined by telephone survey of the major daily newspapers in the seven sample counties.

6. Cost Data

Cost data for the components discussed in this section are contained in Tables 4.5 and 4.6. Details on specific items, statewide average prices, and quantity budgets are contained in Appendix E.

TABLE 4.5: FAMILY OF FOUR: MONTHLY COST DATA FOR HOUSEHOLD MAINTENANCE, CLOTHING, PERSONAL CARE, MEDICINAL SUPPLIES, AND MISCELLANEOUS COMPONENTS

COMPONENTS	KING	PIERCE	THURSTON	WHATCOM	SPOKANE	FRANKLIN	YAKIMA	STATEWIDE
Household Maintenance	$67.56	$66.33	$66.98	$66.15	$64.56	$65.56	$64.15	$66.44
1. Utilities								
a. Telephone	5.87	5.33	4.70	4.84	5.42	5.06	4.82	5.32
b. Electricity	16.10	16.10	16.10	16.10	16.10	16.10	16.10	16.10
2. Household Supplies	9.65	9.02	9.87	9.34	8.87	9.72	8.77	9.42
3. Household Operations								
a. Sewing Supplies	.63	.67	.67	.67	.67	.67	.67	.66
b. Household Mgmt	1.42	1.37	1.41	1.40	1.38	1.37	1.39	1.40
c. Laundry	20.46	20.46	20.20	19.94	18.20	18.72	18.72	19.89
d. Checking Acct.	2.78	2.78	2.78	2.78	2.78	2.78	2.78	2.78
4. Housewares & Linens								
a. Housewares	3.55	3.64	3.69	3.71	3.65	3.68	3.55	3.62
b. Linens	7.10	6.96	7.56	7.37	7.49	7.46	7.35	7.25
Clothing	37.54	37.99	37.61	38.02	37.66	37.45	37.75	37.68
Personal Care	20.38	19.74	20.28	20.29	19.67	19.70	19.65	20.05
Medicinal Supplies	1.47	1.45	1.41	1.30	1.36	1.43	1.34	1.42
Miscellaneous: Newspaper	6.75	6.25	6.75	6.50	6.00	5.50	5.75	6.38

TABLE 4.6: ELDERLY INDIVIDUAL: MONTHLY COST DATA FOR HOUSEHOLD MAINTENANCE, CLOTHING, PERSONAL CARE, MEDICINAL SUPPLIES, AND MISCELLANEOUS COMPONENTS

COMPONENTS	KING	PIERCE	THURSTON	WHATCOM	SPOKANE	FRANKLIN	YAKIMA	STATEWIDE
Household Maintenance	$33.67	$32.93	$32.66	$32.45	$32.24	$32.48	$31.64	$32.91
1. Utilities								
a. Telephone	5.87	5.33	4.70	4.84	5.42	5.06	4.82	5.34
b. Electricity	9.45	9.45	9.45	9.45	9.45	9.45	9.45	9.45
2. Household Supplies	3.64	3.45	3.78	3.55	3.39	3.69	3.28	3.58
3. Household Operations								
a. Sewing Supplies	.22	.23	.23	.23	.23	.23	.23	.23
b. Household Mgmt	1.26	1.21	1.24	1.23	1.22	1.21	1.23	1.24
c. Laundry	7.85	7.85	7.72	7.59	6.94	7.20	7.20	7.61
d. Checking Acct.	.28	.28	.28	.28	.28	.28	.28	.28
4. Housewares & Linens								
a. Housewares	2.60	2.63	2.67	2.69	2.65	2.66	2.58	2.62
b. Linens	2.50	2.50	2.59	2.54	2.66	2.70	2.57	2.56
Clothing	10.79	10.72	10.76	10.62	10.77	10.72	10.85	10.76
Personal Care	9.03	8.67	8.82	8.84	8.78	8.87	8.45	8.84
Medicinal Supplies	.68	.67	.68	.63	.64	.66	.62	.66
Miscellaneous: Newspaper	6.75	6.25	6.75	6.50	6.00	5.50	5.75	6.38

CHAPTER 5: SUPPLEMENTARY COMPONENTS

Several supplementary components were identified in addition to the package of basic requirements. Two of these--school fees and supplies and toys, games, and gifts--are supplemental components for families with children. Costs for these are estimated to provide data on supplemental family needs. Categories of basic requirements, moreover, presume "short-term" (i.e., one year or less) needs. Over a longer term, however, families would incur replacement expenses for both minor appliances and home furnishings. These two categories are considered as supplemental building blocks for these families. Thus, there are four building blocks:

1. School fees and supplies;
2. Toys, games, and gifts;
3. Minor appliances; and
4. Home furnishings.

A. School Fees and Supplies

School expenses are incurred over the year in any family with school-age children. Clothing expenses were included for the school-age children in our family of four in the clothing component of the basic requirements. Within the food component, all week-day lunches were made portable, thus permitting children to take lunches from home.[1]

The major instructional and some supplementary extracurricular school expenses are paid with public funds for all students, regardless of family income. However, there are minor expenditures for school supplies and fees that students are expected to bear. It is these costs that are of concern here. Data on school supplies were obtained from lists compiled in the 1977 Oregon and 1980 New Jersey cost of living studies. These studies served as comparative bases for information collected from school staff in Washington State. Information on minimal but adequate school fees and supplies was sought from knowledgeable administrators, teachers, and staff in the largest school district in each of the seven sample counties.

---

[1]Low-income families almost always meet the income criteria for free school lunches. However, federal and state regulations prohibit counting these free meals as income resources. See 45 CFR 233.20(a)(4)(ii)(i) and WAC 388-28-575(2)(e).

A supplementary building block was calculated for two school-age children: one girl, age nine (elementary school) and one boy, age 13 (middle or junior high school). Expenses were in four categories (Table 5.1):

1. School supplies;
2. School fees;
3. Gym clothes (middle school); and
4. Supplementary reading (elementary school).

1. School Supplies

The list of supplies represents a minimal supplementary package; other supplies are provided by the schools.

Items	Annual Quantity for Elementary School Student	Annual Quantity for Middle/Junior High School Student
Looseleaf binder, 3-ring, approx. 2" wide	0	1
Looseleaf paper, 10 1/2" x 8", wide-rule, pkg of 175	1 pkg.	2 pkgs.
Spiral notebook, 100 sheets	1	2
Pee Chees	2	5
Pens, ball point, medium	6	12
Pencils, No. 2 (package of 7)	2 pkgs.	3 pkgs.
Crayons, box of 24	1	0
Ruler, 12 inch, wood	1	0
Paste, white paper, 5 oz. jar	1	0
School scissors, 1 pair	1	0
Eraser, regular size	1	0

2. School Fees

Mandatory fees are absent in most school districts in Washington State. Optional fees cover areas such as environmental education (elementary school), extracurricular sports (middle and junior high schools), and industrial arts and home economics. Payment of these fees allows students to participate fully in school activities. Fees listed are those assessed in the largest school district in each county:

County/School District	Annual Elementary School Fees	Annual Middle/Junior High School Fees
1. King/Seattle	$4.00	$16.00
2. Pierce/Tacoma	None	14.00
3. Thurston/Olympia	1.35	9.50
4. Whatcom/Bellingham	2.50	5.00
5. Spokane/Spokane	3.75	15.50
6. Franklin/Pasco	1.25	11.00
7. Yakima/Yakima	None	3.00

3. Gym Clothes

Gym clothes (shorts, shirts, socks, and gym shoes) are required for middle or junior high school students. These items were priced using the same methodology and data collection procedures as for the clothing component of the basic requirements.

4. Supplementary Reading: Elementary School

Various kinds of book clubs provide a source of supplementary reading for elementary school students to pursue at home. These materials are relatively inexpensive. Given the absence of a budgetary item for children's books in the basic requirements, an annual amount of $5.00 for the child in elementary school was added to cover this.

B. Toys, Games, and Gifts

The model family of four in the present study has three children. Expenditures for toys, games, and gifts for these children were considered to be beyond basic needs. We decided, therefore, to include an allowance for this category in the supplementary building block.

The methodology was to use the proportional expenditure for such items from the Bureau of Labor Statistics Lower Level Living Standard. Analysis of these data shows that about one percent of a low-income family's budget is allocated for children's toys, games, and gifts. One percent of the basic package has been calculated for this supplemental expenditure.

C. Minor Home Appliances and Home Furnishings

The assumption throughout this analysis has been that families will have stocks of clothing, housewares, small appliances, and home furnishings. Clothing, housewares, and linens were considered part of the basic requirements, because all families consume such items on a

continuing basis. Even though the life expectancy of minor appliances and home furnishings is longer than that of the semi-durable goods, families over the long-term will incur replacement expenses for both minor appliances and home furnishings.

Two approaches were used to estimate annual expenditures for each category. For appliances, a basic list of five was derived from other cost of living studies. These were a television (19" black and white), a clock radio, a steam-dry iron, a toaster, and a vacuum cleaner. All five items were priced in the 1980 Sears Fall/Winter Catalog. Approximate shipping costs were added to each catalog price. Life expectancy data on these appliances were collected from industry sources at Sears national headquarters (Chicago). The price of the supplementary building block represents replacement costs for each item on an annual basis at current (October 1980) prices. (Table 5.2).

For home furnishings, little comparative data existed either to draw up a list of basic home furnishings or to estimate the life expectancy of individual items. Data from the Bureau of Labor Statistics Lower Level Living Standard in the home furnishings category show a small annual allowance of approximately one percent of a low-income budget to be used for replacement of furniture. This allowance was used for the home furnishings building block.

D. Summary

The total costs for all supplementary building blocks are shown in Tables 5.3 and 5.4. Including these building blocks would result in a three percent increase in the cost of living for a family of four and a 1.7 percent increase for an elderly individual.

TABLE 5.1: COST DATA FOR SCHOOL SUPPLIES/FEES BUILDING BLOCK

Category		County							
		King	Pierce	Thurston	Whatcom	Spokane	Franklin	Yakima	Statewide
School Supplies	E*:	$ 8.73	$ 8.55	$ 8.35	$ 8.25	$ 7.85	$ 8.34	$ 8.12	$ 8.44
	M*:	14.83	14.69	14.73	13.89	13.32	13.74	14.02	14.44
Fees	E:	4.00	-0-	1.35	2.50	3.75	1.25	-0-	2.12
	M:	16.00	14.00	9.50	5.00	15.50	11.00	3.00	12.56
Gym Clothes	M:	11.54	11.83	11.54	11.54	11.79	11.85	11.79	11.67
Supplemental Reading	E:	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Annual Total		$60.10	$54.07	$50.47	$46.18	$57.21	$51.18	$41.93	$54.23
Monthly Expenditure		$ 5.00	$ 4.51	$ 4.21	$ 3.85	$ 4.77	$ 4.27	$ 3.49	$ 4.52

* E = Elementary School; M = Middle or Junior High School

TABLE 5.2: COST DATA FOR THE MINOR APPLIANCES BUILDING BLOCK

Appliance	Catalog Price	Life Expectancy	Annual Expenditure (Price + Shipping ÷ Years) Western Washington	Eastern Washington
Television, 19" Black & White	$139.95	11 years	$13.26	$13.34
Toaster, 2 slice, single control	10.99	5 years	2.65	2.66
Clock-Radio	29.95	11 years	2.91	2.92
Steam/Dry Iron	10.99	7 years	2.65	2.66
Vacuum Cleaner Upright with attachments	62.95	7 years	9.56	9.61
	Sub Total		$31.03	$31.19
	Sales Tax (Western = 5.3%)		1.64	1.56
	(Eastern = 5.0%)			
	Annual Expenditure		$32.67	$32.75
	Monthly Expenditure		$ 2.72	$ 2.73

TABLE 5.3: FAMILY OF FOUR: Supplementary Components (Monthly Amounts)

COMPONENTS	KING	PIERCE	THURSTON	WHATCOM	SPOKANE	FRANKLIN	YAKIMA	STATEWIDE
1. School fees and supplies	$ 5.00	$ 4.51	$ 4.21	$ 3.85	$ 4.77	$ 4.27	$ 3.49	$ 4.52
2. Toys, games, and gifts	7.34	6.86	6.87	6.87	7.13	7.34	6.67	7.08
3. Minor appliances	2.72	2.72	2.72	2.72	2.73	2.73	2.73	2.72
4. Home furnishings	7.34	6.86	6.87	6.87	7.13	7.34	6.67	7.08
TOTAL	$22.40	$20.95	$20.67	$20.31	$21.76	$21.68	$19.56	$21.40

TABLE 5.4: ELDERLY INDIVIDUAL: Supplementary Components (Monthly Amounts)

COMPONENTS	KING	PIERCE	THURSTON	WHATCOM	SPOKANE	FRANKLIN	YAKIMA	STATEWIDE
1. Minor appliances	$ 2.72	$ 2.72	$ 2.72	$ 2.72	$ 2.73	$ 2.73	$ 2.73	$ 2.72
2. Home furnishings	3.96	3.59	3.61	3.67	3.77	3.78	3.18	3.73
TOTAL	$ 6.68	$ 6.31	$ 6.33	$ 6.39	$ 6.50	$ 6.51	$ 5.91	$ 6.45

CHAPTER 6: UPDATING THE COST OF LIVING STUDY

In a time of rapidly escalating prices and changing consumption patterns, the accuracy of a cost of living study diminishes with the passage of time. Moreover, RCW 74.08.040 specifies an annual updating. It is therefore important to describe how this study might be updated regularly at reasonable cost.

A. How A Living Standard Can Obsolesce

The living standard may become out-of-date for a number of reasons:

a) Absolute prices change, reflecting inflation in general; the cost of the standard rises accordingly.

b) Relative prices change. For example, the price of fuel oil has increased even relative to the overall price level. Though consumers will seek to substitute relatively cheaper commodities for those more costly, expenditures for basic requirements will tend to rise in any event. The substitution of one set of commodities for another will mean a change in the composition of the market basket.

c) Tastes and the availability of products change. With the passage of time low-income families, like other families, change their consumption patterns as some foods or goods go out of fashion and are replaced by others.

d) Descriptions of need change. Research may lead to an improved understanding of the needs of low-income populations. For example, National Research Council and USDA dietary research led to the modification of the Food Stamp diet in 1974; a further modification in the Thrifty Food Plan may be proposed as soon as 1981. Also, as real personal incomes have risen, the public's perception of needs has changed. A standard may now include items which only decades ago were not considered necessities.

e) The geographic character of the low-income population may change. Costs in this study are calculated on the basis of relative population weights. Statewide costs estimated in this way will shrink or grow depending on the change in the proportion of low-income persons in higher versus lower cost counties in Washington State.

B. Means of Adjusting the Cost of Living Estimates

There are a number of ways to make technical adjustments in the cost estimates -- preparation and pricing of new lists, repricing of the existing lists, use of the Consumer Price Index, use of the Implicit Price Deflator of personal consumption expenditures, and use of price indices for the different consumption components. In addition, it is important to consider changes in the distribution of the low-income population throughout Washington State.

a) The recomposition of items in a minimal standard of living is the task described in this report. This should be done from time to time, but every year is far too often. The standard can be thoroughly revised when new, major studies of consumption are produced, such as that of the BPA, or when new normative consumption lists, such as the Thrifty Food Plan, are generated. In the absence of new data, there is no reason to compile new lists.

b) Repricing an existing list, such as the one developed in this report, may be a plausible approach. It eliminates much of the research involved above. A thorough repricing will require that surveyors resample the hundreds of items in a number of sites. This market basket information should provide an accurate estimate of the changes in costs.

c) If one assumes that the cost of living in Washington State increases at the same rate as the Consumer Price Index, then one might inflate the estimate by the annual growth in the CPI. However, there are shortcomings in this approach. First, the market baskets of the various CPI measures reflect the consumption of middle income urban wage earner households. These baskets do not match the market basket of the low-income population, owing to the absence of nonnecessities in the latter. Second, only experimental CPI measures treat shelter costs in a manner similar to that we have elected. We consider only rental housing in the living standard, while the official CPI measures blend rental and ownership costs. The summary CPI measures may rise at a slower or faster rate than the increase in the basic cost of living.

d) The U.S. Department of Commerce's Implicit Price Deflator (IPD) for personal consumption expenditures has lately gained in favor for some purposes. Unlike the CPI, which calculates the price increase of a fixed market basket of goods, the IPD allows for substitution of goods as they inflate in price. The IPD is calculated on the basis of the actual market basket which consumers currently purchase. To illustrate: the IPD would allow for less beef and more chicken to reflect consumer choice as a response to higher beef prices. Implicit in the CPI is the assumption that consumption choices are constant. Partially as a result of this allowance for substitution of cheaper for more expensive items, the IPD has risen more slowly than the CPI since 1973; it is also projected to continue its slower rate of increase, at least through 1983.[1] The major element in its slower growth is its treatment of shelter costs. In the IPD, only rental housing is priced; the rate of increase in the cost of rental housing has been well below that of owner-occupied housing.

---

[1]Office of Financial Management, "Economic and Revenue Forecast for Washington State," December 1980, Table 4.1, p.20. For a technical explanation of the derivation of the IPD, see U.S. Department of Commerce, Bureau of Economic Analysis, Business Statistics, 1977 (Washington, D.C.: Government Printing Office, 1978), footnotes to pp. 4-5.

In spite of its treatment of rent in a manner suitable to the present study, the IPD is still not a good measure of inflation for this study. First, its implicit weights on consumption categories do not describe the consumption of the market basket developed for this study. Second, the allowance for substitution may not be an appropriate assumption; the budget components allow for little flexibility in consumption choices. The budget is at a level which does not allow for much deviation from the prescribed pattern. The virtue of the IPD for middle income households--its allowance for substitutions among goods--is of little moment when substitution is presumed to be minimal.

e) One might use the component costs from our estimate together with the price indices for comparable components. That is, year-to-year changes would be calculated as the cost for rent, $266.08, times the percentage increase in the cost of rental housing plus the cost for food, $254.69, times the percentage increase in the price of food and so on. This approach allows one to use proportions appropriate to the present study's market basket in combination with authoritative measures of price change.

f) In whatever manner one calculates price changes in the components of the market basket, it is important to consider the impact of the demographic distribution of the low-income population. The statewide estimate is calculated as the population weighted sum of the estimates for aggregations of like counties. A shift in the proportion of the low-income population among counties may affect the level of the overall cost. Even when recomposition and/or repricing are not used, it may nonetheless be more accurate to first adjust component or overall price levels at the county level and then apply the most recent population weights to them.

C. Proposed Procedure

The most appropriate procedure to use in updating depends upon the time elapsed since the most recent recomposition. While the greatest precision might be obtained from an annual recomposition, the cost in terms of improved accuracy cannot be justified. The approach below permits the necessary accuracy within reasonable cost constraints:

a) Annual update. In conjunction with a reweighting for population change, the cost of living should be adjusted for changes in the price levels of its components. That is, component weights calculated in this study are to be multiplied by annual rates of increase in price indices for those components. Generally, rates of price increase of components of the Consumer Price Index-All City Average should be used.[2] Recent criticism of the CPI has not

[2]OFM Chief Economist David Weig recommends CPI-U.S. City Average over CPI-Seattle/Everett. He believes the former is more representative of the state as a whole. Also, he observes the latter is too sensitive to changes in local labor market conditions.

addressed the thoroughness or accuracy of the data collection for the CPI. Rather, it has centered on the definition of the components and the rigidity in the component weights used in calculating that price index. We have avoided this by devising our own components and component weights. Population data are available in the Office of Financial Management's "Economic and Revenue Forecast" or from OFM directly.

b) Every fifth year. Approximately every fifth year the existing list should be repriced around the state. Price data generated in this way will retune the estimate to Washington, as opposed to U.S. average, prices.

c) Every decade. Approximately every ten years, preferably following the publication of U.S. Census results, a recomposition of the cost of living should be performed. This will allow for the incorporation of new research results and will permit a careful review of the analytical approaches here and in other states.

d) As needed. Research results on a major consumption category may indicate that a recomposition of its price is necessary. In particular, it may be necessary in a few years to re-examine the food component in light of anticipated modifications in USDA food budgets. Likewise, research on consumption of shelter or fuels should be monitored.

We have described in this report the cost of living for two low-income households for October 1980, since that is when all in-store pricing occurred. The month for which the costs are appropriate is of less significance than ensuring the consistency of annual updates. If the estimates are to be tied to October, then future investigators should collect data that month. If some other month would be a more appropriate base period, the results in this report should first be updated to that month. The method described under annual update could be used to adjust to that month.

Appendix A: FOOD COMPONENT

This appendix contains four sets of documents:

a) detailed monthly menus for three food plans;

b) monthly consumption quantities for three food plans;

c) statewide, weighted average prices for the items on the consumption quantities list;

d) comparison cost data for the original Thrifty Food Plan.

Menus: The Thrifty Food Plan, the basis of the Food Stamp Program, served as the benchmark for this study. A model monthly menu plan, for a family of four, is reproduced from a U.S. Department of Agriculture publication. Dr. Charlene Martinsen revised this menu plan and created the revised Thrifty Food Plan for four and a food plan for the elderly individual. These revised food plans were the food components of the two model consumption units (see Tables A.1-A.3).

Consumption Quantities: Monthly consumption quantities were determined from the menu plans. These quantities were used in compiling the monthly costs of the three food plans at each of the 27 pricing sites (i.e., supermarkets in the seven sample counties). Quantity lists are in Table A.4.

Average prices: The third document provides data on the statewide, weighted average price for each item priced in the food budgets. These price data serve as a reference point for selected statewide food prices in October 1980 (see Table A.5).

Original Thrifty Food Plan: As explained in Chapter 2, the original Thrifty Food Plan was not used as the food component because it has been criticized for nutritional inadequacies and because the Department of Agriculture, in response to this criticism, will soon revise this plan. However, it still serves as a basis for the Food Stamp Program. Consequently, the cost of this original plan for a family of four was also calculated for each county (see Table A.6).

Consultants: Two consultants assisted in conceptualizing and pricing the food plans. They were: Dr. Charlene Martinsen of the Department of Nutritional Sciences of the University of Washington and Mr. Lance Jensen of Jensen Price Surveys, Inc., Bellevue, Washington.

Table A.1 ORIGINAL THRIFTY FOOD PLAN*

PERIOD I (7 DAYS): MENUS FOR A FAMILY OF FOUR

	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
BREAKFAST	Orange juice (2 c) Eggs (4) Pancakes Sirup (4 T) Beverage	Orange juice (2 c) Oatmeal (2 c dry) Toast (4 sl) Beverage	Bananas (2), sliced Ready-to-eat cereal (6 oz) Toast (4 sl) Beverage	Orange juice (2 c) Eggs (5) Toast (4 sl) Beverage	Pears (4), quartered Ready-to-eat cereal (6 oz) Toast (4 sl) Beverage	Oranges (2), halved Farina (1 c dry) Toast (4 sl) Beverage	Cinnamon peaches (2 c) Ready-to-eat cereal (6 oz) Coffee cake (1/2 cake) Beverage
LUNCH	Baked picnic shoulder (slightly more than 1/3 of 3-1/4 lb roast) Scalloped potatoes Green beans Refrigerator biscuits Ice milk (2 c) Beverage	Cheese (5 3/4-oz sl) sandwiches (5 sand) Celery sticks (1 c) Apples (4) Beverage	Split pea soup Saltine crackers (20) Plums (6) Pound cake (1/3 cake) Beverage	Peanut butter (8 T) & jelly sandwiches (5 sand) Carrot strips (3/4 c) Bananas (4) Beverage	Tuna and macaroni Celery sticks (1 c) Gingerbread (1/2 cake) Beverage	Grilled cheese (5 3/4-oz sl) sandwiches (5 sand) Apple-raisin slaw (1/2 salad) Gingerbread (1/2 cake) Beverage	Chicken rice soup Bologna (6 oz) sandwiches (5 sand) Pickles Beverage
DINNER	One-pan macaroni & cheese Gelatin salad (with celery, dressing) Toast (4 sl) Pound cake (1/3 cake) Beverage	Ham hash Steamed cabbage (1/2 head) Cornbread (1/2 pan) Pound cake (1/3 cake) Beverage	Chicken pie with vegetables Lettuce and tomato (1/2 lb) salad with dressing Cornbread (1/2 pan) Ice milk (2 c) Beverage	Ham, cheese, and rice Peas Sliced tomatoes (1/2 lb) Muffins (6) Pudding Beverage	Creamed chicken Toast (4 sl) Mashed potatoes (4 med) Apple-raisin slaw (1/2 salad) Beverage	Liver and onions Parslied potatoes (4 med) Broccoli Bread (4 sl) Rice pudding Beverage	Chili con carne with beans and macaroni Lettuce salad with dressing Bread (4 sl) Gelatin with 1 c peaches Beverage
SNACK	Cookies	Cinnamon toast (6 sl)	Graham crackers (12)	Toast (6 sl) and jelly	Cheese (4 3/4-oz sl) and saltine crackers (20)	Graham crackers (8) and peanut butter (4 T)	Coffee cake (1/2 cake)

Notes: Amounts of some foods that the family is expected to use are shown in parentheses ( ). Weights refer to amount of food as purchased unless otherwise specified. Beverage is milk for everyone at least once daily and for children more often. Adults may wish to add coffee or tea to their meals. Spreads for bread and sugar for cereal may be added, if desired. Cookies may be added to meals as an optional dessert. See label of ready-to-eat cereal selected to estimate the number of cups of cereal that weighs 6 ounces.

*Source: U.S. Department of Agriculture, Science and Education Administration, Food for Thrifty Families (September 1978).

A.1 (Cont'd)

PERIOD II (7 DAYS): MENUS FOR A FAMILY OF FOUR

	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
BREAKFAST	Orange juice (2 c) French toast Sirup (4 T) Beverage	Orange juice (2 c) Ready-to-eat cereal (6 oz) Doughnuts (4) Beverage	Peaches (2), sliced Grits (1 c dry) Cinnamon toast (4 sl) Beverage	Orange juice (2 c) Eggs (5) Pan-fried potatoes (3 med) Toast (4 sl) Beverage	Peaches (2), sliced Ready-to-eat cereal (6 oz) Toast (4 sl) Beverage	Apple juice (2 c) Farina (1 c dry) Toast (4 sl) Beverage	Apples (2), quartered Pancakes Sirup (4 T) Beverage
LUNCH	Beef pot roast (slightly more than 1/3 of 4 lb roast) Gravy Mashed potatoes (4 med) Mixed vegetables Bread (4 sl) Ice milk (2 c) Beverage	Grilled cheese (5 3/4-oz sl) sandwiches (5 sand) Macaroni salad (1/2 salad) Baked apples Beverage	Frankfurters (5) Sauerkraut Bread (5 sl) Oatmeal cookies Beverage	Beef macaroni soup Saltine crackers (20) Plums (8) Beverage	Noodle soup Peanut butter (5 T) and jelly sandwiches (5 sand) Carrot sticks (3/4 c) Graham crackers (8) Beverage	Frankfurter bean soup Saltine crackers (20) Oatmeal cookies Beverage	Cheese (5 3/4-oz sl) sandwiches (5 sand) Gelatin (with apple juice and celery) Meringue pie (1/2 pie) Beverage
DINNER	Beans in tomato sauce Macaroni salad (1/2 salad) Pear halves Corn bread (1/2 pan) Gelatin Beverage	Beef stew I with vegetables Cornbread (1/2 pan) Ice milk (2 c) and oatmeal cookies Beverage	Beef pie with vegetables Refrigerator biscuits (4) Lettuce wedges with dressing Peanut butter cake (1/3 cake) Beverage	Fried chicken Rice (1 c dry) Gravy Corn Bread (4 sl) Peanut butter cake (1/3 cake) Beverage	Beef patties Baked potatoes (4 med) Stewed tomatoes Muffins (6) Ice milk (2 c) Beverage	Cheese rarebit Toast (6 sl) French-fried potatoes Collards Meringue pie (1/2 pie) Beverage	Spaghetti with meat sauce Tossed salad (lettuce, carrots, dressing) Bread sticks Ice milk (2 c) Beverage
SNACK	Doughnuts (4)	Bread and jelly sandwiches (4 sand)	Cheese (4 3/4-oz slices) and saltine crackers (20)	Doughnuts (4)	Peanut butter cake (1/3 cake)	Graham crackers (8)	Ready-to-eat cereal (6 oz)

Notes: Amounts of some foods that the family is expected to use are shown in parentheses ( ). Weights refer to amount of food as purchased unless otherwise specified. Beverage is milk for everyone at least once daily and for children more often. Adults may wish to add coffee or tea to their meals. Spreads for bread and sugar for cereal and coffee may be added, if desired. Cookies may be added to meals as an optional dessert. See label of ready-to-eat cereal selected to estimate the number of cups of cereal that weighs 6 ounces.

A.1 (Cont'd)

PERIOD III (7 DAYS): MENUS FOR A FAMILY OF FOUR

	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
BREAKFAST	Orange juice (2 c) Eggs (4) Toast (6 sl) Beverage	Bananas (4) Ready-to-eat cereal (6 oz) Toast (4 sl) Beverage	Orange juice (2 c) Oatmeal (2 c dry) Toast (4 sl) Beverage	Orange juice (2 c) Eggs (5) Toast (4 sl) Beverage	Peaches (2), sliced Ready-to-eat cereal (6 oz) Oatmeal muffins (6) Beverage	Oranges (2), quartered Pancakes Sirup (4 T) Beverage	Peaches (2), sliced Farina (1 c dry) Biscuits (6) Beverage
LUNCH	Pan-broiled steak French-fried potatoes Mixed fruit salad Bread (5 sl) Pound cake (1/3 cake) Beverage	Chicken noodle soup Grilled cheese (5 3/4-oz sl) sandwiches (5 sand) Celery strips (1 c) Graham crackers (8) Beverage	Mini-pizzas Carrot strips (3/4 c) Ice milk (2 c) Beverage	Beans in tomato sauce Potato salad Bread (4 sl) Plums (8) Beverage	Creamed chipped beef Rice (1 c dry) Carrot strips (3/4 c) Bread (4 sl) Beverage	Peanut butter (8 T) and jelly sandwiches (5 sand) Fruit cocktail (2 c) Beverage	Vegetable soup with blackeye peas Saltine crackers (20) Gingerbread (1/2 cake) Beverage
DINNER	Cornmeal pancakes with chopped Vienna sausage Sirup (4 T) Sliced tomatoes (1/2 lb) Beverage	Meatballs in potato cups Bouillon gravy Collards Bread (5 sl) Pound cake (1/3 cake) Beverage	Liver in barbecue sauce Rice (1 c dry) Tossed salad (lettuce, celery, green pepper, dressing) Bread (4 sl) Pound cake (1/3 cake) Beverage	Cheese meatloaf Baked potatoes (4 med) Green beans Oatmeal muffins (6) Pudding pie (pudding mix in baked pie shell) Beverage	Crispy fried fish Parslied potatoes (4 med) Lettuce wedges with dressing Bread (4 sl) Stewed apples (2 c) with ice milk (1 c) Beverage	Pork sausage patties Noodles in cheese sauce Beets Biscuits (6) Stewed apples (2 c) with ice milk (1 c) Beverage	Skillet dinner Cucumber slices Gelatin with 1 c fruit cocktail Bread sticks Beverage
SNACK	Cinnamon toast (6 sl)	Cookies	Peanut butter (5 T) and celery sticks (1 c)	Bread and jelly sandwiches (5 sand)	Cheese (4 3/4-oz sl) saltine crackers (20)	Gingerbread (1/2 cake)	Graham crackers (10) and peanut butter (4 T)

Notes: Amounts of some foods that the family is expected to use are shown in parentheses ( ). Weights refer to amount of food as purchased unless otherwise specified. Beverage is milk for everyone at least once daily, and for children more often. Adults may wish to add coffee or tea to their meals. Spreads for bread and sugar for cereal may be added, if desired. Cookies may be added to meals as an optional dessert. See label of ready-to-eat cereal selected to estimate the number of cups of cereal that weighs 6 ounces.

A.1 (Cont'd)

PERIOD IV (10 DAYS): MENUS FOR A FAMILY OF FOUR

	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
BREAKFAST	Peaches (2), sliced Pancakes Sirup (4 T) Beverage	Orange juice (2 c) Ready-to-eat cereal (6 oz) Toast (4 sl) Beverage	Orange (1 c)-grape (1 c) juice Oatmeal (2 c dry) Doughnuts (4) Beverage	Grape juice (2 c) Ready-to-eat cereal (6 oz) Toast (4 sl) Beverage	Orange juice (2 c) Eggs (5) Grits (1/2 c dry) Toast (4 sl) Beverage	Bananas (2), sliced Oatmeal (2 c dry) Cinnamon toast (4 sl) Beverage	Fried apple rings French toast Sirup (4 T) Beverage
LUNCH	Pork shoulder roast (about 1/2 of roast) Oven potatoes (4 med) Mixed vegetables Pound cake (1/3 cake) Beverage	Bologna (6 oz) sandwiches (5 sand) Peaches (2), sliced Peanut butter cookies Beverage	Cheese (5 3/4-oz sl) sandwiches (5 sand) Plums (6) Pound cake (1/3 cake) Beverage	Peanut butter-raisin sandwiches (4 sand) Celery sticks (3/4 c) Doughnuts (4) Beverage	Chicken rice soup Saltine crackers (20) Carrot strips (3/4 c) Cake (1/3 cake) Beverage	Open-face cheese sandwiches Molasses-glazed beans (1/2 pan) Graham crackers (8) Beverage	Bologna (6 oz) sandwiches (5 sand) Carrot strips (3/4 c) Cake (1/3 cake) Beverage
DINNER	Limas in tomato sauce Potato salad Bread (4 sl) Ice milk (2 c) Beverage	Chinese-style dinner with cabbage and rice Sliced tomatoes (1/2 lb) Pound cake (1/3 cake) Beverage	Sloppy Joes Corn Lettuce wedges and dressing Ice milk (2 c) Beverage	Beef stew II with vegetables Sliced tomatoes (1/2 lb) Bread (4 sl) Ice milk (2 c) Beverage	Hamburgers (3/4 lb ground beef) on rolls (4) French-fried potatoes Molasses-glazed beans (1/2 pan) Plums (6) Beverage	Fish sticks Top-of-stove scalloped potatoes Collards Cornbread (1/2 pan) Beverage	Spanish macaroni Coleslaw Cornbread (1/2 pan) Ice milk (2 c) Beverage
SNACK	Saltine crackers (20) and cheese (4 3/4-oz sl)	Doughnuts (4)	Peanut butter cookies	Graham crackers (12)	Pudding	Cake (1/3 cake)	Ready-to-eat cereal (6 oz)

Notes: Amounts of some foods that the family is expected to use are shown in parentheses ( ). Weights refer to amount of food as purchased unless otherwise specified. Beverage is milk for everyone at least once daily and for children more often. Adults may wish to add coffee or tea to their meals. Spreads for bread and sugar for cereal and coffee may be added, if desired. Cookies may be added to meals as an optional dessert. See label of ready-to-eat cereal selected to estimate the number of cups of cereal that weighs 6 ounces.

A.1 (Cont'd)

PERIOD IV (10 DAYS): MENUS FOR A FAMILY OF FOUR--CONTINUED

	SUNDAY	MONDAY	TUESDAY
BREAKFAST	Orange juice (2 c) Eggs (5) Toast (4 sl) Beverage	Bananas (2), sliced Ready-to-eat cereal (6 oz) Toast (4 sl) Beverage	Orange juice (2 c) Farina (1 c dry) Toast (4 sl) Beverage
LUNCH	Braised chicken with vegetables Rice (1 c dry) Peas Bread (4 sl) Gingerbread (1/2 cake) Beverage	Grilled cheese (5 3/4-oz sl) sandwiches (5 sand) Fruit-flavored gelatin Beverage	Peanut butter (5 T) and jelly sandwiches (4 sand) Carrot strips (3/4 c) Apples (4) Graham crackers (8) Beverage
DINNER	Mini-pizzas Celery sticks (1 c) Apples (4) Beverage	Swiss steak Mashed potatoes (4 med) Broccoli Raisin-rice pudding* Beverage	One-pan macaroni & cheese Blackeye peas Tossed salad (lettuce, tomatoes with dressing) Gingerbread (1/2 cake) Beverage
SNACK	Graham crackers (12)	Cookies	Ready-to-eat cereal (6 oz)

Table A.2 REVISED THRIFTY FOOD PLAN

PERIOD 1 (7 DAYS): MENUS FOR A FAMILY OF FOUR

	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
BREAKFAST	Orange juice Eggs Pancakes Syrup Beverage	Orange juice Oatmeal w/raisins Toast Beverage	Bananas Ready-to-eat cereal Toast Beverage	Orange juice Eggs Toast Beverage	Pears Ready-to-eat cereal Toast Beverage	Apple juice Farina Toast Beverage	Ready-to-eat cereal Cinnamon peaches Coffee-cake Beverage
LUNCH	Baked ham Scalloped potatoes Green beans Biscuits Ice Milk Beverage	Cheese sandwiches Celery sticks Apples Beverage Oatmeal cookies w/dates or raisins	Bologna sandwich w/lettuce and salad dressing Pickles Grapefruit Oatmeal or peanut butter cookies Beverage	Peanut butter and raisin sandwich Celery strips Bananas Beverage Oatmeal cookies	Tuna salad sandwich on hamburger bun Carrot strips Gingerbread Beverage	Cheese sandwich Apple Gingerbread cake Beverage	Split pea soup Saltine crackers Peaches Cookies Beverage
DINNER	One-pan macaroni and cheese Lettuce salad with celery, tomato, green pepper and dressing Toast Cake Applesauce	Ham hash Steamed cabbage Cornbread Cake Beverage	Chicken pie w/vegetables Lettuce, tomato and green pepper salad Cornbread Ice milk Beverage	Hamburgers on buns Green beans Carrots Sliced tomatoes Pudding Beverage	Creamed chicken Toast Mashed potatoes Peas Apple raisin slaw Beverage	Liver and onions Parslied potatoes Broccoli Bread Rice pudding Beverage	Chili con carne w/beans and macaroni and cheese Lettuce salad w/dressing Saltine crackers Baked custard Beverage
SNACK	Cookies Grape juice	Cinnamon Toast Grape juice	Graham Crackers	Toast and jelly Tomato juice	Cheese Saltine crackers Tomato juice	Oranges Graham crackers	Cheese, carrot and celery sticks Coffee cake

Beverage is milk for everyone at least once daily and for children more often. Adults may wish to add coffee or tea to their meals. Spreads for bread and sugar for cereal may be added, if desired. Cookies may be added to meals as an optional dessert. Fresh vegetables or fruits in season may be substituted for canned and frozen vegetables and fruits.

A.2 (Cont'd)

PERIOD 2 (7 DAYS): MENUS FOR A FAMILY OF FOUR

	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
BREAKFAST	Orange juice French toast Syrup Beverage	Orange juice Ready-to-eat cereal English muffins Beverage	Peaches Farina Cinnamon toast Beverage	Orange juice Eggs Pan fried potatoes Toast Beverage	Peaches Ready-to-eat cereal Toast Beverage	Apple juice Farina Toast Beverage	Apples Pancakes Syrup Beverage
LUNCH	Beef pot roast Gravy Mashed potatoes Mixed vegetables Bread Ice Milk Beverage	Cheese sandwich Apple Carrot sticks Beverage Cookies	Liverwurst sandwich Pickles Banana Oatmeal cookies Beverage	Cheese Saltine crackers Peanut butter w/ celery sticks Pineapple Cookies Beverage	Peanut butter and jelly sandwich Carrot sticks Graham crackers Orange	Cheese sandwich Applesauce Oatmeal cookies Beverage	Noodle soup Cheese sandwich Meringue pie Beverage
DINNER	Frankfurter bean soup w/tomato sauce Macaroni salad Corn bread Pears Beverage	Beef stew I w/vegetables and extra mixed vegetables from Sunday Cornbread Lettuce salad w/tomato, hard-cooked egg, celery and dressing Ice milk and oatmeal cookies	Frankfurters Sauerkraut Boiled potatoes Lettuce wedges and dressing Peanut butter cake Beverage	Fried chicken Rice Gravy Spinach Bread Peanut butter cake Beverage	Beef patties Baked potatoes Stewed tomatoes Cole slaw Muffins Ice milk Beverage	Fish sticks Toast French fried potatoes Greens Meringue pie Beverage	Spaghetti w/meat sauce Tossed salad Bread sticks Fruit cocktail Oatmeal cookies Beverage
SNACK	English muffins	Cookies	Cheese and Saltine crackers	English muffins Beverage	Peanut butter cake Beverage	Graham crackers Beverage	Ready-to-eat cereal Beverage

Beverage is milk for everyone at least once daily and for children more often. Adults may wish to add coffee or tea to their meals. Spreads for bread and sugar for cereal may be added, if desired. Cookies may be added to meals as an optional dessert. Fresh vegetables or fruits in season may be substituted for canned and frozen vegetables and fruits.

A.2 (Cont'd)

PERIOD 3 (7 DAYS): MENUS FOR A FAMILY OF FOUR

	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
BREAKFAST	Orange juice Eggs Toast Beverage	Bananas Ready-to-eat cereal Toast Beverage	Orange juice Oatmeal Toast Beverage	Orange juice Toast Rice w/milk cinnamon and sugar Beverage	Fruit cocktail Ready-to-eat cereal Oatmeal muffins Beverage	Oranges Pancakes Syrup Beverage	Peaches Farina Biscuits Beverage
LUNCH	Pan broiled steak French fried potatoes Mixed fruit salad Bread Cake Beverage Broccoli	Cheese sandwich Celery sticks Raisins Graham crackers Beverage	Tuna sandwich Carrot strips Apples Beverage	Egg salad sandwich Peaches Cookies Beverage	Tuna and celery sandwich Carrot strips Small orange Beverage	Peanut butter and jelly sandwich Applesauce Cookie Beverage	Vegetable soup w/blackeyed peas Saltine crackers Gingerbread cake Beverage
DINNER	Pancakes w/vienna sausages Syrup Sliced tomatoes Celery and carrot sticks Ice milk Beverage	Meat balls in potato cup Bouillon gravy Greens Coleslaw Bread Cake Beverage	Liver in barbecue sauce Rice Tossed salad Bread Pudding Beverage	Cheese meatloaf Baked potatoes Green beans Oatmeal muffins Beverage	Crispy fried fish Parslied potatoes Lettuce wedges w/dressing Green beans Bread Stewed apples w/ice milk Beverage	Pork sausage patties Noodles in cheese sauce Beets Biscuits Tossed salad w/celery and carrots Stewed apples w/ice milk Beverage	Skillet dinner Coleslaw Bread Pudding w/fruit cocktail topping Beverage
SNACK	Cinnamon toast	Cookies	Peanut butter w/celery sticks	Refried beans w/cheese and crackers	Cheese and saltine crackers	Gingerbread cake	Apples Graham crackers

Beverage is milk for everyone at least once daily and for children more often. Adults may wish to add coffee or tea to their meals. Spreads for bread and sugar for cereal may be added, if desired. Cookies may be added to meals as an optional dessert. Fresh vegetables or fruits in season may be substituted for canned and frozen vegetables and fruits.

PERIOD 4 (7 DAYS): MENUS FOR A FAMILY OF FOUR

	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
BREAKFAST	Peaches Pancakes Syrup Beverage	Orange juice Ready-to-eat cereal Toast Beverage	Orange juice Oatmeal English muffins Beverage	Grape juice Ready-to-eat cereal Toast Beverage	Orange juice Eggs Farina Toast Beverage	Bananas Oatmeal Cinnamon toast Beverage	Fried apple rings French toast Syrup Beverage
LUNCH	Pork shoulder roast Oven potatoes Mixed vegetables Lettuce wedge and dressing Cake Beverage	Bologna sandwich Peaches Peanut butter cookies Beverage	Cheese sandwich Oranges Cake Beverage	Peanut butter and raisin sandwich Celery sticks English muffins Beverage	Bologna sandwich Carrot strips Apples Beverage Cookies	Cheese sandwich Celery sticks w/peanut butter Oatmeal cookies Raisins	Frankfurters Molasses-glazed beans Carrot strips Pudding Beverage
DINNER	Lima beans in tomato sauce Bran muffins Tossed salad Ice Milk Beverage	Chinese-style dinner w/cabbage and rice Sliced tomatoes Cake Beverage	Sloppy joes Corn Lettuce wedges and dressing Ice milk Beverage	Beef stew Sliced tomatoes Bread Ice milk Beverage	Hamburgers w/buns French fried potatoes Molasses-glazed beans Pudding Beverage	Fish sticks Top-of-stove scalloped potatoes Greens Cornbread Fruit cocktail Beverage	Spanish macaroni Coleslaw Cornbread Ice milk Beverage
SNACK	Saltine crackers and cheese Grape juice	Celery and carrot sticks Raisins	Peanut butter cookies Tomato juice	Oranges English muffins	Fruit cocktail	Cookies	Ready-to-eat cereal Tomato juice

Beverage is milk for everyone at least once daily and for children more often. Adults may wish to add coffee or tea to their meals. Spreads for bread and sugar for cereal may be added, if desired. Cookies may be added to meals as an optional dessert. Fresh vegetables or fruits in season may be substituted for canned and frozen vegetables and fruits.

A.2 (Cont'd)

PERIOD 4 (3 DAYS): MENUS FOR A FAMILY OF FOUR

	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
BREAKFAST	Orange juice Eggs Toast Beverage	Bananas Ready-to-eat cereal Toast Beverage	Orange juice Farina Toast Beverage				
LUNCH	Braised chicken w/vegetables Rice Peas Gingerbread cake Bread Beverage	Cheese sandwich Coleslaw w/peas Pineapple Cookies Beverage	Peanut butter and jelly sandwich Carrot strips Apples Graham crackers Beverage				
DINNER	Mini pizza Celery sticks Apples Beverage	Swiss steak Mashed potatoes Broccoli Raisin-rice pudding Beverage	One pan macaroni and cheese Blackeyed peas Tossed salad Gingerbread Beverage				
SNACK	Graham crackers Grape juice	Cookies Tomato juice	Ready-to-eat cereal Grape juice				

Beverage is milk for everyone at least once daily and for children more often. Adults may wish to add coffee or tea to their meals. Spreads for bread and sugar for cereal may be added, if desired. Cookies may be added to meals as an optional dessert. Fresh vegetables or fruits in season may be substituted for canned and frozen vegetables and fruits.

Table A.3 FOOD PLAN FOR ONE

PERIOD 1 (7 DAYS): MENUS FOR SSI INDIVIDUAL

	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
BREAKFAST	Orarge juice Poached egg Toast Beverage	Orange juice Oatmeal Toast Beverage	Banana Ready-to-eat cereal Milk Toast Beverage	Orange juice Egg Toast Beverage	Fruit cocktail Ready-to-eat cereal Milk Toast Beverage	Orange juice Farina Milk Toast Beverage	Fruit cocktail w/cinnamon Ready-to-eat cereal Milk Biscuits Beverage
LUNCH	Baked pork shoulder roast Baked potato Broccoli Bread Ice milk Beverage	Cheese sandwich Tomato and lettuce salad Apple Beverage	Split pea soup w/pork Corn muffin ½ Grapefruit Beverage	Cold chicken sandwich Carrot sticks Banana Beverage	Cold pork sandwich Raw vegetables Cottage cheese Split pea soup Cake Beverage	Egg and chicken salad Corn muffin Vanilla pudding Beverage	Chicken and macaroni soup w/carrots Toast Applesauce Oatmeal cookies Beverage
DINNER	One pan macaroni and cheese Celery and apple Corn muffins Beverage	Pork hash Steamed cabbage Corn muffin ½ Grapefruit Beverage	Chicken w/vegetables Cole slaw w/ salad dressing Beverage	Pork, cheese and rice Peas Lettuce and tomato salad Biscuits Apple sauce Beverage	Creamed chicken Boiled potato Cole slaw w/apples and raisins Beverage	Liver and onions Parslied potatoes Broccoli Bread Fruit cocktail Beverage	Stir fried pork and vegetables (celery, onion, carrots) Rice Pudding Beverage
SNACK	Vegetable juice Carrot sticks	Cinnamon toast	Cookie Vegetable juice	Ready-to-eat cereal Milk	Cheese toast Vegetable juice	Cake Applesauce	Milk Graham crackers

Beverage is coffee, tea or milk. Spreads for bread and sugar for cereal may be added, if desired. Cookies may be added to meals as an optional dessert. Fresh vegetables and fruits in season may be substituted for canned and frozen vegetables and fruits.

A.3 (Cont'd)

PERIOD 2 (7 DAYS): MENUS FOR SSI INDIVIDUAL

	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
BREAKFAST	Orange juice Scrambled egg Toast Beverage	Orange juice Ready-to-eat cereal Milk Toast Beverage	Fruit Cocktail Oatmeal Cinnamon toast Beverage	Tomato juice Poached egg Toast Beverage	Banana Ready-to-eat cereal Milk Toast Beverage	Orange juice Farina Toast Beverage	French toast Applesauce w/ cinnamon Beverage
LUNCH	Beef pot roast Gravy Baked potato Carrots Lettuce and french dressing Fruit Cocktail Beverage	Cheese sandwich Apple wedges Beverage	Bean soup Bran muffin Applesauce Cookie Beverage	Beef macaroni soup Toast Apple Beverage	Egg salad sandwich Sliced tomato Fruit Cocktail Beverage	Vegetable soup Cottage cheese Bran muffin Cookie Beverage	Tuna sandwich Peaches Pudding Beverage
DINNER	Bean soup Cottage cheese Bran muffin Beverage	Beef stew and vegetables Bran muffin Ice milk Beverage	Beef pie w/vegetables Mashed potatoes Lettuce wedge Cake Beverage	Fried chicken Rice Spinach Celery and carrot sticks Bread Cake Beverage	Beef patty Baked potato Mixed vegetables Bran muffin Pudding Beverage	Tuna and cheese on toast Spinach Pudding Beverage	Spaghetti w/meat sauce Tossed salad Cookie Beverage
SNACK	Tomato juice Toast	Tomato juice Bread and jelly sandwiches	Cheese toast Tomato juice	Bran muffin Orange juice	Cake Milk	Cake Tomato juice	Pudding Orange juice

Beverage is coffee, tea or milk. Spreads for bread and sugar for cereal may be added, if desired. Cookies may be added to meals as an optional dessert. Fresh vegetables and fruits in season may be substituted for canned for canned and frozen vegetables and fruits.

A.3 (Cont'd)

PERIOD 3 (7 DAYS): MENUS FOR SSI INDIVIDUAL

	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
BREAKFAST	Orange juice Egg Toast Beverage	Banana Ready-to-eat cereal Milk Toast Beverage	Orange juice Oatmeal Toast Beverage	Orange juice Egg Toast Beverage	Ready-to-eat cereal Milk Muffin Apple Beverage	Orange juice Farina Beverage	Applesauce Egg Pork sausage Muffin Beverage
LUNCH	Pan broiled steak Potato Peaches Cottage cheese Muffin Cake Beverage	Chicken noodle soup Celery sticks Cheese sandwich Graham crackers Beverage	Chicken noodle soup Lettuce, celery, carrot, tuna and egg salad Applesauce Beverage	Pork and beans Muffin Peaches Beverage	Meatloaf sandwich Carrot strips Orange Beverage	Fish chowder Peaches Muffin Beverage	Beef borsch vegetable soup Toast Cake Beverage
DINNER	Tuna sandwich Sliced tomato Applesauce Beverage	Meat balls Rice Tomato Broccoli Muffins Cake Beverage	Liver Rice Tossed salad Cake Beverage	Cheese meat loaf Baked potato Green beans Pudding Beverage	Fish fillet Pork and beans Lettuce wedge Stewed apples Beverage	Pork sausage patty Beets Biscuits Stewed apples Beverage	Skillet dinner Broccoli Tomato Rice Peaches Beverage
SNACK	Tomato juice Cinnamon toast	Orange juice Cookie	Cheese toast	Cottage cheese	Orange juice Graham crackers	Pudding	Cheese Saltine crackers

Beverage is coffe, tea or milk. Spreads for bread and sugar for cereal may be added, if desired. Cookies may be added to meals as an optional dessert. Fresh vegetables and fruits in season may be substituted for canned and frozen vegetables and fruits.

A.3 (Cont'd)

PERIOD 4 (7 DAYS): MENUS FOR SSI INDIVIDUAL

	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
BREAKFAST	Peaches Egg Bran muffin Beverage	Orange juice Ready-to-eat cereal Milk Beverage	Orange juice Oatmeal w/raisins Beverage	Vegetable juice Ready-to-eat cereal Milk Beverage	Vegetable juice Poached egg Toast Milk	Orange juice Oatmeal w/raisins Beverage	Orange juice French toast Pears Beverage
LUNCH	Oven roasted chicken Baked potato Beets Pineapple Beverage	Baked beans Pears Corn muffin Cookie Beverage	Omelette w/ potatoes and cheese Toast Banana Beverage	Cream cheese sandwich Raisins Greenbeans Beverage Beverage	Chicken and rice soup Saltine crackers Carrot salad Cake Beverage	Baked beans Celery and carrots Green beans Bran muffin Pears Beverage	Chicken salad w/pineapple Toast Cake Beverage
DINNER	Baked beans Tossed salad Corn muffin Ice milk Beverage	Chinese Dinner (use chicken) Rice Tomato Cake Beverage	Chicken and rice casserole Pears Lettuce wedge and dressing Ice milk Beverage	Chicken stew w/mixed vegetables Sliced tomato Bread Cake Beverage	Hamburger Lettuce and tomato Toast Cole slaw w/ pineapple Baked beans Orange Beverage	Fish sticks Fried potatoes Steamed cabbage Muffin Pudding Beverage	Spanish macaroni Coleslaw Corn muffin Pudding Beverage
SNACK	Bread and cheese	Bran muffin Milk	Cookie	Graham crackers	Apple	Cake	Ready-to-eat cereal Milk

Beverage is coffe, tea or milk. Spreads for bread and sugar for cereal may be added, if desired. Cookies may be added to meals as an optional dessert. Fresh vegetables and fruits in season may be substituted for canned and frozen vegetables and fruits.

A.3 (Cont'd)

PERIOD 4 (3 DAYS): MENUS FOR SSI INDIVIDUAL

	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
BREAKFAST	Orange juice Egg Toast Beverage	Banana Ready-to-eat cereal Toast Beverage	Orange juice Farina Toast. Beverage				
LUNCH	Fish sticks Rice Mixed vegetables Bran muffin Cookie Beverage	Grilled cheese sandwich Coleslaw Orange Beverage	Cream cheese sandwich Carrot salad Raisin-rice pudding Beverage				
DINNER	Spanish macaroni Coleslaw Corn muffin Apple Beverage	Swiss steak Baked potato Broccoli Raisin-rice pudding Beverage	Swiss steak and macaroni Broccoli Orange Beverage				
SNACK	Cookie Vegetable juice	Cookie Orange juice	Apple Ready-to-eat cereal Milk				

Beverage is coffee, tea or milk. Spreads for bread and sugar for cereal may be added, if desired. Cookies may be added to meals as an optional dessert. Fresh vegetables and fruits in season may be substituted for canned and frozen vegetables and fruits.

Table A.4 Monthly Consumption Quantities for Three Food Plans

	MEATS AND ALTERNATES	PACKAGE SIZE PRICED	FAMILY OF 4 AMOUNT NEEDED	FAMILY OF 4 NUMBER PACKAGES	ELDERLY PERSON AMOUNT NEEDED	ELDERLY PERSON NUMBER PACKAGES	ORIGINAL THRIFTY FOOD PLAN FOR 4 AMOUNT NEEDED	ORIGINAL THRIFTY FOOD PLAN FOR 4 NUMBER PACKAGES
1101	Beef, ground, regular	1 lb.	7.14 lbs.	7.14	2 lbs.	2	5.93 lbs.	5.93
1102	Beef, pot roast, blade/chuck	1 lb.	4 lbs.	4	1.88 lbs.	1.88	4 lbs.	4
1103	Beef, chuck steak, boneless	1 lb.	3.75 lbs.	3.75	1.51 lbs.	1.51	3 lbs.	3
1104	Dried beef	3 oz.	0	0	0	0	3 oz.	1
1121	Pork shoulder butt, bone-in	1 lb.	4 lbs.	4	1.82 lbs.	1.82	2.25 lbs.	2.25
1122	Ham, whole boneless	1 lb.	2.5 lbs.	2.5	0	0	3.25 lbs.	3.25
1123	Pork sausage, bulk	1 lb.	1 lb.	1	.5 lb.	.5	1 lb.	1
1131	Liver, beef	1 lb.	2 lbs.	2	.5 lb.	.5	1.34 lbs.	1.34
1132	Vienna sausage	5 oz.	4.5 oz.	1	0	0	4.5 oz.	1
1133	Wieners, all meat	1 lb.	1.5 lbs.	1.5	0	0	1 lb.	1
1134	Bologna, beef, sliced	12 oz.	18 oz.	1.5	0	0	18 oz.	1.5
1141	Chicken, fryer, whole	1 lb.	8 lbs.	8	4.19 lbs.	4.19	7 lbs.	7
1135	Liverwurst, chunk	1 lb.	.38 lb.	.38	0	0	0	0
1151	Pork and beans, canned	1 lb.	0	0	1 lb.	1	2 lbs.	2
1152	Kidney beans, canned	1 lb.	1 lb.	1	0	0	1 lb.	1
1153	Blackeyed peas, canned	1 lb.	1 lb.	1	0	0	1 lb.	1
1154	Beans, baby lima, dry	2 lbs.	12 oz.	.38	0	0	12 oz.	.38
1155	Beans, small white, dry	2 lbs.	14 oz.	.44	0	0	14 oz.	.44
1156	Beans, pinto, dry	2 lbs.	6 oz.	.19	0	0	5.33 oz.	.17
1157	Peas, split, dry	1 lb.	9 oz.	.57	0	0	9 oz.	.57
1161	Peanut butter	36 oz.	43 oz.	1.2	0	0	43 oz.	1.2
1171	Fillet of red snapper	1 lb.	1 lb.	1	7 oz.	.44	1 lb.	1
1172	Tuna fish, chunk	6.5 oz.	19.5 oz.	3	6.5 oz.	1	6.5 oz.	1
1173	Fish sticks, frozen	10 oz.	20 oz.	2	9 oz.	1	10 oz.	1
1180	Milk, fluid whole, quart	1 qt.	0	0	4 qts.	4	0	0
1181	Eggs, large, grade AA	1 dozen	6 dozen	6	2 dozen	2	5 dozen	5
1182	Milk, fluid whole, gal.	1 gal.	5.25 gal.	5.25	0	0	5.25 gal.	5.25
1183	Milk, dry, non-fat	25.6 oz.	117 oz.	4.58	24 oz.	.94	105.6 oz.	4.13
1184	Ice-milk, 1/2 gal.	1/2 gal.	3.38 1/2 gal.	3.38	.32 1/2 gal.	.32	3 1/2 gal.	3
1185	Cheese-Tillamook, 2 lb. loaf	2 lbs.	5.13 lbs.	2.57	13 oz.	.41	4.69 lbs.	2.35
1186	Cottage cheese	8 oz.	0	0	24 oz.	3	0	0
1187	Cream cheese	3 oz.	0	0	3 oz.	1	0	0

Table A.4 (Continued)

	VEGETABLES	PACKAGE SIZE PRICED	FAMILY OF 4 AMOUNT NEEDED	FAMILY OF 4 NUMBER PACKAGES	ELDERLY PERSON AMOUNT NEEDED	ELDERLY PERSON NUMBER PACKAGES	ORIGINAL THRIFTY FOOD PLAN FOR 4 AMOUNT NEEDED	ORIGINAL THRIFTY FOOD PLAN FOR 4 NUMBER PACKAGES
1201	Cabbage, fresh	1 lb.	5.25 lbs.	5.25	1 lb.	1	2.5 lbs.	2.5
1202	Carrots, fresh	1 lb.	4.13 lbs.	4.13	1.88 lbs.	1.88	2.88 lbs.	2.88
1203	Celery, fresh	2.5 lbs.(bunch)	4.82 lbs.	1.93	.57 lbs.	.23	3.63 lbs.	1.46
1204	Lettuce, iceberg	1 lb. (head)	5.75 lbs.	5.75	2 lbs.	2	4 lbs.	4
1205	Onions, yellow, loose	1 lb.	3.25 lbs.	3.25	1.09 lbs.	1.09	3.44 lbs.	3.44
1206	Potatoes, #1s (10 lb. bag)	10 lbs.	23.44 lbs.	2.35	4.75 lbs.	.48	23 lbs.	2.3
1207	Cucumbers, outdoor	each	0	0	0	0	1	1
1208	Green peppers, large	6 oz. (each)	18 oz.	3	6 oz.	1	12 oz.	2
1209	Greens (collards, turnips, mustard)	12 oz. (bunch)	30 oz.	3	0	0	20 oz.	2
1211	Pickles, dill	22 oz.	8 oz.	.37	0	0	4 oz.	.19
1212	Green beans, canned	16 oz.	64 oz.	4	14 oz.	1	32 oz.	2
1213	Refried beans, canned	15-16 oz.	16 oz.	1	0	0	0	0
1214	Mixed vegetables, canned	16 oz.	0	0	0	0	32 oz.	2
1215	Sauerkraut, canned	16 oz.	16 oz.	1	0	0	16 oz.	1
1216	Beets, sliced, canned	16 oz.	16 oz.	1	16 oz.	1	16 oz.	1
1217	Baked beans, canned	15-16 oz.	0	0	28 oz.	2	0	0
1221	Broccoli, frozen	10 oz.	30 oz.	3	23 oz.	2.3	20 oz.	2
1222	Mixed vegetables, frozen	10 oz.	60 oz.	6	18 oz.	1.8	20 oz.	2
1223	Corn, frozen	10 oz.	10 oz.	1	0	0	20 oz.	2
1224	Spinach, frozen	10 oz.	10 oz.	1	6 oz.	.6	10 oz.	1
1225	French fried potatoes, frozen	32 oz.	32 oz.	1	0	0	27 oz.	.85
1226	Peas, frozen	10 oz.	40 oz.	4	3 oz.	.3	20 oz.	2

Table A.4 (Continued)

	FRUITS	PACKAGE SIZE PRICED	FAMILY OF 4 AMOUNT NEEDED	FAMILY OF 4 NUMBER PACKAGES	ELDERLY PERSON AMOUNT NEEDED	ELDERLY PERSON NUMBER PACKAGES	ORIGINAL THRIFTY FOOD PLAN FOR 4 AMOUNT NEEDED	ORIGINAL THRIFTY FOOD PLAN FOR 4 NUMBER PACKAGES
1301	Tomatoes, fresh	1 lb.	4 lbs.	4	1.38 lbs.	1.38	2.82 lbs.	2.82
1302	Apples, red delicious, fresh	1 lb.	12.75 lbs.	12.75	5 lbs	5	8.5 lbs.	8.5
1303	Bananas, fresh	1 lb.	6.69 lbs.	6.69	2.03 lbs.	2.03	5 lbs.	5
1304	Oranges, loose, fresh	1 lb.	5.94 lbs.	5.94	.94 lbs.	.94	1.69 lbs.	1.69
1305	Grapefruit, fresh	(each)	2	2	1	1	0	0
1311	Tomatoes, whole, canned	16 oz.	48 oz.	3	16 oz.	1	48 oz.	3
1312	Tomatoes, stewed, canned	16 oz.	16 oz.	1	0	0	16 oz.	1
1313	Tomato sauce	8 oz.	24 oz.	3	8 oz.	1	16 oz.	2
1314	Tomato paste	6 oz.	12 oz.	2	3 oz.	.5	18 oz.	3
1315	Peaches, canned	29 oz.	116 oz.	4	28 oz.	1	87 oz.	3
1316	Pears, canned	16 oz.	32 oz.	2	16 oz.	1	32 oz.	2
1317	Fruit cocktail, canned	29 oz.	58 oz.	2	28 oz.	1	87 oz.	3
1318	Applesauce, canned	16 oz.	48 oz.	3	32 oz.	2	0	0
1319	Pineapple, sliced, canned	15 oz.	30 oz.	2	14 oz.	1	0	0
1320	6 pkg. of 6 oz. tomato juice	36 oz.	0	0	24 oz.	1	0	0
1321	Orange juice, froz. conc.	12 oz.	52 oz.	4.34	0	0	54 oz.	4.5
1322	Grape juice, froz. conc.	12 oz.	44 oz.	3.67	0	0	12 oz.	1
1323	Tomato juice, canned	46 oz.	138 oz.	3	0	0	0	0
1324	Vegetable juice cocktail, canned	12 oz.	0	0	24 oz.	2	0	0
1325	Orange juice, froz. conc.	6 oz.	0	0	22 oz.	3.67	0	0
1326	Apple juice, froz. conc.	12 oz.	12 oz.	1	0	0	0	0
1331	Raisins	15 oz.	18 oz.	1.2	6 oz.	.4	7 oz.	.47

Table A.4 (Continued)

	BREADS AND CEREALS	PACKAGE SIZE PRICED	FAMILY OF 4 AMOUNT NEEDED	FAMILY OF 4 NUMBER PACKAGES	ELDERLY PERSON AMOUNT NEEDED	ELDERLY PERSON NUMBER PACKAGES	ORIGINAL THRIFTY FOOD PLAN FOR 4 AMOUNT NEEDED	ORIGINAL THRIFTY FOOD PLAN FOR 4 NUMBER PACKAGES
1401	Flour, white enriched	5 lbs.	5.5 lbs.	1.1	1.5 lbs.	.3	5.5 lbs.	1.1
1403	Oatmeal (rolled oats)	42 oz.	30 oz.	.72	5 oz.	.12	30 oz.	.72
1404	Cream of wheat	28 oz.	33 oz.	1.18	4 oz.	.15	24 oz.	.86
1405	Macaroni, elbow	22 oz.	29 oz.	1.32	11 oz.	.5	37 oz.	1.69
1406	Rice, long grain white	28 oz.	50 oz.	1.79	0	0	50 oz.	1.79
1407	Grits	18 oz.	0	0	0	0	9 oz.	.5
1408	Spaghetti, noodles	12 oz.	6 oz.	.5	0	0	6 oz.	.5
1409	Noodles, egg	12 oz.	4 oz.	.34	0	0	4 oz.	.34
1410	Rice, minute	28 oz.	0	0	19 oz.	.68	0	0
1411	Cornmeal	5 lbs.	0	0	0	0	2.44 lbs.	.49
1420	Bisquick	40 oz.	12 oz.	.3	8 oz.	.2	0	0
1421	Gingerbread mix	14 oz.	42 oz.	3	0	0	42 oz.	3
1422	Muffin mix - blueberry (Jiffy)	7 oz.	14 oz.	2	21 oz.	3	14 oz.	2
1423	Pancake mix, complete	32 oz.	35 oz.	1.1	0	0	28 oz.	.88
1424	Cake mix	18.5 oz.	55.5 oz.	3	27.75 oz.	1.5	74 oz.	4
1425	Chicken-rice soup	10.5 oz.	10.5 oz.	1	0	0	31.5 oz.	3
1426	Noodle soup (chicken)	10.5 oz.	10.5 oz.	1	10.5 oz.	1	21 oz.	2
1427	Muffin mix-corn (Jiffy)	8.5 oz.	68 oz.	8	17 oz.	2	0	0
1428	Split-pea soup	10.5 oz.	0	0	10.5 oz.	1	0	0
1429	Bean soup with bacon	10.5 oz.	0	0	10.5 oz.	1	0	0
1430	Vegetable soup with beef	10.5 oz.	0	0	10.5 oz.	1	0	0
1431	Kix cereal	9 oz.	78 oz.	8.67	0	0	78 oz.	8.67
1432	Bread, white	22.5 oz. (loaf)	17 loaves	17	3.1 loaves	3.1	17 loaves	17
1433	Biscuits, refrigerator	7.5 oz.	22.5 oz.	3	0	0	30 oz.	4
1434	Saltine crackers	16 oz.	20 oz.	1.25	4 oz.	.25	18 oz.	1.13
1435	Graham crackers	16 oz.	18 oz.	1.13	2 oz.	.13	23 oz.	1.44
1436	Doughnuts	10 oz.	0	0	0	0	30 oz.	3
1437	Cookies, oatmeal with dates or raisins	10 oz.	56 oz.	5.6	14 oz.	1.4	56 oz.	5.6
1438	English muffins	pkg. of 6	24	4	0	0	0	0
1439	All-bran cereal	16 oz.	0	0	13 oz.	.82	0	0
1441	Hamburger rolls	pkg. of 8	16	2	0	0	8	1

Table A.4 (Continued)

	STAPLE ITEMS	PACKAGE SIZE PRICED	FAMILY OF 4 AMOUNT NEEDED	FAMILY OF 4 NUMBER PACKAGES	ELDERLY PERSON AMOUNT NEEDED	ELDERLY PERSON NUMBER PACKAGES	ORIGINAL THRIFTY FOOD PLAN FOR 4 AMOUNT NEEDED	ORIGINAL THRIFTY FOOD PLAN FOR 4 NUMBER PACKAGES
1501	Margarine	1 lb.	5.13 lbs.	5.13	1.63 lbs.	1.63	5.13 lbs.	5.13
1502	Shortening	3 lbs.	1.38 lbs.	.46	.5 lb.	.17	1.38 lbs.	.46
1503	Vegetable oil	24 oz.	27 oz.	1.13	8 oz.	.34	27 oz.	1.13
1504	Salad dressing, non-imitation mayo-type	32 oz.	33 oz.	1.04	9 oz.	.29	23 oz.	.72
1505	Salad dressing, french-type	16 oz.	26 oz.	1.63	7.5 oz.	.47	13 oz.	.82
1601	Sugar, granulated	5 lbs.	6.19 lbs.	1.24	1.63 lbs.	.33	6.19 lbs.	1.24
1602	Sugar, brown	1 lb.	2.07 lbs.	2.07	.5 lb.	.5	1.88 lbs.	1.88
1604	Gelatin, flavored	3 oz.	0	0	0	0	18 oz.	6
1605	Pudding mix, regular	4 oz.	28 oz.	7	12 oz.	3	20 oz.	5
1506	Strawberry jam	32 oz.	26 oz.	.82	6 oz.	.19	26 oz.	.82
1607	Syrup, pancake	24 oz.	25 oz.	1.05	0	0	14 oz.	.59
1608	Molasses	12 oz.	5 oz.	.42	0	0	5 oz.	.42
1701	Coffee, ground	2 lbs.	2 lbs.	1	2 lbs.	1	2 lbs.	1
1702	Tea bags	100 bags	100 bags	1	100 bags	1	100 bags	1
1721	Lemon Juice, concentrate	8 oz.	.67 oz.	.09	.34 oz.	.04	.67 oz.	.09
1722	Vinegar, cider	32 oz.	2.67 oz.	.09	1.34 oz.	.04	2.67 oz.	.09
1732	Meat tenderizer	3.5 oz.	.3 oz.	.09	.15 oz.	.04	.3 oz.	.09
1741	Baking powder	7 oz.	.59 oz.	.09	.3 oz.	.04	.59 oz.	.09
1742	Baking soda	16 oz.	1.34 oz.	.09	.67 oz.	.04	1.34 oz.	.09
1743	Corn starch	16 oz.	1.34 oz.	.09	.67 oz.	.04	1.34 oz.	.09
1751	Bouillon, chicken	1.6 oz.	.27 oz.	.17	.14 oz.	.09	.27 oz.	.17
1752	Bouillon, beef	1.6 oz.	.27 oz.	.17	.14 oz.	.09	.27 oz.	.17
1761	Worcestershire sauce	10 oz.	.84 oz.	.09	.42 oz.	.04	.84 oz.	.09
1762	Catsup	32 oz.	10.67 oz.	.34	5.34 oz.	.17	10.67 oz.	.34
1763	Soy sauce	10 oz.	.84 oz.	.09	.42 oz.	.04	.84 oz.	.09

Table A.4 (Continued)

		PACKAGE SIZE PRICED	FAMILY OF 4		ELDERLY PERSON		ORIGINAL THRIFTY FOOD PLAN FOR 4	
			AMOUNT NEEDED	NUMBER PACKAGES	AMOUNT NEEDED	NUMBER PACKAGES	AMOUNT NEEDED	NUMBER PACKAGES
1764	Pickle relish	12 oz.	4 oz.	.34	2 oz.	.17	4 oz.	.34
1765	Mustard, prepared	9 oz.	2.25 oz.	.25	1.5 oz.	.17	2.25 oz.	.25
1766	Tabasco sauce	2 oz.	.17 oz.	.09	.09 oz.	.04	.17 oz.	.09
1767	Barbecue sauce	28 oz.	4.67 oz.	.17	2.34 oz.	.09	4.67 oz.	.17
1771	Bread crumbs	8 oz.	2.67 oz.	.34	.67 oz.	.09	2.67 oz.	.34
1801	Vanilla, imitation	4 oz.	1.34 oz.	.34	.67 oz.	.17	1.34 oz.	.34
1802	Salt, iodized	26 oz.	2.17 oz.	.09	1.09 oz.	.04	2.17 oz.	.09
1803	Pepper, black ground	8 oz.	.67 oz.	.09	.34 oz.	.04	.67 oz.	.09
1804	Oregano, ground	.5 oz.	.04 oz.	.09	.02 oz.	.04	.04 oz.	.09
1805	Chili powder	4 oz.	.34 oz.	.09	.17 oz.	.04	.34 oz.	.09
1806	Cinnamon, ground	4 oz.	.34 oz.	.09	.17 oz.	.04	.34 oz.	.09
1807	Onion salt	4 oz.	.34 oz.	.09	.17 oz.	.04	.34 oz.	.09
1808	Garlic powder	2.5 oz.	.21 oz.	.09	.11 oz.	.04	.21 oz.	.09
1809	Sage, ground	.5 oz.	.04 oz.	.09	.02 oz.	.04	.04 oz.	.09
1810	Thyme, ground	.88 oz.	.08 oz.	.09	.04 oz.	.04	.08 oz.	.09
1811	Nutmeg, ground	1.38 oz.	.12 oz.	.09	.06 oz.	.04	.12 oz.	.09

Basic Needs: Food Component

Table A.5 Average Prices of Food Items

	MEATS AND ALTERNATES	PACKAGE SIZE PRICED	STATEWIDE AVERAGE PRICE: WEIGHTED BY AFDC POPULATIONS OF COUNTIES
1101	Beef, ground, regular	1 lb.	$1.51
1102	Beef, pot roast, blade/chuck	1 lb.	1.69
1103	Beef, chuck steak, boneless	1 lb.	2.33
1104	Dried beef	3 oz.	0.59
1121	Pork shoulder butt, bone-in	1 lb.	1.47
1122	Ham, whole boneless	1 lb.	2.01
1123	Pork sausage, bulk	1 lb.	1.28
1131	Liver, beef	1 lb.	1.22
1132	Vienna sausage	5 oz.	0.55
1133	Wieners, all meat	1 lb.	1.70
1134	Bologna, beef, sliced	12 oz.	1.74
1141	Chicken, fryer, whole	1 lb.	0.92
1135	Liverwurst, chunk	1 lb.	1.84
1151	Pork and beans, canned	1 lb.	0.36
1152	Kidney beans, canned	1 lb.	0.43
1153	Blackeyed peas, canned	1 lb.	0.38
1154	Beans, baby lima, dry	2 lbs.	1.02
1155	Beans, small white, dry	2 lbs.	1.10
1156	Beans, pinto, dry	2 lbs.	1.20
1157	Peas, split, dry	1 lb.	0.42
1161	Peanut butter	36 oz.	2.49
1171	Fillet of red snapper	1 lb.	1.86
1172	Tuna fish, chunk	6.5 oz.	0.88
1173	Fish sticks, frozen	10 oz.	1.43
1180	Milk, fluid whole, quart	1 qt.	0.54
1181	Eggs, large, grade AA	1 dozen	0.82
1182	Milk, fluid whole, gal.	1 gal.	1.92
1183	Milk, dry, non-fat	25.6 oz.	2.82
1184	Ice-milk, 1/2 gal.	1/2 gal.	1.35
1185	Cheese-Tillamook, 2 lb. loaf	2 lbs.	4.87
1186	Cottage cheese	8 oz.	0.48
1187	Cream cheese	3 oz.	0.38
	VEGETABLES		
1201	Cabbage, fresh	1 lb.	0.26
1202	Carrots, fresh	1 lb.	0.36
1203	Celery, fresh	2.5 lbs.(bunch)	0.55
1204	Lettuce, iceberg	1 lb. (head)	0.54
1205	Onions, yellow, loose	1 lb.	0.29
1206	Potatoes, #1s (10 lb. bag)	10 lbs.	1.74
1207	Cucumbers, outdoor	each	0.33
1208	Green peppers, large	6 oz. (each)	0.23
1209	Greens (collards, turnips, mustard)	12 oz. (bunch)	0.50

Table A.5 (Continued)

	VEGETABLES	PACKAGE SIZE PRICED	STATEWIDE AVERAGE PRICE: WEIGHTED BY AFDC POPULATIONS OF COUNTIES
1211	Pickles, dill	22 oz.	$0.92
1212	Green beans, canned	16 oz.	0.34
1213	Refried beans, canned	15-16 oz.	0.52
1214	Mixed vegetables, canned	16 oz.	0.46
1215	Sauerkraut, canned	16 oz.	0.42
1216	Beets, sliced, canned	16 oz.	0.47
1217	Baked beans, canned	15-16 oz.	0.66
1221	Broccoli, frozen	10 oz.	0.51
1222	Mixed vegetables, frozen	10 oz.	0.42
1223	Corn, frozen	10 oz.	0.38
1224	Spinach, frozen	10 oz.	0.41
1225	French fried potatoes, frozen	32 oz.	0.98
1226	Peas, frozen	10 oz.	0.39
	FRUITS		
1301	Tomatoes, fresh	1 lb.	0.76
1302	Apples, red delicious, fresh	1 lb.	0.51
1303	Bananas, fresh	1 lb.	0.37
1304	Oranges, loose, fresh	1 lb.	0.39
1305	Grapefruit, fresh	(each)	0.38
1311	Tomatoes, whole, canned	16 oz.	0.45
1312	Tomatoes, stewed, canned	16 oz.	0.50
1313	Tomato sauce	8 oz.	0.22
1314	Tomato paste	6 oz.	0.32
1315	Peaches, canned	29 oz.	0.82
1316	Pears, canned	16 oz.	0.63
1317	Fruit cocktail, canned	29 oz.	0.99
1318	Applesauce, canned	16 oz.	0.50
1319	Pineapple, sliced, canned	15 oz.	0.65
1320	6 pkg. of 6 oz. tomato juice	36 oz.	1.10
1321	Orange juice, froz. conc.	12 oz.	0.87
1322	Grape juice, froz. conc.	12 oz.	0.83
1323	Tomato juice, canned	46 oz.	0.79
1324	Vegetable juice cocktail, canned	12 oz.	0.32
1325	Orange juice, froz. conc.	6 oz.	0.47
1326	Apple juice, froz. conc.	12 oz.	0.91
1331	Raisins	15 oz.	1.55
	BREADS AND CEREALS		
1401	Flour, white enriched	5 lbs.	1.03
1403	Oatmeal (rolled oats)	42 oz.	1.39
1404	Cream of wheat	28 oz.	1.22
1405	Macaroni, elbow	22 oz.	1.01
1406	Rice, long grain white	28 oz.	1.09
1407	Grits	18 oz.	0.59
1408	Spaghetti, noodles	12 oz.	0.59
1409	Noodles, egg	12 oz.	0.77
1410	Rice, minute	28 oz.	2.34
1411	Cornmeal	5 lbs.	1.49
1420	Bisquick	40 oz.	1.40

Table A.5 (Continued)

	BREADS AND CEREALS	PACKAGE SIZE PRICED	STATEWIDE AVERAGE PRICE: WEIGHTED BY AFDC POPULATIONS OF COUNTIES
1421	Gingerbread mix	14 oz.	$1.00
1422	Muffin mix - blueberry (Jiffy)	7 oz.	0.35
1423	Pancake mix, complete	32 oz.	1.06
1424	Cake mix	18.5 oz.	0.90
1425	Chicken-rice soup	10.5 oz.	0.36
1426	Noodle soup (chicken)	10.5 oz.	0.32
1427	Muffin mix-corn (Jiffy)	8.5 oz.	0.29
1428	Split-pea soup	10.5 oz.	0.39
1429	Bean soup with bacon	10.5 oz.	0.35
1430	Vegetable soup with beef	10.5 oz.	0.42
1431	Kix cereal	9 oz.	1.02
1432	Bread, white	22.5 oz. (loaf)	0.48
1433	Biscuits, refrigerator	7.5 oz.	0.28
1434	Saltine crackers	16 oz.	0.72
1435	Graham crackers	16 oz.	0.88
1436	Doughnuts	10 oz.	1.09
1437	Cookies, oatmeal with dates or raisins	10 oz.	1.04
1438	English muffins	pkg. of 6	0.67
1439	All-bran cereal	16 oz.	1.10
1441	Hamburger rolls	pkg. of 8	0.60
	STAPLE ITEMS		
1501	Margarine	1 lb.	0.50
1502	Shortening	3 lbs.	1.98
1503	Vegetable oil	24 oz.	1.22
1504	Salad dressing, non-imitation mayo-type	32 oz.	1.20
1505	Salad dressing, french-type	16 oz.	1.45
1601	Sugar, granulated	5 lbs.	2.53
1602	Sugar, brown	1 lb.	0.69
1604	Gelatin, flavored	3 oz.	0.35
1605	Pudding mix, regular	4 oz.	0.40
1606	Strawberry jam	32 oz.	1.89
1607	Syrup, pancake	24 oz.	1.31
1608	Molasses	12 oz.	1.08
1701	Coffee, ground	2 lbs.	5.75
1702	Tea bags	100 bags	2.14
1721	Lemon Juice, concentrate	8 oz.	0.70
1722	Vinegar, cider	32 oz.	0.76
1732	Meat tenderizer	3.5 oz.	1.04
1741	Baking powder	7 oz.	0.74
1742	Baking soda	16 oz.	0.55
1743	Corn starch	16 oz.	0.56
1751	Bouillon, chicken	1.6 oz.	0.44
1752	Bouillon, beef	1.6 oz.	0.44

Table A.5 (Continued)

	STAPLE ITEMS	PACKAGE SIZE PRICED	STATEWIDE AVERAGE PRICE: WEIGHTED BY AFDC POPULATIONS OF COUNTIES
1761	Worcestershire sauce	10 oz.	$1.07
1762	Catsup	32 oz.	1.02
1763	Soy sauce	10 oz.	0.89
1764	Pickle relish	12 oz.	0.70
1765	Mustard, prepared	9 oz.	0.46
1766	Tabasco sauce	2 oz.	0.65
1767	Barbecue sauce	28 oz.	1.65
1771	Bread crumbs	8 oz.	0.63
1801	Vanilla, imitation	4 oz.	0.79
1802	Salt, iodized	26 oz.	0.33
1803	Pepper, black ground	8 oz.	2.13
1804	Oregano, ground	.5 oz.	0.98
1805	Chili powder	4 oz.	1.67
1806	Cinnamon, ground	4 oz.	1.92
1807	Onion salt	4 oz.	0.84
1808	Garlic powder	2.5 oz.	1.45
1809	Sage, ground	.5 oz.	0.70
1810	Thyme, ground	.88 oz.	0.84
1811	Nutmeg, ground	1.38 oz.	1.12

TABLE A.6: COST OF THE ORIGINAL THRIFTY FOOD PLAN IN OCTOBER 1980 PRICES (FAMILY OF FOUR)

COMPONENT	KING	PIERCE	THURSTON	WHATCOM	SPOKANE	FRANKLIN	YAKIMA	STATEWIDE
Original Thrifty Food Plan: Monthly Cost	$219.20	$215.93	$217.65	$221.12	$221.81	$227.89	$219.14	$219.46

Appendix B: SHELTER: HOUSING

The housing component of the cost of living estimate is the HUD Fair Market Rent, net of utility charges. In this appendix we compare these FMRs for the sample counties with calculations from a survey of want-ads which we conducted.

Fair Market Rent Calculations

Table B.1 shows the derivation of shelter rent, net of electrical and heating utilities, from HUD data. The Fair Market Rents as published by HUD are the sum of projected rent and energy utilities, assuming all-electric service. These two categories are separately estimated by HUD and added to arrive at a published figure. These computations for October 1980 were supplied by John Taylor, Area Economist for HUD, Region X, Seattle. For all counties except Yakima, the total rents are those published in the Federal Register, March 26, 1980.

Due to the start-up of a public housing program in Yakima County, a special survey of rental prices was conducted for HUD in December 1980, for that county only. This study indicated that the published Fair Market Rent for two-bedroom units was substantially underestimated. Revised figures for December 1980 were supplied to the Cost of Living Study. In addition, Mr. Taylor also provided the technique HUD used to project October 1981 rents based on the December 1980 data. We used this same projection technique to adjust the December 1980 data for Yakima County backwards to October 1980.

Estimates from Classified Ads

Data were collected for the sample counties from classified want ads appearing in August and September 1980. In the case of King County only, we relied on data presented in the Seattle Real Estate Research Report, April 1980.

For the family of four, we recorded the contract rents for unfurnished two-bedroom apartments. For the elderly individual, we recorded rents for unfurnished studios. Data were not collected where the ad indicated utilities were included in rents.

Classified ads do not provide a reliable sample. Choice units, by virtue of cost or other factors, may never be advertised. An ad may describe a single unit in a building while several of that type may be unavailable. The rent may include some or all utilities though the ad may omit this information. A range of rents as opposed to a single number may appear in an ad; these units were of necessity excluded from the calculation.

Overall, want ads tend to be very close to the FMR for units appropriate to families of four and above the FMR for units appropriate to elderly individuals. However, the data regarding the latter are not very reliable due to the small number of units advertised.

TABLE B.1: FAIR MARKET RENT (FMR) CALCULATIONS

COMPONENT	KING	PIERCE	THURSTON	WHATCOM	SPOKANE	FRANKLIN	YAKIMA
Two-Bedroom Units							
a) Contract Rents	$297	$248	$242	$240	$267	$279	$230*
b) Utilities	27	31	26	28	26	22	29
c) Published FMR	$324	$279	$268	$268	$293	$301	$259*
Studio Units							
a) Contract Rents	$211	$174	$171	$178	$187	$185	$134*
b) Utilities	16	20	17	17	17	17	18
c) Published FMR	$227	$194	$188	$195	$204	$202	$152*

*These are not the same as those figures published in March 1980. As explained in the text, they are the comparable figures determined as the result of a later HUD study. The published two-bedroom units were considerably lower, the published studio rents slightly higher.

TABLE B.2: COMPARISON OF RENT ESTIMATES
FAMILY OF FOUR: TWO BEDROOM UNITS
($ PER MONTH EXCLUDING UTILITIES, 1980)

COMPONENT	KING	PIERCE	THURSTON	WHATCOM	SPOKANE	FRANKLIN	YAKIMA
HUD Fair Market Rent[a]	$297	$248	$242	$240	$267	$279	$230
Newspaper survey							
Median	N/A	$245	$240	$232	$224	$265	$222
Mean	$304	245	236	221	216	262	226
(No. of cases)	(310)[b]	(54)[c]	(46)[d]	(35)[e]	(70)[f]	(63)[g]	(34)[h]

Data Sources:
a. FMRs, with the exception of Yakima, were as published in the Federal Register less the utility allowance. The utility allowance was provided by John Taylor of HUD Region X, Seattle. The Yakima FMR for December 1980 was provided by Mr. Taylor and was reduced by 1.7 percent to set it for October 1980.
b. Seattle Real Estate Research Committee, "Real Estate Research Report," Vol. 31, No. 1, April 1980.
c. Tacoma News Tribune, August 10 and 24; September 14 and 28, 1980.
d. Sunday Olympian, dates as above.
e. Bellingham Herald, dates as above.
f. Spokesman Review, August 10 and 24; September 14, 1980.
g. Tri-City Herald, dates as in c.
h. Yakima Herald-Republic, dates as in c.

TABLE B.3: COMPARISON OF RENT ESTIMATES
ELDERLY HOUSEHOLD: STUDIO-TYPE UNIT
($ PER MONTH EXCLUDING UTILITIES, 1980)

COMPONENT	KING	PIERCE	THURSTON	WHATCOM	SPOKANE	FRANKLIN	YAKIMA
HUD Fair Market Rent[a]	$211	$174	$171	$178	$187	$185	$134
Newspaper survey[b]							
Median	N/A	$142	$173	$140	$130	N/A	$150
Mean	$185	142	171	150	132	N/A	148
(No. of cases)	(139)[b]	(14)[c]	(6)[d]	(7)[e]	(11)[f]	(N/A)[g]	(66)[h]

Sources: See previous table.

Appendix C: SHELTER FUELS: CALCULATION OF HEATING EXPENDITURE

Within the Washington State subsample of the BPA survey, there were 165 households of three or more persons with incomes less than $15,000. Of these, 80 used fuels other than electricity as their primary heat source and the median expenditure for electricity for these households was $175.50 per year. The remaining 85 households had a median electrical expenditure of $280.70. The difference between these two medians, $105.20, was assumed to represent the cost of electrical heating alone.

The same analysis was performed using 91 households of one person with incomes less than $10,000. Forty-nine households utilized nonelectric primary heating and the median electrical expenditure was $96 per year. Forty-two households with primary reliance on electric heat had a median electrical expenditure of $184.50. The difference, $88.50, was utilized as the representative cost of electrical heating alone.

These two figures, $105.20 and $88.50 were then used to calculate an overall average electric heating cost. Fuel costs for households using natural gas and fuel oil were also collected from the BPA low-income portion of the Washington sample. These data are also presented in Table C.1. Expenditure data from BPA were updated using the appropriate CPI indices. These data, in turn, were weighted to produce an average statewide cost for home heating, regardless of source. This statewide figure was then used in the calculations shown in Chapter 4, Table 4.3.

TABLE C.1: CALCULATION OF FUEL COSTS FROM BPA DATA

Primary Heat Source	A. 8/78-7/79 Median Annual Cost	B. Change Owing to Increase in CPI to 10/80	C. Cost of Using Primary Heat Source Only in 10/80 (A+B)	D. Proportion Weights for Each Fuel*	E. Contribution to Statewide Weighted, Average Fuel Cost (CxD)
1. Family of Four					
a. Electricity	$105.25	$ 27.37	$132.62	.613	$ 81.30
b. Natural Gas	$371.50	$133.74	$505.24	.213	$107.62
c. Fuel Oil	$376.00	$266.96	$642.96	.174	$111.87
				Statewide Weighted Cost	$300.79/year $ 25.07/month
2. Elderly Individual					
a. Electricity	$ 88.50	$ 23.01	$111.51	.613	$ 68.36
b. Natural Gas	$331.50	$119.34	$450.84	.213	$ 96.03
c. Fuel Oil	$347.00	$246.37	$593.37	.174	$103.25
				Statewide Weighted Cost	$267.64/year $ 22.30/month

Source: Data runs produced by Bonneville Power Administration from The Pacific Northwest Residential Survey, op. cit.

*Proportion weights are the same for both model families because we decided to use the proportions of all low-income families (regardless of size) using each type of fuel in the Washington subsample.

Appendix D: TRANSPORTATION

Private Transportation: Private transportation cost estimates are largely based on the U.S. Department of Transportation's (DOT) publication Cost of Owning and Operating Automobiles and Vans - 1979. Cost estimates for the seventh and tenth years of operation of a standard-sized car was used as a baseline. A standard car was chosen as being most representative of the vehicles owned by low-income groups and most likely to be used by both four-person households and elderly persons.

Several adjustments were made to the DOT data. As mentioned in Chapter 4, depreciation, parking, tolls, garaging, accessories, titling, and insurance costs were excluded. Second, costs were updated to October 1980 to account for inflation.[1] Lastly, since the annual mileage assumed for the DOT report was more than six times that estimated in the Cost of Living Study, adjustment in some upkeep costs was needed. License, registration, and scheduled maintenance were assumed to be fixed costs of automobile operation regardless of the mileage driven. Utilization of oil and tires for low mileage driving was provided by Stan Cummings of the Washington State Department of Transportation. Current Thurston County prices for oil and tires were applied statewide. Gasoline prices for the sample counties were taken from the Automobile Club of Washington's September 1980 service station survey. Unscheduled maintenance was estimated using the per mile rate from the DOT report adjusted for inflation (see Tables D.1 and D.2).

Public Transit: Most of the counties in Washington State, including one of the sample counties, do not have effective public transportation commuting systems. Also, many residents of the more urbanized counties do not have reasonable access to public transit. Nonetheless, an estimate was made of the cost of public transportation as part of the cost of living study.

As in the private transportation estimate, school transportation was assumed to be publicly provided. Slightly higher trip frequencies were used in estimating public transportation costs. This reflects the limited grocery carrying capacity of the public transit rider and the probability that not all services are available within a single-zone fare. However, each trip was assumed to take a sufficient amount of time as to require two separate fares. (In most areas, this means more than one hour.) Based on these considerations, and the data utilized in arriving at a trip frequency standard for private transportation, the following trip frequency standards were selected:

a) for a family of four, five adult and three child roundtrips per week: each roundtrip requires two separate one-zone fares; toddlers ride free in all sample areas, so each older child can accompany the parent 1-1/2 times each week;

---

[1]Costs increased 16 percent based on the increase in U.S. All-City Average CPI for Transportation.

b) for a single elderly person, five round trips per week: each round trip requiring two separate one-zone fares; or

c) for a single elderly person, a monthly pass.

These standards require 43.3 adult fares and 25.98 children's fares per month for a family of four and 43.3 elderly fares or a monthly pass for a single elderly person per month. Fare rates and monthly costs are reported in Table D.3.

TABLE D.1: PRIVATE TRANSPORTATION - FAMILY OF FOUR

COMPONENTS	KING	PIERCE	THURSTON	WHATCOM	SPOKANE	FRANKLIN	YAKIMA	STATEWIDE
Median miles to the store (4.6 trips weekly)	1.15	1.92*	2.70	2.25*	1.38	2.79*	1.68	
Annual mileage	550.16	918.53	1,291.68	1,076.40	660.19	1,334.74	803.71	
Annual cost of gasoline[1]	$43.33	$72.33	$106.56	$85.44	$51.99	$105.94	$63.29	
Annual cost of oil[2]	18.28	18.28	18.28	18.28	18.22	18.22	18.22	
Unscheduled maintenance[3]	27.62	46.11	64.84	54.04	33.14	67.00	40.35	
Tires[4]	48.98	48.98	48.98	48.83	48.83	48.83	48.83	
Annual operating cost	138.21	185.70	238.66	206.74	152.18	239.99	170.69	
License renewal	3.50	3.50	3.50	3.50	3.50	3.50	3.50	
Registration	27.20	27.20	27.20	27.20	27.20	27.20	27.20	
Scheduled maintenance	144.57	144.57	144.57	144.57	144.57	144.57	144.57	
Annual ownership costs	175.27	175.27	175.27	175.27	175.27	175.27	175.27	
TOTAL ANNUAL COST	$313.48	$360.97	$413.93	$382.01	$327.45	$415.26	$345.96	
TOTAL MONTHLY COST	$ 26.12	$ 30.08	$ 34.49	$ 31.83	$ 27.29	$ 34.61	$ 28.83	$29.72 per month

[1]The annual cost of gasoline is calculated at $1.26 to $1.32 per gallon (including taxes) at a consumption rate of 16 miles per gallon.
[2]Cost includes two oil changes and two oil filters annually.
[3]The cost of unscheduled maintenance is $.0502 per mile, an updated average of the per mile cost for the 7th, 8th, 9th, and 10th year of the standard sized car.
[4]One new tire per year is allocated. The price includes balancing and taxes.
*Distance data not available for Pierce, Whatcom, and Franklin counties. Olympia/Seattle average, Clark county, and Grant/Whitman county data were substituted, respectively.

TABLE D.2: PRIVATE TRANSPORTATION - ELDERLY INDIVIDUAL

COMPONENTS	KING	PIERCE	THURSTON	WHATCOM	SPOKANE	FRANKLIN	YAKIMA	STATEWIDE
Median miles to the store	1.15	1.92*	2.70	2.25*	1.38	2.79*	1.68	
Annual mileage	275.08	459.26	645.84	538.20	330.10	667.37	401.86	
Annual cost of gasoline[1]	$21.67	$36.16	$53.28	$42.72	$26.00	$52.97	$31.65	
Annual cost of oil[2]	18.28	18.28	18.28	18.28	18.22	18.22	18.22	
Unscheduled maintenance[3]	13.81	23.05	32.42	27.02	16.57	33.50	20.17	
Tires[4]	48.98	48.98	48.98	48.98	48.83	48.83	48.83	
Annual operating cost	102.74	126.47	152.96	137.00	109.62	153.52	118.87	
License renewal	3.50	3.50	3.50	3.50	3.50	3.50	3.50	
Registration	27.20	27.20	27.20	27.20	27.20	27.20	27.20	
Scheduled maintenance	144.57	144.57	144.57	144.57	144.57	144.57	144.57	
Annual ownership costs	175.27	175.27	175.27	175.27	175.27	175.27	175.27	
TOTAL ANNUAL COST	$278.01	$301.74	$328.23	$312.27	$284.89	$328.79	$294.14	
TOTAL MONTHLY COST	$ 23.17	$ 25.15	$ 27.35	$ 26.02	$ 23.74	$ 27.40	$ 24.51	$24.51 per month

[1]The annual cost of gasoline is calculated at $1.26 to $1.32 per gallon (including taxes) at a consumption rate of 16 miles per gallon.
[2]Cost includes two oil changes and two oil filters annually, with an extra quart of oil every 700 miles.
[3]The cost of unscheduled maintenance is $.0502 per mile, an updated average of the per mile cost for the 7th, 8th, 9th, and 10th year of the standard sized car.
[4]One new tire per year is allocated. The price includes balancing and taxes.
*Distance data not available for Pierce, Whatcom, and Franklin counties. Olympia/Seattle average, Clark county, and Grant/Whitman county data were substituted, respectively.

TABLE D.3: PUBLIC TRANSPORTATION

	KING	PIERCE	THURSTON	WHATCOM	SPOKANE	FRANKLIN[1]	YAKIMA
Adult fare	$ .50	$ .25	$ .25	$ .175*	$ .40	N/A	$ .35
43.3 trips/month	$21.65	10.82	10.82	7.58	17.32		15.15
Child's fare	.50	.20	.15	.175*	.30	N/A	.20
25.98 trips/month	12.99	5.20	3.90	4.55	7.80		5.20
Family of four total	$34.64	$16.02	$14.72	$12.13	$25.12		$20.35
Elderly fare	.15	.10	.10	.20	.15	N/A	.15
43.3 trips/month	$ 6.49	$ 4.33	$ 4.33	$ 8.66	$ 6.49		$ 6.49
Elderly Pass/month	$ 3.00	$ 2.50	$ 2.00	$ 1.00	$ 7.00	N/A	$ 3.00

[1]There is no public transit in Franklin County.

*17.5 cents is a compromise between the cash rate of 20 cents and a pre-purchased token rate of 15 cents.

Appendix E: HOUSEHOLD MAINTENANCE, CLOTHING, PERSONAL CARE, AND MEDICINAL SUPPLIES

This appendix contains tables listing the quantities and descriptions of the items included in the cost of living budgets. Statewide average prices are also listed, along with annual costs for each of the two model households. The monthly figures given in Chapter 4 were derived by summing up the annual costs for all items in each category, adding sales tax[1], and dividing by 12.

Also included in this appendix are tables providing additional information on the costs of some of the services included in these components.

---

[1]A sales tax rate of five percent was applied in eastern counties, and a rate of 5.3 percent in western counties.

Table E.1

MINIMUM RESIDENTIAL TELEPHONE MONTHLY RATES FOR FOUR/PARTY PHONE SERVICE

COUNTY/CITY	BASE RATE COST	MUNICIPAL TAX		FEDERAL TAX		TOTAL COST
King (Seattle)	$5.30	8.69%	$0.46	2%	$0.11	$5.87
Pierce (Tacoma)	$4.85	7.87%	$0.38	2%	$0.10	$5.33
Thurston (Olympia)	$4.40	4.71%	$0.21	2%	$0.09	$4.70
Whatcom (Bellingham)	$4.40	8.00%	$0.35	2%	$0.09	$4.84
Spokane (Spokane)	$4.85	9.62%	$0.47	2%	$0.10	$5.42
Franklin (Pasco)	$4.65	7.00%	$0.32	2%	$0.09	$5.06
Yakima (Yakima)	$4.55	4.00%	$0.18	2%	$0.09	$4.82

Source: Washington State, Utilities and Transportation Commission (Effective Date August 21, 1980)

ADJUSTMENT FOR ELECTRICAL CONSUMPTION BY WASHERS AND DRYERS IN BPA DATA

Since it is assumed in the cost of living budget that all laundry is done in commercial laundromats, electrical expenditures reported in the BPA survey were adjusted downwards to correct for use of home laundry facilities by families in their sample.

Based on data supplied by the Office of Community Relations, Seattle City Light, electrical consumption was estimated at 8.6 kilowatt/hours per load, including water heating, for a warm wash and cold rinse cycle. Electrical costs were estimated as an average of winter and summer rates for public and private utilities, with all four of these rates being weighted equal. An allowance for municipal tax was included in private rates. This average rate of $0.0226 per kilowatt/hour was multiplied times 8.6 (per load) and then by four loads per week and 4.3 weeks per month to arrive at a figure of $3.35 per month for laundry electrical consumption for a family of four. The same process was repeated using a rate of 1.5 loads per week to arrive at a figure of $1.25 per month for a single elderly person.

Electrical consumption costs were reduced according to the proportions of families of three or more and single-person families in the BPA sample who owned washers and dryers. The nonheating electrical expenditure was reduced by $2.33 for the family of four and $0.63 for the single elderly person.

TABLE E.2

	Household Supplies	Unit Price	Family of Four Annual Quantity	Family of Four Annual Cost	Elderly-Single Annual Quantity	Elderly-Single Annual Cost
3601	Pot Scrubber, plastic ball-type	$ 0.42	01.00	$ 0.42	00.50	$ 0.21
3612	Paper Towels, 100 sheets	0.93	06.00	5.58	02.00	1.86
3613	Paper Napkins, 1-ply, pkg. of 140	0.76	22.00	16.72	05.50	4.18
3614	Aluminum Foil, 25 sq. ft.	0.59	04.00	2.36	01.50	0.88
3615	Plastic Wrap, 100 sq. ft.	0.76	04.00	3.04	01.50	1.14
3616	Wax Paper, 100 sq. ft.	0.83	04.00	3.32	01.50	1.24
3621	Cellulose Sponge, approx. 3-1/2" x 4-1/2" x 1/2", pkg. of 2	0.62	02.00	1.24	01.00	0.62
3622	Light Bulbs, soft white, 60 watt, pkg. of 4	3.55	01.50	5.32	01.00	3.55
3641	Bleach, liquid, 64 oz.	0.54	04.00	2.16	00.50	0.27
3642	Laundry Detergent, powdered, 49 oz.	1.66	24.00	39.84	08.00	13.28
3643	Dishwashing Detergent, liquid, 22 oz.	1.00	12.00	12.00	04.00	4.00
3644	Sudsy Ammonia, 28 oz.	0.55	03.00	1.65	01.00	0.55
3645	Powdered Cleanser, 14 oz.	0.39	08.00	3.12	03.00	1.17
3646	Floor Wax, liquid, 27 oz.	2.83	01.00	2.83	01.00	2.83
3647	Stain Remover, liquid, 22 oz. spray bottle	1.76	01.00	1.76	00.50	0.88
3701	Drain Cleaner, granular, 26 oz.	2.40(b)	01.00	2.40	01.00	2.40
3702	Oven Cleaner, aerosol, 15 oz. net	1.83(b)	02.00	3.66	01.00	1.83

1) All prices and annual costs do not include sales tax. Sales tax, where appropriate, was included in each cost of living component. Tax rates used for eastern and western counties were 5 percent and 5.3 percent respectively.
2) Prices listed in this table are weighted statewide averages based on the distribution of welfare cases throughout the state. See Chapter 2 and Table 2.1.
3) Price Data are from survey of 27 supermarkets by Jensen Price Surveys, except prices noted (b) are from survey of 7 K-Mart stores. (See Chaper 4.)

Table E.3

	Sewing Supplies	Unit Price	Family of Four Annual Quantity	Family of Four Annual Cost	Elderly-Single Annual Quantity	Elderly-Single Annual Cost
3703	Thread, cotton-covered polyester, 175 yds.	$ 0.48	05.00	$ 2.40	02.00	$ 0.96
3704	Safety Pins, pkg. of 50	0.61	00.50	0.30	00.25	0.15
3705	Pins, rust proof, pkg. of 250	0.78	00.33	0.26	00.33	0.26
3706	Hook & Eye Sets, #2, pkg. of 24 pair	0.53	01.00	0.53	00.50	0.26
3707	Patches, iron-on, denim, 5" x 5", pkg. of 5	0.88	02.00	1.76	00.00	0.00
3708	Mending Tape, iron-on, 1 1/4" x 70"	0.70(d)	01.00	0.70	00.00	0.00
3709	Snaps, pkg. of 8	0.61	01.00	0.61	00.50	0.30
3710	Elastic, braided, 1/4" x 3 yds.	0.48	01.00	0.48	00.50	0.24
3711	Needles, sharps, #3-#9 asstd., pkg. of 20	0.43	01.00	0.43	01.00	0.43

1) All prices and annual costs do not include sales tax. Sales tax, where appropriate, was included in each cost of living component. Tax rates used for eastern and western counties were 5 percent and 5.3 percent respectively.
2) Prices listed in this table are weighted statewide averages based on the distribution of welfare cases throughout the state. See Chapter 2 and Table 2.1.
3) Price data are from survey of 27 supermarkets by Jensen Price Surveys, except price marked (d) is from Thurston County drug/discount store. See Chapter 4.

Table E.4

	Household Management	Unit Price	Family of Four Annual Quantity	Family of Four Annual Cost	Elderly-Single Annual Quantity	Elderly-Single Annual Cost
3501	Ballpoint Pen, medium point	$ 0.27	10.00	$ 2.70	06.00	$ 1.62
3502	Pencils, #2, pkg. of 7	0.55	02.00	1.10	01.00	0.55
3503	Stationery Pad, 5-1/2" x 9", 90 sheets	0.64	01.50	0.92	01.50	0.92
3504	Envelopes, 9-1/2" long, pkg. of 50	0.79	02.00	1.58	02.00	1.58
3505	Cellophane Tape, 1/2" x 1100"	0.52	01.00	0.52	01.00	0.52
3506	White Glue, casein, 4 oz.	0.58	01.00	0.58	00.50	0.29
3507	Postage Stamps, book of ten 15 cent	1.50	6.00	9.00	6.00	9.00

1) All prices and annual costs do not include sales tax. Sales tax, where appropriate, was included in each cost of living component. Tax rates used for eastern and western counties were 5 percent and 5.3 percent respectively.
2) Prices listed in this table are weighted statewide averages based on the distribution of welfare cases throughout the state. See Chapter 2 and Table 2.1.
3) Price Data are from survey of 27 supermarkets by Jensen Price Surveys. See Chapter 4.

LAUNDRY

Minimal rates of laundry usage were set at four loads per week for a family of four and one and one-half loads per week for a single elderly person. These rates are equal to 17.3 and 6.5 loads per month, respectively.

In addition, the model households were estimated to require two and one eight-pound loads of dry cleaning per year, respectively.

Costs were estimated by telephone survey of laundromats and laundry equipment suppliers serving the sample counties. Rates derived from this survey were:

Table E.5
LAUNDRY-DRY CLEAN RATES

County	Wash	Dry	Dry Clean* (8 lb. Unpressed)	Monthly Cost Family of 4	Monthly Cost Elderly Single
King	$0.75.	$0.35	$8.42	$20.46	$7.85
Pierce	0.75	0.35	8.42	20.46	7.85
Thurston	0.75	0.35	6.84	20.20	7.72
Whatcom	0.75	0.35	5.27	19.94	7.59
Spokane	0.75	0.25	5.25	18.20	6.94
Franklin	0.75	0.25	8.40	18.72	7.20
Yakima	0.75	0.25	8.40	18.72	7.20

* Dry cleaning includes sales tax of 5.0 percent in eastern Washington, 5.3 percent in western Washington.

Table E.6

	Housewares	Unit Price	Family of Four Annual Quantity	Family of Four Annual Cost	Elderly-Single Annual Quantity	Elderly-Single Annual Cost
3801	Salt & Pepper shakers, plastic	$ 1.07	00.25	$ 0.27	00.25	$ 0.27
3802	Pitcher w/lid, plastic, 2 qt.	2.16	00.25	0.54	00.17	0.37
3803	Collander, footed, metal	3.44	00.20	0.69	00.20	0.69
3804	Tumblers, plastic, 6 oz.	0.49(d)	04.00	1.96	02.00	0.98
3805	Rubber spatula (bowl scraper)	0.76	00.50	0.38	00.50	0.38
3806	Potato Peeler, stainless steel	1.35	00.20	0.27	00.20	0.27
3807	Grater, stainless steel	1.23	00.17	0.21	00.17	0.21
3808	Paring knife, stainless steel	1.04	00.50	0.52	00.50	0.52
3809	Knife, 10"	1.97	00.50	0.98	00.50	0.98
3810	Mixing spoon, plastic	0.72	00.50	0.36	00.33	0.24
3811	Eggbeater, nylon gears	3.10	00.17	0.53	00.17	0.53
3812	Can Opener	0.94	00.25	0.24	00.25	0.24
3813	Kitchen Shears	1.02	00.50	0.51	00.50	0.51
3814	Cutlery, stainless steel, 50-piece, service for 8	18.67	00.10	1.87	00.10	1.87
3815	Kitchen Utensil Set, stainless steel, 6 pieces	12.17	00.17	2.07	00.17	2.07
3816	Measuring Cup, Pyrex, 1 cup	1.12	00.17	0.19	00.17	0.19
3817	Measuring Cups, plastic, set of 5	1.08	00.33	0.36	00.25	0.36
3818	Measuring Spoons, aluminum, set of 4	0.76	00.17	0.13	00.17	0.13
3819	Cookie Sheet, 10" x 15", lightweight aluminum	1.44	00.20	0.29	00.20	0.29
3820	Bread Pan, 9-1/2" x 5-1/2", light-weight	0.93	00.33	0.31	00.25	0.31
3821	Muffin Pan, for 12 muffins, light-weight	1.68	00.33	0.55	00.25	0.42
3822	Cake Pan, stainless steel	1.59(d)	00.33	0.52	00.25	0.40
3823	Pie Pan, metal, 10", lightweight aluminum	0.67	00.33	0.22	00.25	0.17
3824	Set of Cookware, stainless steel, copper-clad, 7 piece	29.33	00.10	2.93	00.07	2.05
3825	Double Boiler, light aluminum, 2 qt.	5.43	00.17	0.92	00.17	0.92
3826	Percolator, stove top, aluminum, 9 cup	5.61	00.17	0.95	00.17	0.95
3827	Casserole, w/lid, Pyrex, 2 qt.	4.64	00.17	0.79	00.17	0.79
3828	Mixing Bowls, Pyrex, set of 3	5.78	00.17	0.98	00.17	0.98
3829	Tumblers, glass, 12 oz., pkg. of 4	2.99	01.00	2.99	00.50	1.50

Table E.6 (Continued)

	Housewares (cont.)	Unit Price	Family of Four Annual Quantity	Family of Four Annual Cost	Elderly-Single Annual Quantity	Elderly-Single Annual Cost
3830	Set of Dishes, unbreakable, ovenproof, 20 pc. service for 4, Corelle	$25.32	00.20	$ 5.06	00.10	$ 2.53
3831	Dishpan, heavy duty plastic	2.65	00.33	0.87	00.33	0.87
3832	Dish drainer, rubber-covered wire, large	4.00	00.17	0.68	00.17	0.68
3833	Pail, plastic, 11 qt.	3.49(d)	00.33	1.15	00.17	1.15
3834	Dust Pan, plastic	0.98	00.33	0.32	00.17	0.32
3835	Scrub Brush, wood w/synthetic bristles, 8"	1.07	00.50	0.54	00.33	0.35
3836	Broom, synthetic bristles	2.72	00.50	1.36	00.33	0.90
3837	Sponge Mop	3.38	00.25	0.84	00.17	0.57
3838	Sponge replacement for mop	1.74	02.00	3.48	01.00	1.74
3839	Toilet Bowl Brush, plastic	0.64	00.50	0.32	00.33	0.21
3840	Ironing Board Cover and Pad, scorch resistant	3.45	00.25	0.86	00.17	0.59
3841	Clothes Pins, wooden, pkg. of 30	0.97	00.50	0.48	00.50	0.48
3842	Kitchen Wastebasket w/lid, plastic, large	5.38	00.33	1.78	00.17	0.91

1) All prices and annual costs do not include sales tax. Sales tax, where appropriate, was included in each cost of living component. Tax rates used for eastern and western counties were 5 percent and 5.3 percent respectively.
2) Prices listed in this table are weighted statewide averages based on the distribution of welfare cases throughout the state. See Chapter 2 and Table 2.1.
3) Price Data are from survey of 7 K-Mart stores, except prices marked (d) are from Thurston County drug/discount stores. See Chapter 4.

Table E.7

	Household Linens	Unit Price	Family of Four Annual Quantity	Family of Four Annual Cost	Elderly-Single Annual Quantity	Elderly-Single Annual Cost
3901	Shower Curtain, vinyl, 70" x 72"	$ 3.37	00.50	$ 1.68	00.33	$ 1.11
3902	Scatter Rug, nylon, 21" x 36"	5.87	00.33	1.94	00.25	1.47
3903	Bathmat, deep pile, polyester, non-skid back, 18" x 30" oval	3.94	00.33	1.30	00.25	0.98
3904	Mattress Pad, full size, polyester	7.81(c)	00.10	0.78	00.10	0.78
3905	Mattress Pad, twin size, polyester	5.50(c)	00.30	0.55	00.00	0.55
3906	Bedspread, quilted, full size	22.26	00.17	3.78	00.17	3.78
3907	Bedspread, ribbed, twin size	13.77	00.75	10.33	00.00	0.00
3909	Blanket, woven synthetic, 72" x 90"	9.91	00.20	1.98	00.20	1.98
3910	Blanket, woven synthetic, 72" x 90"	9.91	00.60	5.95	00.00	0.00
3911	Bed linen, set for twin, 3 pcs, muslin	12.87	01.50	19.30	00.00	0.00
3912	Bed linen, set for full, 4 pcs, muslin	16.42	00.50	8.21	00.50	8.21
3913	Bath Towel, lightweight cotton	2.75	04.00	11.00	01.50	4.12
3914	Hand Towel, lightweight cotton	1.76	04.00	7.04	01.50	2.64
3915	Wash Cloth, pkg. of 12, lightweight cotton	3.77	00.50	1.88	00.17	0.64
3916	Placemats, vinyl	0.45(d)	02.00	0.90	01.33	0.60
3917	Tablecloth, vinyl, flannel-backed, 52" x 70"	3.97	00.50	1.98	00.33	1.31
3918	Dish Towels, cotton, 12" x 14"	1.47	02.00	2.94	01.00	1.47

1) All prices and annual costs do not include sales tax. Sales tax, where appropriate, was included in each cost of living component. Tax rates used for eastern and western counties were 5 percent and 5.3 percent respectively.
2) Prices listed in this table are weighted statewide averages based on the distribution of welfare cases throughout the state. See Chapter 2 and Table 2.1.
3) Price Data are from survey of 7 K-Mart stores, except prices marked (c) are from Sears 1980 catalogues and prices marked (d) are from Thurston County drug/discount stores. See Chapter 4.

CLOTHING

The clothing budgets listed in the following tables reflect quantity and quality decisions made with our clothing consultant. These items are intended to be annual replacements for existing clothing stocks. The quantity of an item needed was used to calculate the annual cost of that item. Replacement cycles, or annual quantity estimates, reflect the quality of items priced in K-Mart stores or in the Sears catalogue.

All prices listed here for clothing are prices for new clothing. The cost of the clothing component was adjusted to account for used clothing purchases (see Chapter 4).

All prices listed in the appendix do not include sales tax. Sales tax is, however, included in the component totals for all clothing items, including used clothing. Tax rates were 5.0 percent and 5.3 percent for eastern and western Washington, respectively.

The average prices listed are statewide weighted averages based on the distribution of welfare caseloads throughout the state. See Chapter 2 and Table 2.1.

Most price data was obtained from the survey of seven K-Mart stores in the sample counties. Those few items for which reliable price data could not be obtained via this method were priced in Sears mail order catalogues for 1980. Shipping charges were included as described in Chapter 4. These items are noted in the tables by a "c".

Table E.8

BASIC BUDGET 1980
QUANTITY STANDARDS FOR CLOTHING

CHILD 3 YEARS OLD

	Item	Weighted Statewide Unit Cost	Annual Quantity*	Annual Cost
6332	Mittens, acrylic knit	$ 1.27	01.00	$ 1.27
6331	Cap, acrylic knit	2.57	(01.00)	(2.57)
6322	Shirt, polo	4.79(c)**	(03.00)	(14.37)
6323	Shirt, long-sleeved, pullover	3.69	(02.00)	(7.38)
6324	Overalls, denim	7.81	(01.00)	(7.81)
6325	Jeans, elastic waist, no zipper	3.47	(01.00)	(3.47)
6326	Slacks, corduroy w/lining	4.97	(02.00)	(9.94)
6327	Outfit, polyester/cotton top-corduroy slacks	5.94	(01.00)	(5.94)
6330	Sweater, pullover, acrylic, bulk knit	5.61	(00.50)	(2.80
6301	Sneakers, canvas	5.97	02.00	11.94
6302	Shoes, tie-oxford, vinyl	7.97	02.00	15.94
6303	Boots, over-shoe, waterproof vinyl	4.97	01.00	4.97
6304	Socks, tube-type, terry (pkg. of 2)	1.11	01.50	1.66
6305	Socks, anklets, nylon (pkg. of 3)	1.58	01.00	1.58
6353	Underpants, cotton (pkg. of 3)	3.62	02.00	7.24
6354	Undershirts, cotton (pkg. of 3)	3.62	02.00	7.24
6351	Pajamas, 2 piece, knit-cuff	6.66	(01.00)	(6.66)
6352	Sleeper, heavy, acrylic	6.63	(01.00)	(6.63)
6328	Jacket, lined windbreaker	8.53	(01.00)	(8.53)
6329	Snowsuit, 2 piece with hood, nylon shell, lined	19.97	(00.50)	(9.98)

*Parentheses indicate the quantity needed of items which are assumed to be handed-down.
**Item priced in Sears catalogue. See Chapter 4.

Table E.9

BASIC BUDGET 1980
QUANTITY STANDARDS FOR CLOTHING

GIRL 9 YEARS OLD

	Item	Weighted Statewide Unit Cost	Annual Quantity	Annual Cost
5734	Gloves, acrylic knit	$ 1.85	00.50	$ 0.92
5736	Hat, acrylic knit	1.88	00.50	0.94
5724	Blouse, long-sleeved, dress	6.37	01.00	6.37
5723	Shirt, cap-sleeved, T-shirt	3.96	02.00	7.92
5725	Jeans, denim w/zipper medium weight	10.17	02.00	20.34
5727	Skirt, synthetic	6.96	00.50	3.48
5726	Outfit, shirt/slacks, synthetic knit	14.28	01.00	14.28
5722	Shorts, gym-style	2.34	01.00	2.34
5729	Sweater, pullover-acrylic, long-sleeve	7.44	00.50	3.72
5730	Sweater, cardigan-acrylic, bulk knit	9.17	00.50	4.58
5701	Slippers, washable, pile-lined	4.97	00.50	2.58
5704	Boots, vinyl-midcalf, waterproof	13.97	01.00	13.97
5702	Shoes, tie oxford, vinyl	10.97	01.00	10.97
5703	Shoes, running style	11.97	02.00	23.94
5705	Socks, kneesocks, acrylic cable knit	1.07	04.00	4.28
5706	Socks, crewsocks, cotton (pkg. of 3)	2.25	01.00	2.25
5751	Underpants, cotton (pkg. of 3)	2.16	02.00	4.32
5753	Slip, full-length, synthetic	2.87	00.50	1.44
5754	Undershirt, vest-style, cotton (pkg. of 3)	3.66	00.67	2.45
5755	Bathrobe, velour	9.66	00.33	3.19
5756	Nightgown, synthetic flannel	4.67	00.50	2.34
5731	Jacket, windbreaker, nylon w/acetate lining	8.30(c)	00.50	4.15
5732	Jacket, ski-type, with hood, water repellent, nylon w/quilted lining	12.47	00.50	6.24

Table E.10

BASIC BUDGET 1980
QUANTITY STANDARDS FOR CLOTHING

MALE 13 YEARS OR OLDER

	Item	Weighted Statewide Unit Cost	Annual Quantity	Annual Cost
5622	Gloves, vinyl, pile lined	$ 3.77	00.50	$ 1.88
5621	Cap, acrylic knit	1.89	00.50	0.94
5634	Tie, polyester	3.96	00.50	1.98
5635	Wallet, leather	7.37	00.20	1.47
5636	Belt, leather	3.97	00.33	1.31
5637	Handkerchief, cotton/polyester (pkg. of 3)	1.18	00.33	0.39
5630	Shirt, long-sleeved, dress	8.97	01.00	8.97
5632	Shirt, casual, flannel	7.96	01.00	7.96
5633	Shirt, short-sleeved, sport	8.72	01.00	8.72
5628	Slacks, dress, woven synthetic	13.79	01.00	13.79
5629	Jeans, heavy cotton denim	14.97	02.00	29.94
5627	Sweater, long-sleeved, acrylic pullover	13.57	00.33	4.48
5624	Raincoat, zip-out lining, cotton/synthetic	42.00(c)	00.10	4.20
5623	Jacket, winter, wool/acrylic/cotton, pile lined	35.97	00.33	11.87
5625	Jacket, windbreaker, nylon w/cotton lining	9.97	00.33	3.29
5601	Slippers, washable, pile-lined	5.97	00.33	1.97
5602	Sneakers, canvas, low-cut	10.97	01.00	10.97
5603	Shoes, running-style, nylon/suede	12.60	01.00	12.60
5605	Boots, ankle-height, leather	14.90	00.33	4.92
5606	Socks, nylon, dress	0.82	02.00	1.64
5607	Socks, tube style	1.07	05.00	5.35
5651	Undershorts, cotton briefs (pkg. of 3)	5.64	01.33	7.50
5652	Undershirts, cotton (pkg. of 3)	6.66	01.00	6.66
5653	Pajamas, long-sleeved cotton/synthetic	7.87	00.50	3.94
5654	Bathrobe, velour, short	10.81	00.20	2.16
5639	Shorts, gym-style	2.34	01.00	2.34

Table E.11

BASIC BUDGET 1980
QUANTITY STANDARDS FOR CLOTHING

WOMAN - ADULT

	Item	Weighted Statewide Unit Cost	Annual Quantity	Annual Cost
5135	Gloves, acrylic knit, w/gripper palms	$ 3.56	00.50	$ 1.78
5136	Hat, acrylic knit	1.89	00.50	0.94
5139	Purse, vinyl shoulder bag	8.85	00.50	4.42
5128	Blouse, long sleeved, tailored, oxford cloth	9.96	01.00	9.96
5131	Shirt, casual, flannel	4.96	01.00	4.96
5132	Shirt, cap-sleeve (T-shirt)	5.96	01.00	5.96
5120	Shorts, gym-style	2.34	01.00	2.34
5129	Slacks, dress, polyester	9.96	00.50	4.98
5130	Jeans, medium weight, denim	14.96	01.00	14.96
5125	Sweater, cardigan, acrylic, medium weight	9.93	00.17	1.69
5126	Dress, polyester	16.48	01.00	16.48
5127	Skirt, synthetic, solid color	11.20	00.50	11.20
5122	Raincoat with zip-out lining, full length	44.96	00.10	4.50
5123	Coat, short, winter, polyester w/acetate lining	43.15	00.10	4.32
5124	Jacket, light weight, nylon w/cotton lining	10.70(c)	00.25	2.68
5101	Slippers, washable terrycloth	3.97	00.25	0.99
5102	Shoes, canvas, tennis	3.97	00.50	1.98
5103	Shoes, tie-oxford, vinyl	15.97	01.00	15.97
5104	Shoes, pump, medium heel	21.44(c)	00.50	10.72
5105	Boots, knee-high, waterproof vinyl, side-zipper	16.97	00.25	4.24

Table E.11 (Continued)

Basic Budget 1980 - Quantity Standards for Clothing
Woman - Adult (Continued)

	Item	Weighted Statewide Unit Cost	Annual Quantity	Annual Cost
5154	Winter Underwear (top and bottom), cotton/synthetic knit	$ 7.92	00.20	$ 1.58
5106	Kneesocks, cable knit acrylic	1.07	03.00	3.21
5107	Socks, crew, cotton/synthetic, (pkg. of 2 pr.)	2.18	01.00	2.18
5108	Nylons, knee-high	0.42	03.00	1.26
5109	Panty-hose	0.70	02.00	1.40
5151	Underpants, nylon/acetate (pkg. of 3)	2.68	01.33	3.56
5152	Bra, synthetic, unpadded	1.96	02.00	3.92
5153	Slip, full-length	4.68	00.50	2.34
5155	Nightgown, nylon, cap-sleeved	6.57	00.50	3.28
5156	Bathrobe, velour	16.38	00.20	3.28

Table E.12
BASIC BUDGET 1980
QUANTITY STANDARDS FOR CLOTHING

WOMAN - ELDERLY

	Item	Weighted Statewide Unit Cost	Annual Quantity	Annual Cost
6627	Gloves, acrylic, w/gripper palms	$ 3.55	00.33	$ 1.17
6628	Hat, acrylic knit	1.88	00.50	0.94
6629	Hat, vinyl (rain)	2.48	00.25	0.62
6630	Umbrella, nylon	3.88	00.20	0.78
6631	Purse, vinyl shoulder bag	8.80	00.33	2.90
6632	Wallet, vinyl	3.97	00.50	1.98
6633	Watch, Timex plain women's	15.46	00.20	3.09
6624	Blouse, synthetic, long-sleeved, tailored	10.05	01.00	10.05
6626	Shirt, polyester, casual	9.96	01.00	9.96
6625	Slacks, synthetic, dress	9.36	01.00	9.36
6621	Dress, long-sleeved, polyester	15.40	00.50	7.70
6623	Dress, short-sleeved, polyester	15.10	00.50	7.55
6637	Sweater, cardigan, acrylic medium weight	9.92	00.33	3.27
6622	Pantsuit, polyester	14.94	00.50	7.47
6634	Raincoat, zip-out lining, full length	44.96	00.10	4.50
6635	Coat, short, winter, polyester w/acetate lining	43.16	00.10	4.32
6636	Jacket, lightweight, nylon w/cotton lining	10.70(c)	00.25	2.68
6601	Slippers, shoe-style, pile-lined	4.97	00.25	1.24
6602	Shoes, low-heeled pumps	21.50(c)	00.33	7.10
6603	Boots, over-shoe, ankle-high, waterproof	5.97	00.50	2.98
6606	Shoes, tie-oxford	15.97	01.00	15.97
6604	Socks, anklets (pkg. of 3 pr.)	1.68	00.67	1.12
6607	Socks, kneesocks	1.07	01.00	1.07
6608	Nylons, knee-high	0.42	04.00	1.68
6605	Pantyhose, light-support	2.96	01.00	2.96
6652	Winter underwear, vest and knee-length bottoms, ribbed polyster/cotton knit, pkg. of 2 pr. (4 garments)	9.76(c)	00.17	1.66
6655	Bra, synthetic, unpadded	1.96	02.00	3.92
6656	Slip, full-length, synthetic	4.68	00.50	2.34
6653	Nightgown, long-sleeved, flannel	6.96	00.50	3.48
6651	Underpants, acetate, pkg. of 3	6.45(c)	01.33	8.58
6654	Bathrobe, velour	16.33	00.20	3.27

Table E.13

	Personal Care Item, description, size	Unit Price	Family of Four Annual Quantity	Family of Four Annual Cost	Elderly-Single Annual Quantity	Elderly-Single Annual Cost
3101	Shampoo, 16 oz.	$ 1.37	11.00	$15.07	03.00	$ 4.11
3102	Hair Spray, aerosol, 8-10 oz. net.	1.35	02.00	2.70	02.00	2.70
3103	Home Permanent Kit, single application	3.49	00.00	0.00	03.00	10.47
3104	Toothpaste, flouride, 6.4-7 oz.	1.36	10.00	13.60	03.00	4.08
3105	Dental Floss, unwaxed, 50 yds.	1.15	02.00	2.30	01.00	1.15
3106	Toothbrush, adult size	0.74	08.00	5.92	02.00	1.48
3107	Razor Blades, single-edge, pkg. of 15	3.31	06.00	19.86	01.00	3.31
3108	Shaving Cream, aerosol, 11 oz.	1.01	03.00	3.03	00.00	0.00
3109	Hand Lotion, 10 oz.	1.98	01.00	1.98	01.00	1.98
3111	Deodorant, roll-on, 1.5 oz.	1.66	06.00	9.96	03.00	4.98
3112	Cold Cream, 3.5 oz.	1.98	00.50	0.99	01.00	1.98
3113	Tampons, pkg. of 40	2.74	02.25	6.16	00.00	0.00
3114	Sanitary napkins, regular, pkg. of 30	3.33	03.00	9.99	00.00	0.00
3120	Toilet Paper, 2-ply, pkg. of 4 rolls	1.07	40.00	42.80	13.00	13.91
3131	Facial Tissue, 2-ply, pkg. of 200	0.60	08.00	4.80	02.00	1.20
3141	Baby Powder, 9 oz.	1.60	01.00	1.60	00.00	0.00
3151	Hand Soap, bar, 3.5 oz.	0.31	27.00	8.37	12.00	3.72
3161	Shoe Laces, 24", 2 pair	0.52	04.00	2.08	01.00	0.52
3162	Shoe Polish, paste, 1 1/8 oz.	0.77	01.00	0.77	00.33	0.25
3201	Denture Adhesive, tube, 2.4 oz.	1.86(b)	00.00	0.00	05.00	9.30
3202	Denture Cleaner, 40 tablets	1.14(b)	00.00	0.00	05.00	5.70
3203	Makeup, liquid foundation, 1 oz.	2.10(b)	02.00	4.20	02.00	4.20
3204	Lipstick, tube	1.94(b)	01.00	1.94	01.00	1.94
3205	Nailfile, metal, 4-1/2"-5" long	0.85(b)	00.17	0.14	00.17	0.14
3206	Toenail Clippers	1.44(b)	00.17	0.24	00.17	0.24
3207	Razor, single edge injector	3.37(d)	00.67	2.26	00.10	0.34
3208	Hair Rollers, large, pkg. of 12	1.09(b)	00.50	0.54	00.00	0.00
3209	Hair Brush, plastic	1.18(b)	00.50	0.59	00.00	0.00
3210	Comb, nylon, 9" incl. handle	0.63(b)	01.00	0.63	00.50	0.32

1) All prices and annual costs do not include sales tax. Sales tax, where appropriate, was included in each cost of living component. Tax rates used for eastern and western counties were 5 percent and 5.3 percent respectively.
2) Prices listed in this table are weighted statewide averages based on the distribution of welfare cases throughout the state. See Chapter 2 and Table 2.1.
3) Price Data are from survey of 27 supermarkets by Jensen Price Surveys, except prices noted (b) are from survey of 7 K-Mart stores and those noted (d) are from a Thurston County drug/discount store. (See Chapter 4.)

Table E.14

	Medicinal Supplies	Unit Price	Family of Four Annual Quantity	Family of Four Annual Cost	Elderly-Single Annual Quantity	Elderly-Single Annual Cost
3301	Cold/Sinus Medication, 24 capsules	$ 2.06	01.00	$ 2.06	00.50	$ 1.03
3302	Aspirin, 100 tablets of 5 grains each	1.06	01.33	1.41	00.50	0.53
3303	Antacid, liquid, 12 oz.	1.66	01.00	1.66	00.50	0.83
3304	Petroleum Jelly, 7.5 oz.	1.75	00.33	0.58	00.33	0.58
3305	Diarrhea Medication, liquid, 8 oz.	1.90	00.80	1.52	00.00	0.00
3306	Adhesive Bandaids, pkg. of 50 asstd.	1.74	02.00	3.48	00.50	0.87
3307	Rubbing Alcohol, one pint	0.83	00.50	0.42	00.50	0.42
3401	First Aid Kit, compact	3.52(b)	00.50	1.76	00.50	1.76
3402	Children's Aspirin, 36 tablets of 1.25 grains each	0.47(b)	01.00	0.47	00.00	0.00
3403	Cotton Balls, pkg. of 65	0.96(b)	02.00	1.92	01.00	0.96
3404	Tweezers	1.25(b)	00.17	0.21	00.10	0.12
3405	Hot Water Bottle	3.76(b)	00.10	0.38	00.10	0.38
3406	Cotton Swabs, pkg. of 300	1.07(b)	00.40	0.43	00.10	0.11

1) All prices and annual costs do not include sales tax. Sales tax, where appropriate, was included in each cost of living component. Tax rates used for eastern and western counties were 5 percent and 5.3 percent respectively.
2) Prices listed in this table are weighted statewide averages based on the distribution of welfare cases throughout the state. See Chapter 2 and Table 2.1.
3) Price Data are from survey of 27 supermarkets by Jensen Price Surveys, except prices noted (b) are from survey of 7 K-Mart stores. (See Chapter 4.)

Appendix F: SCHOOL SUPPLIES

School supplies for the supplementary component (see Chapter 5) were priced according to the methods discussed in Chapter 4. Statewide, weighted average prices and annual cost data are contained in Table F.1.

TABLE F.1: SCHOOL SUPPLIES PRICE DATA

	School Supplies	Unit Price	Family of Four Annual Quantity	Family of Four Annual Cost
4101	Paste, 5 oz.	$ 0.49	01.00	$ 0.49
4102	School Scissors, blunt-tipped	0.58	01.00	0.58
4103	Crayons, box of 24	0.82	01.00	0.82
4104	Eraser, 3"	0.30	01.00	0.30
4105	Folder w/pockets, Peechee	0.21	07.00	1.47
4106	Loose-leaf binder, 3-ring, 2" capacity, canvas cover	2.23	01.00	2.23
4107	Loose-leaf paper, pkg. of 175 sheets	1.34	03.00	4.02
4108	Spiral-wire notebook, 100 sheets	1.33	03.00	3.99
4109	Ballpoint Pen, medium point	0.27	18.00	4.86
4110	Pencils, #2, pkg. of 7	0.55	05.00	2.75
4121	Ruler, wooden, 12", w/metal edge	0.19(d)	01.00	0.19
4131	Shorts, gym style	2.34	01.00	2.34
4132	Undershirts, cotton (pkg. of 3)	6.66	00.33	2.22
4133	Socks, tube style	1.07	01.00	1.07
4134	Sneakers, canvas, low-cut	10.97	00.50	5.48

1) All prices and annual costs do not include sales tax. Sales tax, where appropriate, was included in each cost of living component. Tax rates used for eastern and western counties were 5 percent and 5.3 percent respectively.
2) Prices listed in this table are weighted statewide averages based on the distribution of welfare cases throughout the state. See Chapter 2 and Table 2.1.
3) Price Data are from survey of 7 K-Mart stores, except prices marked (d) are from Thurston County drug/discount stores. See Chapter 4.

Appendix G: DATA ANALYSIS CODES

For data processing and analysis purposes, item codes are assigned to categories of consumption in the study.

The following lists identify which categories of goods are associated with particular item codes. Usually the first two digits were utilized in categorizing items.

1100-1800 Food
- 1100- Meat and high protein foods
- 1200- Vegetables
- 1300- Fruits
- 1400- Breads and Cereals
- 1500- Shortenings and oils
- 1600- Sugars and Sweetening
- 1700- Condiments, beverages, and baking supplies
- 1800- Spices

3100-3200 Personal Care
- 3100- Data from Jensen Price Survey
- 3200- Data from K-Mart Survey

3300-3400 Medicinal Supplies
- 3300- Data from Jensen Price Survey
- 3400- Data from K-Mart Survey

3500 Household Management: stationery and related supplies

3600-3702 Household Supplies: cleansers, food wrap, and consumables
- 3600- Data from Jensen Price Survey
- 3701-02 Data from K-Mart Survey

3703-3711 Sewing Supplies

3800 Housewares

3900 Linens

4100 School Supplies

5100 Clothing for Adult Female (family of four)

5600 Clothing for 13-year old male

5700 Clothing for 9-year old female

6300 Clothing for 3-year old child: unisex

6600 Clothing for Elderly Female

Price data in the relevant computer files are organized according to these codes. For further information on these computer files, contact Robert Peak, Office of Research, DSHS.