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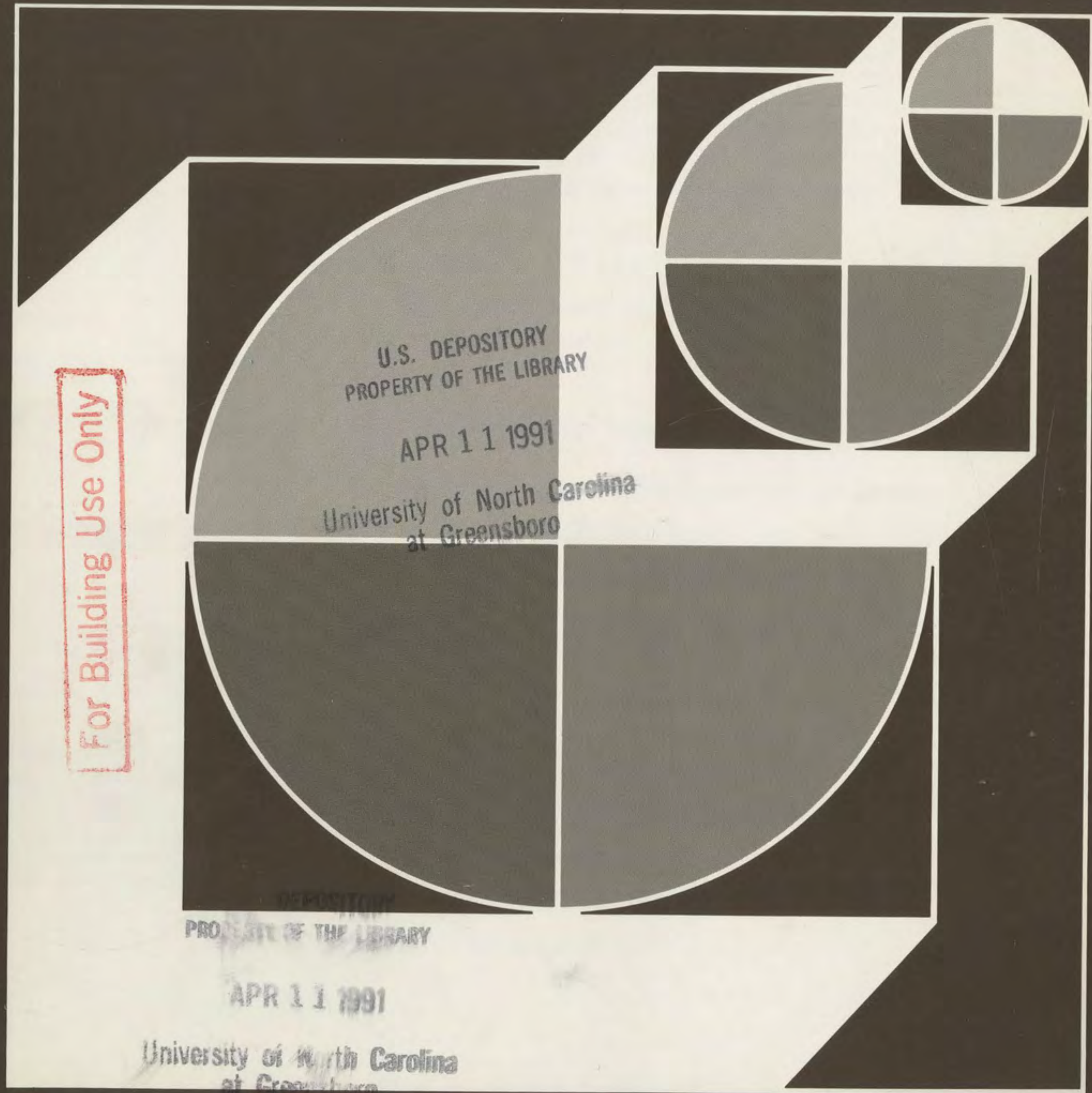

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March 1991

Expenditures on a Child by Single-Parent Families

By Mark Lino
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A previous ARS study examined expenditures on a child by husband-wife families using the 1987 Consumer Expenditure Survey updated to current prices. This study examines these expenditures by single-parent families using the same data. Estimates are provided for major components of the budget by age of child and family income level for a child in a single-parent household with two children. Child-rearing expenses increased with the age of the child and family income. Housing comprised the largest share of total expenditures on a child, regardless of the child's age or household income. Expenses on a child were slightly higher for single-parent households as opposed to husband-wife households in the same income group. This likely reflects expenses being shared by fewer members in single-parent households. Although single-parent households spent slightly more on a child than married-couple households in the same income group, a much larger percentage of single-parent households than married-couple households were in the lower income group.

The Family Economics Research Group of the U.S. Department of Agriculture (USDA) has provided estimates of child-rearing expenses for the past two decades. The estimates reflect expenditures by husband-wife families[1] on a child from birth through age 17 (*4*). The most recent estimates are based on the 1987 Consumer Expenditure Survey, updated to 1990 dollars using the Consumer Price Index for all Urban Consumers (CPI-U) (*6*). These estimates do not apply to single-parent households, which account for an increasing percentage of households with children. This study, therefore, estimates child-rearing expenses in single-parent families.

Child-rearing estimates are provided for two income groups of single-parent households for the overall United States. The two income groups were selected to correspond with those used in the child-rearing estimates of husband-wife families so comparisons could be made. Expenditures on a child are estimated for the major budgetary components: housing; food; transportation; clothing; health care; and education, child care, and other miscellaneous goods and services. (See box below for description of each component.)

Methodology

Source of Data

Data used to estimate expenditures on a child in a single-parent household are from the 1987 Consumer Expenditure Survey (CEX). This survey is the most comprehensive source of household expenditure information available at the national level. Administered by the Bureau of Labor Statistics (BLS), U.S. Department of Labor, the CEX has been ongoing since 1980 and collects information on household characteristics and income as well as expenditures. About 5,000 households are interviewed each quarter over a 1-year period. Each quarter is deemed an independent sample by BLS, bringing the total number of households in the 1987 survey to approximately 20,000 consumer units.

One-parent families headed by a male or female with one or more children age 17 or under but no other persons present, and who were complete income reporters, were selected for the study. This yielded a sample of 1,212 families. Because of data limitations, single-parent households residing with other family members or friends were not included. The majority of single-parent households (91 percent) were

Housing expenses include shelter (mortgage interest, property taxes, or rent; maintenance and repairs; and insurance), utilities (gas, electricity, fuel, telephone, and water), and housefurnishings and equipment (furniture, floor coverings, major appliances, and small appliances).

Food expenses include food and nonalcoholic beverages purchased at grocery stores, convenience stores, and specialty stores; dining out at restaurants; and school meals.

Transportation expenses include the net outlay on purchase of new and used vehicles, vehicle finance charges, gasoline and motor oil, maintenance and repairs, insurance, and public transportation.

Clothing expenses include children's apparel items such as shirts, pants, dresses, and suits; footwear; and clothing services such as dry cleaning, alteration and repair, and storage.

Health care expenses include medical and dental services not covered by insurance, prescription drugs and medical supplies not covered by insurance, and health insurance premiums not paid by employer or other organization.

Education, child care, and other miscellaneous expenses include elementary and high school tuition, books and supplies; day care tuition and supplies; baby-sitting; and personal care items, entertainment, and reading.

[1]For this study the terms "families" and "households" are used to refer to consumer units.

headed by a female. The sample was weighted using BLS methods to reflect the population of interest. Quarterly expenditures were multiplied by four to provide annual estimates.

Estimating Expenditures

To estimate expenditures on a child by single-parent households, this study followed the methodology used by the Family Economics Research Group in determining child-rearing expenses for husband-wife families. This approach estimates child-related expenditures (clothing, education, and child care) and overall household expenditures (housing, food, transportation, health care, and other miscellaneous goods and services). These expenditures are then assigned to a child for child-specific expenditures or, for overall household expenditures, allocated to a child based on previous research or on a per capita basis.

Multivariate analysis was used to estimate household and child-related expenditures, controlling for income level, family size, and age of the younger child. The two income groups of single-parent households (1987 before-tax income under $26,000 and $26,000 and over) were selected to correspond with the income groups used in estimating child-rearing expenditures in husband-wife households (1987 before-tax income under $26,000, between $26,000 and $42,000, and over $42,000). These income groups for husband-wife households were determined by dividing the sample into equal thirds. For single-parent household estimates, the two higher income groups of the husband-wife households were combined because of the small number of single-parent households who fell in these income ranges. Of the single-parent households, 85 percent had a before-tax income under $26,000, and 15 percent had a before-tax income of $26,000 and over. When controlling for income, sex of the single parent did not significantly affect total expenditures. Hence, separate estimates were not determined for households headed by male and female single parents.

For each income level the estimates were for single-parent families with two children, with the younger child in one of six age categories (0-2, 3-5, 6-8, 9-11, 12-14, and 15-17). Households with three members (two children) were selected as the base since this was the average size of one-parent families in 1987. The focus was on the younger child in a household since the older child was sometimes over age 17. If the older child had been selected as the household member of interest, expenditures for some items would be higher or lower. In addition, if a household with other than two children was selected as the base, expenditures would be different because of diseconomies or economies of scale. How these expenditures differ for an older child or for households with other than two children is addressed later in this paper. Each expense was estimated separately, thereby assuming that each expenditure was made independently of the others. The specific function describing how each budgetary expenditure was estimated in dollars is set forth in the box below.

Using dummy independent variables, the specific function was:

$$Ei = a + b1Y2 + c1HS1 + c2HS3 + d1CA2 + d2CA3 + d3CA4 + d4CA5 + d5CA6$$

where:

- Ei = household expenditures on a particular budgetary component (housing, food, transportation, health care, children's clothing, children's education and child care, or other miscellaneous goods and services)
- Y2 = 1 if household had a before-tax income $26,000 or over, 0 otherwise (the omitted category being household had a before-tax income under $26,000)
- HS1 = 1 if single-parent household with one child, 0 otherwise
- HS3 = 1 if single-parent household with three or more children, 0 otherwise (the omitted category being a single-parent household with two children)
- CA2 = 1 if age of the younger child was 3-5, 0 otherwise
- CA3 = 1 if age of the younger child was 6-8, 0 otherwise
- CA4 = 1 if age of the younger child was 9-11, 0 otherwise
- CA5 = 1 if age of the younger child was 12-14, 0 otherwise
- CA6 = 1 if age of the younger child was 15-17, 0 otherwise (the omitted category being age of the younger child was 0-2)

Family expenditures on each budgetary component (Ei) were calculated by summing the coefficients for the appropriate income level, household size, and age of the younger child. For example, expenditures for a family with a before-tax income under $26,000, two children, and the younger child age 3-5 were calculated as Ei = a + d1CA2, whereas expenditures for a household with a before-tax income $26,000 or over, two children, and the younger child age 15-17 were calculated as Ei = a + b1Y2 + d5CA6.

Ordinary least squares analysis was used to estimate expenditures for housing, food, and other miscellaneous goods and services. Tobit analysis was used to estimate expenditures for transportation, health, children's clothing, and children's education and child care since over 10 percent of the sample reported zero expenses for these budgetary components. Because of these zero expenditures, tobit analysis yields more efficient estimates than ordinary least squares analysis. The procedure outlined by McDonald and Moffitt (*5*) was used to transform the tobit analysis estimates into dollars.

Allocating Expenditures Among Family Members

After the various overall family and child-related expenditures were estimated, these total amounts were allocated among the three family members (parent, older child, and younger child). Since the estimated expenditures for children's clothing, education, and child care were only for children, this allocation was made by dividing these estimated expenditures by two (the number of children in the household). CEX data on children's clothing expenditures were for children age 15 and under, so a 16- or 17-year-old was assigned the clothing expenditures of a 15-year-old. Expenditures for other clothing services, such as dry cleaning, were estimated for the overall family and allocated on a per capita basis among family members.

Data from other Federal studies were used to apportion the budgetary shares for food and health care to a child by age. The 1977-78 National Food Consumption Survey conducted by the Human Nutrition Information Service (HNIS), USDA, collected data on food consumption by individual family members and the money value of food used at home by the household. Four food plans were then developed from this information (thrifty, low-cost, moderate-cost, and liberal) with costs updated each month. Based on the 1987 plans (*7*), food budget shares, as a percentage of total food expenditures, were calculated for the younger child in a single-parent household with two children under the low-cost and moderate-cost food plans for the lower and higher income groups. It was assumed the parent was between 20 and 50 years old and the age spread between the younger and older child was 3 years.

Appropriate (for age of the child and income level of the family) food budget shares were then applied to the estimated family food expenditures to determine child-related food expenses. The calculated food budget shares as a percentage of total food expenditures for the younger child in a single-parent household with two children, by age of the child and income group, were:

Age of child	Income group: Lower	Income group: Higher
	Percent share	
0 - 2	26	24
3 - 5	25	25
6 - 8	30	29
9 - 11	32	33
12 - 14	33	33
15 - 17	33	33

The 1980 National Medical Care Utilization and Expenditure Survey (*2*) conducted by the Public Health Service, U.S. Department of Health and Human Services (HHS), contains data on health care expenses by age of individual household members. From these figures, the proportion of health care expenses attributable to the younger child in a single-parent household with two children was derived. These individual member shares for health care expenses then were applied to estimated family health care expenditures to determine child-related expenses. It was assumed that the age of the parent was between 19 and 54, and the age spread between the younger and older child was 1-6 years. Applying these derived health care expense shares to total family health care expenditures for the two income groups in 1987 assumes these shares have not changed since 1980 and do not vary by income. Health care budget shares by age of the younger child in a single-parent family with two children were 26 percent for a child age 0-5 and 27 percent for a child age 6-17.

No authoritative base exists for allocating estimated family expenditures on housing, transportation, and other miscellaneous goods and services among individual family members. These expenditures were thereby allocated on a per capita basis.[2] As the per capita approach does not allow for possible diseconomies or economies of scale from having one child or three or more children, diseconomies or economies of scale percentages were estimated for single-parent families with other than two children (see p. 7).

Transportation expenses resulting from work activities are not related to child-rearing expenses, so these costs were excluded from the estimated family transportation expenses. Data from a 1983-84 study by the U.S. Department of Transportation (*3*) were used to calculate the percentage of transportation expenditures that may be attributed to work-related activities for single-parent families with children of different ages. Applying these percentages to 1987 Consumer Expenditure Survey data assumes these patterns have not changed since 1983-84 and do not vary by income level. Work-related transportation activities accounted for approximately 19 percent of travel for single-parent families with a child under age 6 and 29 percent for families with a child age 6-17.

[2]See Lino (*4*) for a discussion of alternative methods for allocating such expenditures.

Estimated Expenditures on a Child in a Single-Parent Household

Estimates of family expenditures on the younger child in a single-parent family with two children for the overall United States are presented in table 1. Although the estimates are based on 1987 data, income levels of households were updated to 1990 dollars using the all-items category of the CPI-U, and expenditures were updated using the CPI for the corresponding item (i.e., the CPI's for housing, food, etc.).

Child-rearing expenses ranged from $3,800 to $5,650 for single-parent households in the lower income group (before-tax income less than $29,900) and from $7,830 to $10,030 for single-parent households in the higher income group (before-tax income $29,900 or more). Although families in the higher income group spent more than families in the lower income group on a child in each respective age category, this difference varied by budgetary component.

Expenditures on a child in a single-parent household in both income groups generally increased over the age of a child. This held for all budgetary components with the exception of education, child care, and other miscellaneous goods and services, which were highest for a child age 3-5 in both income groups. Many women with children in this age group are in the labor force, so much of this expense can be attributed to child care. In 1987, 70 percent of divorced women with children under 6 years of age were in the labor force (*8*). Although the dollar costs may seem low, the averages include households with and without the expense.

The largest proportion of child-related expenditures was allocated for housing. Housing comprised, based on an average of the six age groups, 33 percent of total child-related expenses for single-parent households in the lower income group and 35 percent for those in the higher income group. Transportation was the second largest average annual expense on a child for single-parent families in both the lower and higher income groups, accounting for 25 percent and 22 percent of child-related expenses, respectively. Food comprised the third largest average expense on a child for families in the lower income group, totaling 19 percent of child-related expenditures. However, education, child care, and other miscellaneous goods and services accounted for the third largest average expense on a child for families in the higher income group, totaling 18 percent of child-related expenses.

Clothing, on average, made up 5 to 7 percent of total child-related expenses for the two income groups of single-parent households. These

Table 1. Estimated expenditures on a child by single-parent families, overall U.S., 1990

Age of Child	Total	Housing	Food	Transportation	Clothing	Health Care	Education, Child Care, and Other
Income: Less than $29,900							
0 - 2	$3,800	$1,360	$ 710	$ 980	$ 180	$ 90	$ 480
3 - 5	4,770	1,570	740	1,240	250	140	830
6 - 8	5,180	1,800	970	1,190	290	150	780
9 - 11	5,460	1,800	1,040	1,300	320	170	830
12 - 14	5,330	1,660	1,170	1,270	600	210	420
15 - 17	5,650	1,760	1,230	1,440	600	190	430
Total	$90,570	$29,850	$17,580	$22,260	$6,720	$2,850	$11,310
Income: $29,900 or more							
0 - 2	$7,830	$2,990	$1,060	$1,720	$ 270	$ 220	$ 1,570
3 - 5	9,150	3,210	1,160	2,070	360	320	2,030
6 - 8	9,460	3,440	1,430	1,950	400	330	1,910
9 - 11	9,860	3,440	1,630	2,100	440	370	1,880
12 - 14	9,650	3,300	1,730	2,060	790	430	1,340
15 - 17	10,030	3,400	1,790	2,270	780	400	1,390
Total	$167,940	$59,340	$26,400	$36,510	$9,120	$6,210	$30,360

estimates do not include children's clothing received in the form of gifts. Therefore, total overall clothing expenses on a child would likely be higher than reported here. Health care averaged between 3 and 4 percent of total child-rearing expenses for the two income groups. These estimates include only out-of-pocket expenses, and not those expenses covered by health insurance.

In non-widowed single-parent situations (divorced, separated, or never married), estimates for child-related expenses presented here include only those expenditures made by the parent with primary care of the child. The estimates do not include possible child-related expenditures made by the other parent. For example, the parent with whom the child does not reside the majority of time may incur transportation, food, and entertainment expenses during visitation days and have a larger living unit because a child stays with this parent on weekends. Such expenditures could not be estimated from the data. Hence, the overall expenses on a child in a single-parent household by the two parents in a non-widowed situation would likely be greater than this study's estimates.

A comparison of the expenditures for the younger of two children in a single-parent household with those for that child in a husband-wife household for the lower income group is presented in table 2. As previously discussed, most single-parent households (85 percent) are in this lower income group. Total expenditures on a child were, on average, 5 percent higher for single-parent households compared with married-couple households. In part, this reflects the greater transportation expenses attributed to a child in a single-parent household since these expenditures are allocated among fewer members. On average, housing expenditures were slightly higher (2 percent), whereas expenditures on clothing; health care; and education, child care, and other miscellaneous goods and services on a child were lower in single-parent

Table 2. Estimated expenditures on a child by single-parent and husband-wife families with income less than $29,900, overall U.S., 1990

Age of child	Single-parent families	Husband-wife families
0 - 2	$3,800	$4,330
3 - 5	4,770	4,630
6 - 8	5,180	4,620
9 - 11	5,460	4,480
12 - 14	5,330	5,150
15 - 17	5,650	5,490
Total	$90,570	$86,100

than in husband-wife households. Child-related food expenditures were similar, on average, in single-parent and in husband-wife families.

A precise comparison between child-rearing expense estimates for single-parent households in the higher income group to those of husband-wife households is not possible as the higher income groups of married couples (before-tax income between $29,900 and $48,300, and over $48,300) did not exactly correspond. However, the child-rearing expense estimates for single-parent households in the higher income group were in the range of those of husband-wife households in these middle and highest income groups.

Hence, it seems that expenses on a child in single-parent households are slightly higher than those in husband-wife households, probably because of economies of scale. What really distinguishes the two types of households is that 85 percent of single-parent households, but only 33 percent of husband-wife households, are in the lower income group. Even within this lower income group, single-parent households had a lower mean income than husband-wife households. The income of husband-wife households tended to fall in the upper range of this income category, whereas that of single-parent households was more dispersed.

Differences in Expenditures for an Older Child and by Number of Children

The estimates presented thus far represent expenditures on the younger child in a single-parent household with two children. Expenses for the older child may be different. To determine the extent of this difference, the previous procedure was repeated. Multivariate analysis was used to estimate expenditures for each budgetary component, controlling for household size and, for this analysis, age of the older child. A family with two children was used as the standard. The sample was weighted to reflect the U.S. population.

Children's clothing, education, and child care expenditures were divided between the two children in a household. For food and health care, household member shares were calculated for a three-person household (parent and two children with the older child in one of the six age categories) using the USDA and HHS studies. These shares for the older child were then applied to estimated food and health care expenditures to determine expenses on the older child in each age category. Housing, transportation, and other miscellaneous expenditures were allocated among household members on a per capita basis. Transportation expenses were adjusted to account for non-work-related activities.

On average, single-parent households with two children spent approximately 11 percent less on the older than on the younger child. This is contrary to husband-wife households that spent approximately 3 percent more on the older than on the younger child (*6*). Education, child care, and other miscellaneous goods and services accounted for much of the higher expenses associated with the younger child in single-parent households.

In addition, diseconomies or economies of scale are achieved if a single-parent household has only one child or three or more children. To determine these diseconomies and economies of scale factors, multivariate analysis was used to estimate expenditures for each budgetary component controlling for household size and age of the younger child. Compared with expenditures for each child in a single-parent, two-child family, single-parent households with one child spent approximately 37 percent more on the single child, and those with three or more children spent approximately 26 percent less on each child.

Greater diseconomies and economies of scale are achieved in single-parent families than in husband-wife families. Husband-wife families spend approximately 21 percent more on an only child and 22 percent less on each child in families with three or more children, compared with a two-child family (*6*). The smaller household size of single-parent families relative to married-couple households is likely the reason for this. Diseconomies and economies of scale typically have a diminishing effect, so as family size moves from three to two members (a single parent with two children vs. one child), greater diseconomies of scale result than when decreasing from four to three members (a married couple with two children vs. one child). Similarly, as family size moves from three members to four or more members (a single parent with two children vs. three or more children), greater economies of scale are achieved than when increasing from four to five or more members (a married couple with two children vs. three or more children).

Other Expenditures on Children

Expenditures estimated in this study for a child in a single-parent household are direct expenses for six major budgetary components. There are other direct expenses involved in rearing a child in a single-parent household. One, already discussed, is expenses incurred by the parent without primary care of the child in divorced, separated, or never-married situations. Another is the cost of a college education, which usually occurs after the child reaches age 18. Child-rearing estimates in this study are for a child age 17 and under.

There are also indirect costs involved in the rearing of a child. In order to care for children, current earnings and future career opportunities may be diminished for the single parent due to less time in the labor force. In addition, parental leisure time is curtailed. These indirect costs can surpass direct expenses on a child (*1*) and may be particularly restrictive for a single parent who typically assumes major responsibility for child rearing.

References

1. Calhoun, C.A. and Espenshade, T.J. 1985. *The Opportunity Cost of Rearing American Children.* The Urban Institute, Washington, DC.

2. Kasper, J.D. 1986. *Perspectives on Health Care: United States, 1980.* National Medical Care Utilization and Expenditure Survey. Series B, Descriptive Report No. 14. Office of Research and Demonstrations, Health Care Financing Administration.

3. Klinger, D. and Kuzmyak, J.R. 1986. *Personal Travel in the United States, Vol. I, 1983-1984 Nationwide Personal Transportation Study.* U.S. Department of Transportation.

4. Lino, M. 1990. Expenditures on a child by husband-wife families. *Family Economics Review* 3(*3*):2-18.

5. McDonald, J.F. and Moffitt, R.A. 1980. The uses of Tobit analysis. *The Review of Economics and Statistics* 62(*2*):318-321.

6. U.S. Department of Agriculture, Agricultural Research Service, Family Economics Research Group. 1991. *Expenditures on a Child by Husband-Wife Families: 1990.*

7. __________, Human Nutrition Information Service. 1987. Cost of food at home. *Family Economics Review* No. 3, p. 30.

8. U.S. Department of Commerce, Bureau of the Census. 1989. *Statistical Abstract of the United States, 1989.* [109th ed.]

Income and Expenditure Patterns of Consumer Units with Reference Person Age 70 to 79 and 80 or Older

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The U.S. population of older persons, especially those 80 years or older, is increasing at a faster rate than the total population. Information on the characteristics of these households will aid policymakers, planners, and educators in planning for the needs of these families. Using data from the 1987 Consumer Expenditure Survey, this study describes the socioeconomic and demographic characteristics of households with a head 80 years or older. It also compares these characteristics with those of families having a reference person age 70 to 79 years. Results indicate that the 80-plus age group had less income and spent considerably less than those in their seventies. This study did not include older persons who lived in the homes of their children, nursing homes, or other such arrangements.

Introduction

Since the beginning of this century, the United States has experienced rapid growth in the older population. Whereas, 1 in 25 Americans was at least 65 years old in 1900, this proportion rose to 1 in 8 in 1990. Projections for 2025 are that one in five persons will be 65 or older (*7*). The subset of persons 80 and older is expected to almost double by 2025 while the total population will increase by 20 percent (table 1).

Projections of an increasingly older population have far-reaching implications for educational programs and public policy on issues related to health and social and economic well-being of the older population. This study contributes to the discussion of these effects by providing information on the current socioeconomic and demographic characteristics of this population and on their income and expenditure patterns. Households with a reference person 80 years or older and those with a head age 70 to 79 years are compared.

Source of Data

Data used for this study were from the 1987 Consumer Expenditure Survey (CEX) (*6*), an ongoing survey conducted quarterly[1] by the Bureau of the Census for the Bureau of Labor Statistics. Consumer units[2] were interviewed in the survey; persons in nursing homes or similar institutions were not included. A consumer unit may be one person but that person need not live alone. Two persons living together but financially independent would be considered two separate consumer units. Findings are based on responses from 2,727 consumer units with reference persons[3] age 70 years or older. Seventy-one percent were 70 to 79 years of age and 29 percent were 80 or older. Data were weighted to reflect the U.S. population; 8.4 million households with a head age 70 to 79 years and 3.4 million with

[1]Quarterly expenditure data were multiplied by four to provide estimates of annual expenditures. Income data in the survey were annual data.

[2]Consumer unit comprises either: (1) all members of a particular household who are related by blood, marriage, adoption, or other legal arrangements; (2) two or more persons living together who pool their income to make joint expenditure decisions, or (3) a person living alone or sharing a household with others or living as a roomer in a private home or lodging house or in permanent living quarters in a hotel or motel, but who is financially independent. To be considered financially independent, at least two of the three major expense categories (housing, food, and other living expenses) have to be provided by the respondent. The terms "household" and "family" are used throughout the text to refer to consumer units.

[3]Reference person (sometimes referred to as householder in this text) is the first member mentioned by the respondent when asked to "Start with the name of the person or one of the persons who owns or rents the home."

Table 1. Projections of the population* by age

Population	1990	2000	2025
Total	250,410	268,266	298,252
Age 65 and older	31,559	34,882	59,713
Age 70 - 79	14,227	16,034	26,798
Age 80 and older	7,082	9,357	13,658

*Numbers in thousands.

Source: U.S. Department of Commerce, Bureau of the Census, 1989, *Projections of the populations of the United States, by age, sex, and race: 1988 to 2080*, Current Population Reports, Population Estimates and Projections, Series P-25, No. 1018.

one 80 or older are represented.[4] The weighted means and proportions are presented in the text and tables. An alternative way to analyze these data is by testing the unweighted sample to determine the significance level of comparisons or relationships; therefore, t-test procedures were conducted, and significant values ($p < .01$) are noted in the tables.

Household Characteristics

Socioeconomic and demographic variables are important factors in the study of income and expenditure patterns among older households because they reflect past circumstances, needs, and preferences that impact their current economic status. Table 2 (p. 10) shows selected characteristics for two age subgroups—the seventies (70 to 79 years) and 80-plus years. For comparison, data also are shown for the U.S. population.[5]

Gender and Race

The percentages of male and female reference persons were similar for those age 70 to 79. However, the reality of uneven longevity was reflected in a larger proportion of female reference persons among those 80 and over (62 percent).

Differences in longevity also were reflected in racial composition. There was a smaller percentage of black respondents in the older group than in the younger group.

Education

Compared with those 80 and older, the education level was higher for persons age 70 to 79. Nearly 10 percent of reference persons in each group were college graduates. The greatest difference was in the minimum years of schooling: 42 percent of the 80-plus group received an elementary education or never attended school, compared with 31 percent of the seventies group. Differences in education levels may reflect factors such as changing attitudes by society concerning how much education was appropriate (*1*).

Income

Almost half of those age 70 to 79 and 61 percent of those 80 and older reported a before-tax annual income of less than $10,000. Twelve percent and 17 percent, respectively, reported an annual income of less than $5,000 before taxes in 1987. These households were below the official poverty level ($6,872 for couples and $5,447 for single individuals over 65 years of age) (*4*). On the other side of the scale, 6 percent of the seventies group and 4 percent of the 80-plus households reported an annual income of $40,000 or more. These variations between groups probably reflect employment history, type of occupation during the productive years, wages earned, and related factors.

Income was related to family type and education of the reference person. When compared with other family types, the husband and wife households were better off in both age groups. Table 3 (p. 11) shows the two predominant family types: husband-wife and single female. Almost one-third of husband-wife families in both age groups had incomes of $20,000 or higher, whereas over three-quarters of single-female families reported income below $10,000.

Those with more education tended to do better financially during the retirement years. Almost one-third of the high school graduates age 70 to 79 and one-fourth of those 80 and older had income over $20,000. In contrast, the less educated reference person typically reported a household income below $10,000.

Employment

Most reference persons were retired, but 15 percent of the younger group and 4 percent of the older group were employed. Most worked part time. Five percent of those in their seventies and less than 1 percent of those in their eighties worked full time, year round.

Marital Status

As shown in table 2, there were differences between the two age groups in marital status. Compared with the younger group, a much lower percentage of married couples and a considerably higher percentage of widowed persons were seen in the 80-plus group. Persons in this older group were less likely to be separated or divorced than their younger counterparts.

Family Composition

As expected, there was a larger percentage of husband-wife families in the younger group (44 percent) than in the older group (27 percent). A higher percentage of persons 80 and older were single females (52 percent), compared with those 70 to 79 years old (36 percent). Single males accounted for approximately 10 percent of the households in both age groups.

Residence—Urban/Rural

More than four of five older households were located in urban as opposed to rural communities (less than 2,500 population). However, households headed by a person 80 years or older were more likely to live in an urban environment than were those headed by a person age 70 to 79.

[4]The U.S. population had 13.5 million persons age 70 to 79 years and 6.7 million persons 80 and older in 1987. This study included 10.8 million reference persons or spouses age 70 to 79, and 3.9 million age 80 and over. Thus, 80 percent of persons 70 to 79 years and 58 percent of those 80 or older are represented. Those not included in the sample may have lived in nursing homes or other institutions or with children, grandchildren, siblings, or friends. Also, some disparity in numbers may have resulted from the exclusion in this study of consumer units that were incomplete income reporters.

[5]The U.S. population estimates are weighted data from all consumer units in the survey that gave complete reporting of income, i.e., provided values for at least one of the major sources of income.

Table 2. Selected characteristics of older consumer units and all consumer units, 1987

Characteristics	70–79 years	80+ years	All consumer units[1]
Number of persons in consumer unit	1.7	1.5	2.5
		Percent	
Gender of reference person:			
Female	47.1	61.8	33.8
Race of reference person:			
Non-Hispanic white	88.2	88.6	81.9
Non-Hispanic black	9.1	8.2	10.1
Non-Hispanic American Indian, Asian, Other	1.2	1.3	2.6
Hispanic origin	1.5	1.9	5.4
Education of reference person:			
Never went to school	.7	3.0	.5
Elementary (1–8)	30.0	38.8	11.8
Some high school	20.9	17.3	13.7
High school graduate	25.9	20.4	31.0
Some college	12.3	10.8	22.2
College graduate	5.2	6.3	10.8
>4 years college	5.0	3.4	10.0
Income class (before taxes):			
Under $5,000	12.3	16.5	9.2
$5,000 - $9,999	35.2	43.9	15.4
$10,000 - $14,999	20.3	17.1	12.8
$15,000 - $19,999	11.4	7.8	10.3
$20,000 - $29,999	10.2	7.4	17.5
$30,000 - $39,999	4.9	3.0	13.0
$40,000 and over	5.7	4.3	21.8
Labor force status of reference person:			
Employed	15.3	4.4	72.5
Ill, disabled	6.3	6.0	4.1
Homemaker	4.5	6.6	4.5
Retired	73.4	82.8	17.5
Could not find work, doing something else	.5	.2	1.4
		Percent	
Marital status:			
Married	45.5	28.3	56.0
Widowed	43.4	65.6	12.4
Divorced	5.3	2.3	11.4
Separated	2.5	.1	3.4
Never married	3.3	3.7	16.8
Family type:			
Single male consumer	10.1	10.9	12.5
Single female consumer	35.7	51.9	16.8
Husband, wife only	38.1	24.0	21.4
Husband, wife, and child	5.5	3.1	32.8
Single parent, other family	10.6	10.1	16.5
Residence:			
Urban	83.2	87.1	85.5
Housing:			
Public	1.9	3.0	1.9
Government pays part of costs	3.3	4.5	1.9
Housing tenure:			
Homeowner without mortgage	64.0	61.6	24.6
Homeowner with mortgage	11.0	5.2	37.1
Renter	24.8	32.8	36.1
Occupied without payment	.2	.4	1.0
Student housing	0	0	1.2
Type house:			
Single family, detached	67.9	60.8	61.5
Apartment (flats, high-rise, garden)	17.1	25.2	20.6
Other (row, town, 2,3,4-plex)	8.0	8.0	11.7
Mobile home-trailer	7.0	6.0	6.2

[1]All consumer units includes those headed by persons of any age and represents the U.S. population.

Table 3. Household income by family type and education of reference person, for age subgroups, 1987

Family characteristic	70–79 years				80+ years			
	<$10,000	$10,000–$19,999	$20,000–$39,999	$40,000+	<$10,000	$10,000–$19,999	$20,000–$39,999	$40,000+
	Percent				Percent			
All families	47	32	15	6	61	25	10	4
Family type:								
Husband, wife only	21	48	22	9	26	43	22	9
Single female	77	15	7	1	78	17	4	1
Education of reference person:								
Did not graduate from high school	58	31	10	1	68	24	6	2
High school graduate	37	32	21	10	50	26	16	8

Public or Subsidized Housing

Although nearly all persons in this study lived in private housing, there was a slightly higher percentage of reference persons 80 and older living in public housing or housing where the government paid part of the cost. Perhaps this was due, in part, to the economic status of older persons and the availability of subsidized apartments for the elderly.

Home Ownership

Reference persons in the seventies group were more likely (75 percent) than the older group (67 percent) to be homeowners. A small percentage in each group held a mortgage on their home. There was a relationship between housing tenure and family type in both age groups. Renting was more frequently observed among single-female households (35 percent of those age 70 to 79 and 41 percent of those 80 and older) than among husband-wife households (14 percent of the younger group and 16 percent of the older group).

Housing Type

The highest percentage of older persons lived in single-family homes (68 percent of the younger group and 61 percent of those 80 or older). Apartments (flats, high-rise, or garden-style) comprised 17 and 25 percent of the housing occupied by those age 70 to 79 and 80 years and older, respectively. It may be that the 80-plus group was more likely to be housed in an apartment-type unit than the seventies group because they were more likely to be single.

Source of Income

Average annual income before taxes is shown in table 4 (p. 12), by components. Also, after-tax income and per capita incomes are given for both age groups. The percentage of consumer units who had income from each source and the average income of those who had that type of income also are presented. Although most consumer units (96 percent) had income from Social Security, less than half had income from pensions and annuities or interest on savings.

Mean income before or after taxes differed significantly between the two age groups, but per capita incomes did not. Wages and salaries, Social Security, and pensions and annuities varied significantly. These income sources were expected to be lower for those 80 and older than for those age 70 to 79 because the younger group had a higher percentage of husband-wife households.

The major source of income for both age groups in this study was Social Security,[6] which provided, on average, over half their income (51 percent for the younger group and 55 percent for those over 80).

[6]Although more elderly depend on Social Security than on other sources for their income, their *income share* from Social Security varies widely (2). According to a Social Security Administration Report (*5*), in 1987 the average monthly benefit was $513 ($6,156 per year) for a retired worker. However, when a retired worker with a wife receiving benefits based on his earnings was included, the average monthly benefit was $873 ($10,476 annually). Widows or widowers averaged $468 per month or $5,616 per year.

A larger percentage of the younger group (37 percent) had private pensions and annuities perhaps because these were more accessible to them than they were to the 80-plus group (32 percent) during their working years. Also, the younger group was more likely to have both husband and wife receiving pensions or annuities. A larger percentage of those 80 and older (41 percent), compared with those in their seventies (37 percent), reported income from interest on savings accounts and bonds. More of them may have sold homes, placing the proceeds in savings accounts or bonds. Although 12 percent of the younger and 17 percent of the older households reported annual incomes below $5,000, few of these households received public assistance.

Expenditures

Total expenditures and per capita total expenditures for those 80 and older were significantly lower than those for the 70 to 79 group (table 5, p. 13). The older group spent significantly less on each category of expenditures except health care, education, miscellaneous, and cash contributions.

As expected, housing commanded the largest share of the household budget for each age group followed by food, transportation, and health care. Housing included shelter, utilities, and household operations and furnishings. The older group allocated $4,162 or 42 percent of their expenditures, whereas the younger group spent $4,864 or

Table 4. Income sources and mean annual household income by age subgroups, 1987

Sources of before-tax income	Mean for all consumer units		Mean for consumer units with source		Percent with income from source	
	70–79 years	80+ years	70–79 years	80+ years	70–79 years	80+ years
Wages and salaries	$1,908	$1,171*	$12,323	$17,883	15	7
Net business	490	146	11,899	9,763	4	1
Net farm	51	–	2,159	–	2	–
Social Security, Railroad Retirement, and private retirement:						
Social Security and Railroad Retirement	7,711	6,899*	7,927	7,195	97	96
Pensions and annuities	2,406	1,524*	6,433	4,834	37	32
Interest, dividends, property income:						
Dividends, trusts, royalties, estates	678	725	5,477	6,135	12	12
Interest on savings accounts or bonds	1,482	1,809	3,969	4,458	37	41
Roomer and boarder income	6	–	1,040	–	1	–
Other rental income	126	85	3,743	1,729	3	5
Unemployment and workers' compensation:						
Unemployment	–	–	–	–	–	–
Workers' compensation and Veterans benefits	62	107	3,228	2,879	2	4
Public assistance:						
Welfare	14	–	999	–	1	–
Supplemental Security Income (SSI)	107	55	1,502	1,058	7	5
Food stamps	32	18	491	348	6	5
Other income:						
Regular contributions	33	34	1,332	1,565	2	2
Other money income	61	–	6,412	–	1	–
Total income (before taxes)	$15,174	$12,627*				
Total income (after taxes)	14,402	12,083*				
Per capita income (before taxes)	8,926	8,418				
Per capita income (after taxes)	8,472	8,055				

– Insufficient sample size.
* $p < .01$.

34 percent of their expenditures on housing. Utilities accounted for almost one-third of the housing expense of each age group.

Transportation expenses included vehicle purchase, gasoline and oil, insurance, maintenance, public transportation, and other expenses. Budget shares for transportation were smaller in the older group (10 percent) than the younger group (18 percent) partly because they owned fewer vehicles. Half of the older group had no vehicle, compared with 28 percent of those age 70 to 79.

There was little difference between the two age groups on the expenditure share for food. As expected, the older group spent a larger share on health care than the younger group.

Summary

The results of this study indicated that, on average, families with a reference person in their seventies spent nearly all of their after-tax income. It was surprising to note that the average expenditures of householders 80 and older were less than their average after-tax income. Rather than spending more than their income and drawing on their assets, as might be expected, families with a head 80 years or older had average total expenditures $2,000 less than average income. This may have been because these families wanted to save or had less inclination to spend.

The older households had a lower average income than those in their seventies. This was due partly to smaller household size. The older group reported lower average income from most sources except dividends and interest. Fewer of the older group owned a house, so perhaps they had sold their home and put the proceeds into instruments producing dividends and interest.

The older households also spent less than the younger households, and per capita expenditures also were significantly lower for older families. Families with a reference person age 80 and older spent fewer dollars and a smaller budget share than the younger group on transportation, apparel, and entertainment; they may go out less often for reasons of health or preference.

Table 5. Mean expenditures and budget shares by age subgroups, 1987

Item	Mean expenditures		Budget share	
	70–79 years	80+ years	70–79 years	80+ years
	Dollars		Percent	
Food	$2,618	$1,890*	18	19
Housing	4,864	4,162*	34	42
Transportation	2,577	1,010*	18	10
Health care	1,626	1,432	11	14
Apparel and services	615	288*	4	3
Entertainment	519	231*	4	2
Personal care	190	159*	1	2
Reading	133	84*	1	1
Education	18	10	0	0
Miscellaneous	291	165	2	2
Cash contributions	169	222	1	2
Insurance and retirement	518	249*	4	2
Alcohol	123	43*	1	0
Tobacco	134	68*	1	1
Total expenditures	$14,397	$10,015*	100	100
Per capita total expenditures	8,469	6,677*		

* $p < .01$.

Conclusions

On average, households with a head 80 years or older had similar per capita incomes and lower per capita expenditures when compared to families in their seventies. Also, expenditures were less than income for both age groups, so some families were not using their savings or other assets for current spending. This may be welcome information to those who are concerned about the economic status of older families as the percentage of persons 80 or older increases.

However, some households were not faring so well. Twelve percent of those with a reference person in their seventies and 17 percent of those 80 or older reported incomes less than $5,000, considerably below poverty thresholds for families over 65 years of age. Yet, less than 7 percent received Supplemental Security Income (SSI) and less than 6 percent received food stamps. It appears that families eligible for economic support were not receiving it. Efforts to reach these families are needed.

For families in this study,[7] housing-related costs comprised the largest share of the household expenditures. Over 70 percent owned their home, but such assets are not readily available for use. Furthermore, as persons become less independent with age, it becomes more difficult to maintain a single-family dwelling. Yet, about two-thirds lived in single-family homes. Alternative housing options, including those with a service component (such as congregate housing, shared, and group homes), may be needed.

Given these findings, further research related to the economics of aging is needed. Researchers, consumer educators, extension agents, and professionals on aging can contribute to developing a better understanding of the economic status of older persons.

[7]Persons living in nursing homes, with their children, or in other arrangements may have different expenditure patterns. For some, health-related expenses would be the major budget component.

References

1. Atchley, R.C. 1988. *Social Forces and Aging*. Wadsworth Publishing Co., Belmont, CA.

2. Clark, R.L., Maddox, G.L., Schrimper, R.A., and Sumner, D.A. 1984. *Inflation and the Economic Well-Being of the Elderly*. The Johns Hopkins University Press, Baltimore, MD.

3. U.S. Department of Commerce, Bureau of the Census. 1989. *Projections of the Populations of the United States, by Age, Sex, and Race: 1988 to 2080*. Current Population Reports, Population Estimates and Projections. Series P-25, No. 1018.

4. U.S. Department of Health and Human Services, Social Security Administration. 1989. *Social Security Bulletin, Annual Statistical Supplement*, p. 123.

5. _________. 1988. *Fast Facts and Figures about Social Security*. Washington, DC.

6. U.S. Department of Labor, Bureau of Labor Statistics. Consumer Expenditure Survey: 1987 Interview Survey Public Use Tape and Documentation.

7. U.S. Senate Special Committee on Aging. 1987-1988. *Aging in America: Trends and Projections*. [In conjunction with the American Association of Retired Persons, the Federal Council on the Aging, and the U.S. Administration on Aging.]

Trends in Housing

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Using data from various government and industry sources, recent trends in housing are reported. For the past year, the inflation rate for housing was lower than the overall inflation rate, as measured by the Consumer Price Index (CPI). The increase in home prices during the 1990's is expected to be much lower than the increases during the 1970's and 1980's. The U.S. home ownership rate has held steady at about 64 percent for the past 25 years. Renters pay a higher share of their total income for housing costs than do homeowners. The housing industry is experiencing a decline. New housing starts, an indication of the health of the real estate industry and the national economy, have been decreasing for both single-family and multifamily structures. Other information presented includes mortgage trends, new developments in the housing industry, and recent legislation. Housing professionals and educators, as well as would-be home buyers, are provided with useful trend information.

The CPI for housing rose 4.5 percent between December 1989 and December 1990 (table 1). This increase was less than the 6.1 percent increase for the overall CPI during the period. The housing component that showed the greatest increase in price was fuel oil and other household fuel commodities (28.6 percent). Smallest increases in price (less than 2 percent) were observed for housefurnishings, maintenance and repair commodities, gas (piped) and electricity, and household insurance.

Home Ownership

The U.S. Census Bureau conducted its first housing census in 1940. That year, the median value of nonfarm owner-occupied homes was $2,938, and the median rent was $27.28 per month (*9*). A majority of Americans (56.4 percent) were renters. Although many homes today have a 6-digit price tag, the dream of home ownership has become a reality for most Americans. In the second quarter of 1990, the home ownership rate was 63.7 percent. This rate has varied by only 2 or 3 percentage points over the past 25 years. The home ownership rate was highest outside Metropolitan Statistical Areas (73.2 percent) and lowest inside central cities (48.3 percent). Among the four geographic areas of the country, the rate was highest in the Midwest (67.4 percent) and lowest in the West (57.3 percent) (*20*).

Home Prices

Owning a home in the 1990's is not expected to be the same profitable experience as it was during the 1970's and 1980's. According to the chairman of the Federal Home Loan Mortgage Corporation (*3*), home prices are expected to increase about 2 percent per year in the 1990's, compared with 4 percent per year in the 1980's and 10 percent per year in the 1970's (*3*). Home buyers during the next few years are advised to think of their purchase as a form of asset savings rather than as an investment.

The appreciation rate for home prices is decreasing in the highest priced markets such as Boston, New York City, and the California coast – areas that had experienced boom markets in the late 1980's. In contrast, housing appreciation is increasing in many of the relatively lower priced urban areas such as Seattle, Akron, and Peoria. Prices in several depressed Southern markets, such as Houston and Baton Rouge, also appear to be on an upswing (*8*).

In 1989 the median sale price of a single-family home in the United States was $120,000 for a new home and $93,100 for an existing home (table 2, p. 16). Median existing home prices for the second quarter of 1990 showed the three most expensive areas of the country to be Honolulu ($345,000), San Francisco ($263,600), and Anaheim/Santa Ana ($248,900). In contrast, the three least expensive areas were Saginaw, MI ($49,300); Youngstown-Warren, OH ($50,400); and Peoria ($52,100) (*8*).

Metropolitan areas of the country can be compared on a housing affordability index – the percentage of income needed to marginally qualify for a conventional loan covering 80 percent of the median existing single-family home price, based on current lending requirements of the Federal National Mortgage Association (Fannie Mae). For example, the July 1990 affordability index of 102.3 for the United States means that a family earning the median income of $34,358 had 102.3 percent of the income necessary to purchase the median existing single-family home, priced at $98,400 (*8*). For the second quarter of 1990, the metropolitan areas with the most favorable affordability indexes were: Houston (179.9), Indianapolis (159.8), Minneapolis/St. Paul (154.1), Kansas City (149.9), and Detroit (146.4). The metropolitan areas with the least favorable affordability indexes were: Los Angeles (49.5), San Francisco (51.9), New York (53.3), San Diego (58.7), and Boston (79.8) (*8*).

In 1989, 350,000 apartment condominiums and cooperatives were sold, up from 230,000 five years earlier. The Northeast accounted for 45 percent of these sales. The median sale price of condos and co-ops was $84,300, ranging from $65,600 in the Midwest to $110,800 in the Northeast (*7*).

Table 1. Consumer Price Index for housing, all urban consumers: U.S. city average [1982–84 = 100]

Group and item	December 1989	December 1990	Percent change
All items	126.1	133.8	6.1
Housing	124.9	130.5	4.5
Shelter	135.6	142.7	5.2
Renter's costs[1]	140.1	149.5	6.7
Homeowners' costs[1]	140.9	147.5	4.7
Household insurance[1]	134.0	136.5	1.9
Maintenance and repairs	119.5	123.8	3.6
Maintenance and repair services	122.2	128.9	5.5
Maintenance and repair commodities	115.8	116.8	.9
Fuel and other utilities	108.4	112.7	4.0
Fuel oil and other household fuel commodities	88.7	114.1	28.6
Gas (piped) and electricity	107.0	108.6	1.5
Household furnishings and operation	111.7	113.7	1.8
Housefurnishings	105.5	106.1	.6
Housekeeping supplies	123.6	127.5	3.2
Housekeeping services	117.6	122.3	4.0

[1]Indexes on a December 1982 = 100 base.
Source: U.S. Department of Labor, Bureau of Labor Statistics.

As of 1987, 5.8 percent of the total occupied year-round housing units in the United States were mobile homes, and 81 percent of mobile homes were owner occupied. Median monthly housing costs for mobile home owners, including all mortgages plus maintenance costs, was $266 (*22*). The average sale price of a new mobile home for residential use was $23,700 (*19*). The number of new mobile homes placed for residential use has been declining every year since 1984.

Mortgage Trends

Today, borrowers have numerous choices when shopping for a mortgage. Lenders are tailoring mortgages to the needs of local borrowers. In the West, the Nation's least affordable housing region, most mortgages are adjustable rate mortgages (ARM's) with monthly adjustments tied to the Eleventh District Cost of Funds Index (COFI), a relatively slow moving index that reflects lenders' borrowing costs in the Western States (*2*). Treasury-indexed ARM's, which react quickly to interest rate changes, are now only a small portion of the ARM's issued in the West (*2*).

No-point ARM's are increasing in popularity among prospective home buyers with little cash for a down payment. With a no-point ARM, borrowers pay only minor closing costs. The initial interest rate discount is smaller than for a traditional ARM, and the monthly payment is slightly higher. The 7-year reset mortgage is also gaining market share in the West (*2*). These fixed-rate loans, which are popular with buyers who expect to live in a home for only a few years, offer automatic or conditional refinancing at the end of 7 years. In other regions of the country, most borrowers choose fixed-rate loans, although ARM's increase in popularity when interest rates go up (table 3, p. 16).

There is a trend among real estate lenders toward simplifying the financial side of home buying in the 1990's. For example, the loan approval process is expected to be shortened within the next few years. Property appraisals, which currently add about 2 weeks to the process, will be able to be completed within 24 hours due to advances in high-tech data storage and retrieval systems. A quick appraisal will enable lenders to offer instant loan commitments, and buyers can eliminate financial contingencies in their sales offers (*12*).

Expandable mortgages, already being offered by Citibank of New York in the New York City area, will become commonplace in the future. Lenders will approve credit lines based on the appreciated value of the home at some future point, though the borrower receives only the loan money needed to purchase the home (*12*).

Real estate lenders are trying to help home buyers concerned about environmental hazards on their property. The Federal National Mortgage Association, together with others in the lending industry, published a brochure entitled "Home Buyer's Guide to Environmental Hazards" in August 1990. Hazards, such as asbestos, formaldehyde, radon, lead paint, lead in drinking water, and toxic waste were identified and defined, together with the risks associated with each. It is predicted that, as part of sales transactions, toxic waste inspections will become as commonplace as termite inspections are today (*5*).

Demographic Trends

During the 1990's, aging baby boomers will be in the market for larger trade-up homes, but selling their starter homes may be difficult. Because of the baby bust, there will be less demand at the lower end of the housing market, creating a buyers' market for starter homes and also, a time of bargains for renters.

An increasing amount of the U.S. housing dollar will be spent on amenities that appeal to those over age 35. The latest status symbols in housing are libraries and master bedroom suites with a full bath and spa. Growth in spending on existing housing in terms of additions, remodeling, and refurnishing will approach the growth in spending on new housing. During the 1990's the number of persons age 75 and over will grow rapidly, and may increase the demand for nursing homes and assisted-living facilities. However, the number of persons age 65-74 will decline, leading to a flat demand for housing for the young elderly (*11*).

First-Time Home Buyer

Although the number of first-time home buyers is expected to decline during the 1990's, consumers purchasing their first home comprise a major segment of the housing market. Even in high-priced California, over one-third of purchasers in 1989 were buying their first home, spending an average of $162,500, and paying 20 percent down. Outside California, buyers typically put 10 percent down on their first homes (*4*).

For the Nation, the median price of a home purchased by a first-time buyer in 1989 was $79,100 with a monthly payment of $642. The first-time home buyer earning the median income of $22,878 had 74.2 percent of the income necessary[1] to purchase this home using a conventional loan at 10.11 percent interest rate.

Table 2. Number and price of single-family homes sold in selected years, 1970–89

Year	Single-family home sales		Median sale price of single-family homes	
	Existing	New	Existing	New
1970	1,612,000	485,000	$23,000	$ 23,400
1980	2,973,000	545,000	62,200	64,600
1984	2,868,000	639,000	72,400	79,900
1985	3,214,000	688,000	75,500	84,300
1986	3,565,000	750,000	80,300	92,000
1987	3,526,000	671,000	85,600	104,500
1988	3,594,000	676,000	89,300	112,500
1989	3,440,000	650,000	93,100	120,000

Source: U.S. Department of Commerce, Bureau of the Census and U.S. Department of Housing and Urban Development, 1990, *New One-Family Houses Sold and For Sale*, Current Construction Reports, Series C25-9005; and National Association of Realtors, 1990, *Home Sales*, Vol. 4, No.4.

Table 3. Characteristics of conventional first mortgage loans for purchase of single-family homes

Loan characteristic	1970	1980	September 1990
New homes:			
Contract interest rate, all loans	8.3	12.3	9.6
Term to maturity (years)	25.1	28.1	27.2
Purchase price ($1,000)	35.5	83.2	156.6
Loan to price ratio	71.7	73.2	74.7
Percent of loans with adjustable rates	*	*	32
Existing homes:			
Contract interest rate, all loans	8.2	12.5	9.7
Term to maturity (years)	22.8	26.9	26.2
Purchase price ($1,000)	30.0	68.3	135.2
Loan to price ratio	71.1	73.5	74.0
Percent of loans with adjustable rates	*	*	25

*Data are not available.

Source: U.S. Department of Commerce, Bureau of the Census, 1990, *Statistical Abstract of the United States, 1990*, [110th ed.]; and Federal Housing Finance Board, 1990, *News*, FHFP 90-20.

About 175 lenders nationwide are participating currently in an innovative program called the Community Home Buyers Program (*14*). Under this program, first-time home buyers can make 5 percent down payments, take out bigger mortgages, and reduce their closing costs if they meet program qualification guidelines, including completion of a home ownership course. The sponsor, GE Capital Mortgage Insurance Co., based in Raleigh, NC, is insuring $800 million in mortgages under this program. The mortgage insurance reduces the lenders' risk by protecting

[1]The affordability index *for first-time buyers* is their median income divided by the amount of income needed to qualify for a mortgage, based on current lending requirements of the Federal National Mortgage Association using a 10-percent down payment (*7*).

against financial losses if a borrower defaults on the mortgage. Fannie Mae is purchasing most of the mortgages from the lenders.

Although low down-payment mortgages have a higher default rate than conventional mortgages, the 6-hour home ownership course should reduce that risk. The required course covers topics such as budgeting, establishing good credit, and buying and maintaining a home. Lenders' income and loan limits vary, but a family that could qualify for a conventional mortgage of about $120,000 will be able to qualify for a $160,000 mortgage under this unique program (*14*).

New Housing Starts

Monthly housing starts are an indication of the health of the real estate industry and the national economy. The housing industry finished 1989 with 1.4 million housing starts, a decrease of 5.9 percent from 1988. The National Association of Home Builders (NAHB) projected about 1.3 million housing starts in 1990, and by June of 1990, new housing starts had fallen to their lowest level since 1982 when the Nation experienced a severe recession (*19*). A number of factors are responsible for the decline. From January to June 1990, the interest rate on a fixed-rate loan for a newly built home rose from 9.8 percent to 10.2 percent (*15*). Home prices remain high, particularly in fast-growing urban areas where developers pay premium prices for land.

Also, new banking regulations have contributed to sharp cutbacks in lending to some developers. The Financial Institutions Reform, Recovery and Enforcement Act, enacted in August 1989, limits savings and loan associations in the amount they can lend to any one borrower. An April 1990 survey of NAHB members showed that 60 percent were cutting back their building plans for 1990 as a result of these restrictions. Builders are reducing the number of homes they build, laying off workers, delaying projects, or closing down their operations temporarily (*10*). Even so, in early 1990 there was a high inventory of new homes for sale (a 7-1/2-month supply, based on the ratio of houses for sale to houses sold) (*21*).

For the second consecutive year the Riverside-San Bernardino area of southern California led the Nation in 1989 in the number of building permits issued for single-family homes. The Los Angeles-Long Beach area was second, and the Washington, DC, area was third (*6*).

The single-family houses being built today are larger than those built over the past two decades (table 4). There is a trend toward more two-story houses, more bathrooms, more central air-conditioning, and more use of gas for heating.

Table 4. Characteristics of new, privately owned, single-family houses

Characteristic	1970	1980	1989
Total houses (thousands)	793	957	1,026
Floor area:			
Average (sq. ft.)	1,500	1,740	2,035
Median (sq. ft.)	1,385	1,595	1,850
		Percent distribution	
Number of stories:			
1	73	61	46
2 or more	17	31	50
Split level	10	8	4
Bathrooms:			
1 or less	32	18	8
1-1/2 or more	68	82	92
Heating fuel:			
Electricity	28	51	34
Gas	63	41	58
Oil	8	3	5
Other	1	5	3
Central air-conditioning	34	63	77

Source: U.S. Department of Commerce, Bureau of the Census, 1990, *Statistical Abstract of the United States, 1990*, [110th ed.]; U.S. Department of Commerce, Bureau of the Census and U.S. Department of Housing and Urban Development, 1990, *Characteristics of New Housing:1989,* Current Construction Reports, Series C25-8913.

Rental and Multifamily Housing

As of 1987, 31.9 percent of total U.S. housing units[2] were occupied by renters, 56.7 percent were occupied by owners, 8.7 percent were vacant, and 2.8 percent were seasonal. The median rent was $333 (*22*). Renters paid a *median* of 29 percent of their *before-tax income* for housing, compared with 18 percent for homeowners.[3] The U.S. rental vacancy

[2]A housing unit is a group of rooms or a single room occupied or intended for occupancy as separate living quarters, with direct access from the outside or through a common hall.

[3]Monthly housing costs for renter-occupied housing units include the contract rent plus the estimated average monthly cost of utilities, fuels, property insurance, mobile home land rent, and garbage collection if paid for by the renter. Monthly housing costs for owner-occupied units include mortgage payments, real estate taxes, property insurance, homeowners' association fees, cooperative or condominium fees, mobile home park fees, land rent, utilities, fuels, and garbage collection (*22*).

rate (the number of vacant units for rent divided by total rental units) for the second quarter of 1990 was 7.0 percent. The rental vacancy rate ranged from a high of 8.4 percent in the South to a low of 6.0 percent in the Midwest (*20*).

Multifamily housing starts (structures with two or more units) peaked in 1985 at 670,000 and represented 38 percent of total residential starts. That share fell to 27 percent by 1989 because of an oversupply of apartment buildings, tax reform in 1986, and a decline in many local economies. The multifamily market, however, shows signs of improvement. Rental vacancy rates are lower than those of 2 years ago (8.0 percent in first quarter 1988), and apartments appear to be renting more quickly, as shown by absorption rates (the percentage of new apartments completed and rented within 3 months) published by the Census Bureau (*13*).

A major recovery for multifamily housing is not expected in the 1990's, as several factors will continue to depress the market. The number of household heads age 25 and under, of which 85 percent are renters, will drop by about 5 percent between now and the year 2000, and those age 25 to 34, also a big renter group, will decline by 15 percent. The Financial Institutions Reform, Recovery and Enforcement Act, limiting the amount of acquisition, development, and construction lending by financial institutions, will negatively affect the availability and cost of construction loans for apartment builders. Also, the U.S. Department of Housing and Urban Development's (HUD) new requirement that newly constructed apartment buildings must be accessible to the handicapped will raise the costs of building these projects (*13*).

In 1987, 4.4 percent of U.S. households received public or subsidized housing benefits. The Federal Government spent $11.1 billion that year on public housing, and State and local governments spent an additional $2.1 billion. In 1987 there were 1.4 million occupied low-income public housing units subsidized by HUD. Of these, 27 percent were intended for persons 62 years or older, disabled, or handicapped (*18*).

New Developments

Home Technology

Smart House is a state-of-the-art electrical wiring, energy distribution, and communications system designed to control energy and communications throughout the home (*16*). The goal of Smart House is to provide integrated systems that will be practical and affordable, and will enhance safety and security in the home. The Smart House project was begun in 1984 by the National Research Center, a wholly owned subsidiary of NAHB. Smart House, L.P., a consortium, consists of over 100 manufacturers of electric, electronic, and gas-fired home products along with major utilities and research organizations.

The control technology used by Smart House is composed of 17 meters and numerous complex measurement devices that keep track of the efficiency of the house and its systems. For example, appliances anywhere in the house can be operated with a wall switch, hand-held remote controller, sensor, video touch screen, touch-tone telephone, or voice. Also, the owner can control the house from any distance with a touch-tone telephone. Its sophisticated security control system will alert the owner to a fire's existence and location via audio or display devices and will notify the fire department or an emergency monitoring service. Doors and windows can be monitored and locked from remote locations, appliances can be locked out from unsupervised use, and police and neighbors can be alerted in emergency situations. A VCR tape can be viewed on a television in another room, and telephones can be used as intercoms, all without additional wiring. Smart House features are expected to be on the market in 1991.

The Gas Research Institute, an organization that plans and manages financing for gas-related research and development projects, built the Gas Laboratory House in Bowie, MD. The house is a testing facility for the Smart House system and for conducting research and testing programs on new gas systems and products. The use of natural gas is increasing, and there is a virtually unlimited supply available, according to the American Gas Association. Currently, 54 percent of new single-family homes and 44 percent of new multifamily homes use gas.

Home Sales

The trend in home sales is toward greater use of pictures to sell homes. One of the newest sales tools for bringing home buyers and sellers together is video services and the accompanying hardware and software. Already on the market is a computerized multiple listing service which allows real estate brokers to show up to 27 photos of a home, along with a written description (*1*).

Video marketing of homes on local television programs is sponsored by real estate sales companies. These programs provide prospective home buyers with a guided tour of available homes, along with a narrative description of the home's features (*1*).

Recent Legislation

Public Law 101-235, The Department of Housing and Urban Development Reform Act of 1989, revised the procedures for the allocation of grants by HUD. The Federal Housing Administration insurance funds were revised to eliminate potential areas of abuse. Incentives were provided to property owners to keep their properties affordable for low-income persons. The bill established a National Commission on Severely Distressed Public Housing, composed of 18 members. This Commission identifies those public housing projects that are in a severe state of distress, assesses the most promising strategies to improve conditions in these projects, and develops a national action plan to eliminate unfit living conditions in public housing by the year 2000. Another provision of this bill established a National Commission on Native American, Alaska Native, and Native Hawaiian Housing, composed of 12 members. It evaluates the factors currently impeding the development of safe and affordable housing for these population groups and assesses the most promising strategies for the development, management, and modernization of housing for these groups. It also establishes an action plan for housing, which includes recommending legislative, regulatory, or administrative action necessary to achieve objectives. The law was enacted on December 15, 1989 (*17*).

References

1. Billings, K. 1990. Marketing to the video generation's home buyers. *FreddieMac Reports*. Freddie Mac, Reston, VA. March issue, p. 6.

2. _______. 1990. Regional roundup: Lending by locale. *FreddieMac Reports*. Freddie Mac, Reston, VA. April issue, pp. 1-2.

3. Brendsel, L.C. 1990. Four challenges for the 1990's. *FreddieMac Reports*. Freddie Mac, Reston, VA. February issue, p. 3.

4. Crellin, G.E. 1990. Starter homes. *Home Sales*. National Association of Realtors 4(*2*):3.

5. Federal Home Mortgage Association. 1990. *A Home Buyer's Guide to Environmental Hazards*.

6. *FreddieMac Reports*. 1990. Freddie Mac, Reston, VA. April issue, p. 4.

7. *Home Sales*. 1990. National Association of Realtors 4(*4*):12.

8. _______. 1990. National Association of Realtors 4(*8*):15-17.

9. *Housing Backgrounder*. 1990. National Association of Home Builders.

10. *Housing News Service*. 1990. National Association of Home Builders, May 16 issue.

11. Hughes, J.W. and Sternlieb, G. 1990. Demographics vs. development. *American Demographics* 12(*5*):40-41.

12. Lehman, H.J. 1990. Mortgage lenders look to the future. *The Washington Post*, June 9 issue.

13. Martin, D. 1990. Malaise in the multifamily market. *FreddieMac Reports*. Freddie Mac, Reston, VA. May issue, p. 5.

14. Salmon, J.L. 1990. Two more lenders sign up for homeowner's program. *The Washington Post*, June 2 issue.

15. *News*. 1990. Federal Housing Finance Board. FHFB 90-20.

16. *The Smart House Partnership, Leaders in Innovation*. 1989. Smart House, L.P., Upper Marlboro, MD.

17. U.S. Congress. 1989. Public Law 101-235 – Department of Housing and Urban Development Reform Act of 1989, 101st Congress.

18. U.S. Department of Commerce, Bureau of the Census. 1990. *Statistical Abstract of the United States, 1990*. [110th ed.]

19. _______ and U.S. Department of Housing and Urban Development. 1990. *Housing Starts*. Current Construction Reports, Series C20.

20. _______. 1990. *Housing Vacancies and Home Ownership*. Current Housing Reports H111-90-Q2.

21. _______. 1990. *New One-Family Houses Sold and For Sale*. Current Construction Reports C25-9005, May issue.

22. _______. 1989. *American Housing Survey for the U.S. in 1987*. Current Population Housing Reports H-150-87.

Dietary Guidelines for Americans Revised, 1990

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The newly published third edition of the Dietary Guidelines for Americans reflects new knowledge on diet and health and a better understanding of user perceptions of earlier guidelines. Based on the advice of a Federal Dietary Guidelines Advisory Committee, the central messages of the seven 1985 guidelines are retained. However, their presentation in 1990 is more positive and more total diet oriented, with more food selection guidance. The new guidelines are: eat a variety of foods; maintain a healthy weight; choose a diet low in fat, saturated fat, and cholesterol; choose a diet with plenty of vegetables, fruits, and grain products; use sugars only in moderation; use salt and sodium only in moderation; and if you drink alcoholic beverages, do so in moderation.

The third edition of *Nutrition and Your Health: Dietary Guidelines for Americans* was jointly published in late 1990 by the U.S. Departments of Agriculture (USDA) and Health and Human Services (HHS) (*8*). It replaces the second edition (*7*) as the statement of Federal nutrition policy. As such, it presents the priority dietary guidance messages the Government gives to healthy Americans through its extension, food assistance, and public health programs nationwide.

The new Dietary Guidelines bulletin reflects recommendations of a Dietary Guidelines Advisory Committee (DGAC) of nine nationally recognized nutrition scientists and physicians, chaired by Dr. Malden Nesheim of Cornell University. At the request of USDA and HHS, this Committee reviewed the 1985 bulletin for its soundness with respect to the current scientific evidence about diet as it relates to health. In its review, the Committee drew heavily from two recent major reports on this topic by the National Academy of Sciences (NAS) and the Surgeon General (*5,9*).

The DGAC's review also considered the utility of the bulletin to consumers and to professionals who serve them, drawing on USDA-sponsored research on the use of earlier editions. The importance of stability of the message in efforts to educate the public about nutrition and health and the potential for confusion that change in the message can cause were recognized. Written public comments from numerous individuals and groups to the Committee provided useful perspectives on the guidelines.

The DGAC's report to USDA and HHS (*3*) includes its recommendations, discussion of the rationale for changes it proposed to the 1985 edition, summaries of the research on the uses of earlier guidelines, and information on public comments received. Single copies of the report are available while supplies last from the Human Nutrition Information Service, Federal Building, Room 325A, Hyattsville, MD 20782.

The Seven Dietary Guidelines

The DGAC and the Government scientists who reviewed the Committee's recommendations concluded that the basic messages of the seven guidelines, as presented on the cover of the 1985 bulletin, remain sound and of major importance to Americans in choosing food for a healthful diet. However, the wording of some of the guidelines was changed (see table) for the following reasons:

- "Healthy" weight replaces "desirable" weight to describe the new and more health-oriented weight assessment method presented in the bulletin.
- The guideline on fats is reworded to make it clear on the bulletin's cover that fat in the total diet is the focus.
- The fat guideline and the guidelines on sugars and salt are stated more positively by removing the term "avoid too much." This phrase incorrectly conveyed to some guideline users the idea that elimination of the substance from the diet was intended.
- The adequacy of complex carbohydrates and fiber in the diet is assured through guidance on the selection of foods containing these substances – vegetables, fruits, and grain products. This new wording responds to scientific evidence that healthful diets contain more and a greater variety of these foods than most Americans now consume. Also, guidance on foods is more helpful than guidance on food components to guideline users.
- The term "sugars" replaces "sugar" to more accurately define the foods of concern, sugar and other caloric sweeteners, which are listed in the new bulletin's text.

- Salt and sodium are now used in the guideline which previously referred only to sodium, because salt provides most of the sodium in American diets and is a better understood term.

The Text of the Bulletin

The 1990 text accompanying the seven guidelines differs from the 1985 text in both content and emphasis. Some differences reflect scientific advancements regarding diet and health, and greater consensus on some issues since the early 1980's, when the text for the 1985 edition was developed. For example, new prominence is given to recommendations to decrease fat, especially saturated fat, and to increase consumption of vegetables, fruits, and grain products. This prominence is supported by conclusions in both the NAS and the Surgeon General's reports (*5,9*).

The guidelines and advice about their implementation emphasize enjoyable and healthful eating through variety and moderation, rather than dietary restriction. Additional attention is given to certain nutrition principles, such as the content of the total diet over a day or more is what counts, and any food that provides energy and nutrients can be part of a nutritious diet.

Variety of foods defined. Many users of the bulletin requested more food selection guidance. Thus, a variety of foods is described in the 1990 guideline as the number of servings of foods from five food groups from USDA's Food Guide (*1,6*). People who eat little food are cautioned to choose low-calorie, high-nutrient foods from the groups. Women and adolescents are advised to eat more calcium-rich foods. Young children, teenage girls, and women of childbearing age are cautioned about their special need for iron-rich foods. Everyone is encouraged to choose foods in accordance with all of the guidelines.

Dietary guidelines: 1985 and 1990

1985 Edition	1990 Edition
Eat a variety of foods	(Same)
Maintain desirable weight	Maintain a healthy weight
Avoid too much fat, saturated fat, and cholesterol	Choose a diet low in fat, saturated fat, and cholesterol
Eat foods with adequate starch and fiber	Choose a diet with plenty of vegetables, fruits, and grain products
Avoid too much sugar	Use sugars only in moderation
Avoid too much sodium	Use salt and sodium only in moderation
If you drink alcoholic beverages, do so in moderation	(Same)

Healthy weight defined. New, yet interim, advice on how to assess body weight and shape is introduced with this guideline. A healthy weight depends on meeting all of three conditions: Your weight is within the suggested range for persons of your height and age; your abdominal fat does not put your health at high risk; and you do not have a health problem for which your doctor suggests weight loss or gain. If you fail to meet any of these three conditions, you are advised to check with your doctor on how your weight might affect your health and what to do about it. Research on the relationship of body weight and shape to mortality and morbidity continues. More precise criteria for healthy body weight and shape are expected by the next edition of the guidelines, if not before.

Reduce weight slowly. People who are overweight are advised to set realistic weight goals and strive for long-term success through better habits of exercise and eating. A steady loss of 1/2 to 1 pound per week, rather than the 1 to 2 pounds in the 1985 edition, is suggested. A 2-pound loss, which represents a reduction of about 1,000 calories per day, is excessive and possibly dangerous for some people. The bulletin cautions about the use of other extreme and dangerous approaches to weight loss, such as inducing vomiting and using medications like laxatives, amphetamines, and diuretics.

Suggested goals for dietary fats. The DGAC concluded that if broad scientific consensus exists on a numerical goal for a food component important to health, such as fat, such a goal should be presented to the public. The goal will be useful to professionals and others with enough interest and information to assess diets for fat content. Also, numerical goals will help counteract the incorrect understanding by some that a healthful diet contains no fat.

Goals are presented for fat and saturated fat, the two food components believed to be of most current significance to the health of Americans. The goals are to be applied to diets over several days, not to a meal or a food. Goals presented are 30 percent or less of calories from total fat and less than 10 percent from saturated fat. These are the same goals recommended by the NAS and those to be used in the National Cholesterol Education Program. The way to figure the grams of fat represented by 30 and 10 percent of calories and the fat content of a few commonly used foods are given. However, people who want to assess their diets for fat content will need additional information about the fat in foods they eat from supplemental materials and food labels.

Special emphasis on vegetables, fruits, and grain products. This guideline emphasizes the dietary pattern that replaces calories from fat with calories from foods containing carbohydrates, a pattern recommended in both the NAS and Surgeon General's reports (*5,9*). Also noted is the importance of dietary fiber in proper gastrointestinal function, and the importance of getting it from a variety of foods rather than supplements.

Use sugars only in moderation. This guideline calls for using sugars only in moderation for two main reasons. First, sugars and foods that contain large amounts of them supply calories but are limited in nutrients. Second, sugars and starches, which break down into sugars in the mouth, can contribute to tooth decay. The importance of fluoride and dental hygiene in the prevention of tooth decay is also noted.

Use salt and sodium only in moderation. This guideline calls for using salt and sodium only in moderation because Americans need much less of these substances than they now consume, and eating less will benefit those people whose blood pressure goes up with salt intake.

If you drink alcoholic beverages, do so in moderation. With this guideline comes the caution that drinking alcoholic beverages is linked to health problems, accidents, and addiction. People who should not drink are identified: Women who are pregnant or trying to conceive; people who plan to drive or engage in other activities that require attention and skill; people who are using medication; people who cannot keep their drinking moderate; and children and adolescents.

Moderate drinking defined. For people who elect to drink alcoholic beverages, moderate drinking is defined as no more than one drink a day for women and no more than two drinks a day for men. Women can drink less because they are usually smaller than men and have proportionately less water in their bodies to dilute the alcohol. Also, new research indicates that women have about one-half as much as men of the enzyme that breaks down alcohol in the stomach before it enters the blood stream (*4*).

Several national health organizations in the private and public sectors have published dietary recommendations (*2*). These recommendations are notably similar in emphasis and direction. However, they may differ in presentation and scope, mainly because of the audience targeted and the disease(s) focused upon. The 1990 Dietary Guidelines are directed to healthy Americans 2 years of age and over, and to the nutrition and health professionals who serve them. The guidelines focus on the promotion of general health and on the prevention of those chronic diseases for which clear evidence of dietary implication currently exists.

Single copies of the bulletin, *Nutrition and Your Health: Dietary Guidelines for Americans*, Third Edition, HG-232, are available free from the Consumer Information Center, Dept. 514-X, Pueblo, CO 81009. For information about printing bulk copies of the bulletin, or obtaining negatives, contact the U.S. Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

References

1. Cronin, F.J. et al. 1987. Developing a food guidance system to implement the Dietary Guidelines. *Journal of Nutrition Education* 19:281-302.

2. Cronin, F.J. and Shaw, A.M. 1988. Summary of dietary recommendations for healthy Americans. *Nutrition Today* Nov./Dec. pp. 26-33.

3. Dietary Guidelines Advisory Committee. 1990. *Report of the Dietary Guidelines Advisory Committee on the Dietary Guidelines for Americans,* 1990. Hyattsville, MD. U.S. Department of Agriculture, Human Nutrition Information Service.

4. Frezza, M. et al. 1990. High blood alcohol levels in women: Role of decreased gastric alcohol dehydrogenase activity and first pass metabolism. *New England Journal of Medicine* 322:95-99.

5. National Academy of Sciences. National Research Council. Food and Nutrition Board. 1989. *Diet and Health: Implications for Reducing Chronic Disease Risk*. National Academy Press, Washington, DC

6. U.S. Department of Agriculture, Human Nutrition Information Service. 1989. *Preparing Foods and Planning Menus Using the Dietary Guidelines*. Home and Garden Bulletin No. 232-8.

7. U.S. Department of Agriculture and U.S. Department of Health and Human Services. 1985. *Nutrition and Your Health: Dietary Guidelines for Americans*. Home and Garden Bulletin No. 232.

8. __________. 1990. *Nutrition and Your Health: Dietary Guidelines for Americans*. Home and Garden Bulletin No. 232.

9. U.S. Department of Health and Human Services, Public Health Service. 1988. *The Surgeon General's Report on Nutrition and Health*. DHHS(PHS) Pub. No. 88-50215.

The Impact of Legislation on Work and Family

Federal and State Governments have sought to assist in times of such family crises as unemployment, disability or death, old age, and poverty. Many U.S. social programs reflect attitudes formed by the Great Depression, when one-fourth of the labor force was unemployed (see table, p. 24).

Legislation Related to Child Labor

Massachusetts enacted the Nation's first child labor law in 1836 and the first compulsory school attendance law in 1852. Most States followed suit during the late 19th and early 20th centuries, but enforcement was minimal. Congress enacted laws establishing a minimum working age and maximum working hours for children in 1916 and 1919, respectively, but the U.S. Supreme Court struck down these statutes. Later, during the Great Depression, opposition to child labor legislation weakened from concern that working children would further depress wages. The 1938 Fair Labor Standards Act, enacted in 1941, set a minimum age of 16 for most kinds of work. The proportion of 14- and 15-year-old boys in the labor force dropped from 43 percent at the turn of the century to 28 percent in 1948 and 17 percent in 1985.

As an alternative to work, the Government facilitated educational opportunities. The 1944 GI Bill made college a reality for millions of veterans. Federal education assistance for the disadvantaged was initiated in the 1960's and Federal loans and grants expanded during the 1970's. States raised the mandatory school enrollment age to 16 or higher. Nearly all States established postsecondary educational systems that charge only a fraction of the tuition fees of private schools.

Legislation Restricting Adult Working Hours

The first governmental attempt to limit working hours for adults took place in 1840 when President Martin Van Buren issued an Executive Order restricting daily labor in Federal navy yards to 10 hours. By 1920, 43 States had enacted maximum hours laws, though only 11 States used an 8-hour standard, usually for a 6-day workweek. The 1938 Fair Labor Standards Act required employers to pay "time and one-half" for hours worked in excess of 40 per week. Most jobs were covered by this provision.

Old-Age Retirement Programs

Federal Civil War pensions represented the first broad governmental old-age retirement program. Alaska initiated welfare assistance for the aged in 1915, and by 1935, 29 States had followed suit. The 1935 Social Security Act created two cash assistance programs for the elderly: Old Age Insurance and Old Age Assistance, which induced widespread retirement. Congress broadened Old Age Insurance in 1939 and transformed it into a family program by adding benefits for spouses and dependents, as well as survivors of deceased workers. Subsequent liberalizations permitted early retirement at age 62, first for women (1956) and then for men (1961). Eligibility was later reduced to age 60 for widows (1965) and widowers (1972).

Rising Social Security benefits, which outpaced the cost of living, also encouraged retirement. Average benefits as a proportion of the federally established poverty line increased greatly between 1940 (when monthly benefits were first paid) and 1988:

Benefit recipient	Percent of poverty line	
	1940	1988
Retired men	41	114
Retired couples	50	136

Private pensions grew during the 1940's as a result of two governmental decisions. In 1942 the Federal Government excluded from taxation the contributions that private employers invest in pension funds. In 1949 the Supreme Court ruled that private sector pensions are subject to collective bargaining. These actions further stimulated retirement among those eligible. As Old Age Insurance benefits increased and private sector pensions became more common, the proportion of men age 65 and over who were in the labor force dropped from over 50 percent in the 1930's to 33 percent by 1960 and to 17 percent by 1989.

Major work-related government programs with implications for families

Program and year of enactment	1988 expenditure (billions)
Retirement:	
Old Age and Survivors Insurance (1935)	$197.2
Tax exclusion for pensions (1942)	49.3
Old Age Assistance (1935)/ Supplemental Security Income (1972)	5.7[1]
Disability:	
Workers' compensation (first State, 1911)	27.4[2]
Disability Insurance (1956)	22.4
Veterans compensation	11.3
Aid to the Permanently and Totally Disabled (1950)/ Supplemental Security Income (1972)	9.1[1]
Vocational rehabilitation (1921)	1.6
Education, employment, and training:	
Postsecondary education	58.5[3]
Job Training Partnership Act (1982)	3.7
Employment Service (1933)	.8
Poverty:	
Aid to Families with Dependent Children (1935)	19.0
Earned Income Tax Credit (1975)	4.9
Unemployment:	
Unemployment insurance (1935)	13.2
Child care:	
Dependent Care Tax Credit (1976)	3.4
Head Start (1965)	1.5

[1]Authors' estimate.
[2]Data relate to 1987.
[3]Data relate to 1986–87.

Sources: U.S. Social Security Administration; U.S. Congress, House Committee on Ways and Means; and U.S. Library of Congress, Congressional Research Service.

Because of recent concern over the financial solvency of the Social Security program, Congress enacted measures designed to encourage more of the elderly to continue working. Within the next two decades, the Old Age Insurance retirement age will increase from 65 to 67. The credit for delayed retirement will become more generous, early retiree benefits will be reduced, and beneficiaries will lose less of their benefits if they continue to work.

Legislation Related to Women in the Labor Force

Historically, women were discouraged from working by Federal and State policies. During the Great Depression wives were denied jobs needed by men. Many school districts did not hire wives and fired women who married. During World War II, labor force participation rates of married women rose from 17 to 26 percent and, after a brief postwar drop, began to climb continuously. Some of the governmental policies that encouraged women to work included expanded educational opportunities, equal pay laws, child care assistance, and the growing number of preschool facilities. A limited, temporary child care program was established for working mothers during World War II, but there was no further action until 1954, when the Federal Government established a tax deduction for employment-related child care expenses. The deduction was replaced in 1976 with a more generous tax credit. The establishment of Head Start in 1965, and the Social Services Block Grant in 1974, further supported child care. The 1988 Family Support Act requires States to provide child care to parents receiving Aid to Families with Dependent Children (AFDC) who are enrolled in an educational, training, or work program. Twelve States have enacted maternal or parental leave laws.

Work and Poverty

In 1900 more than half of American families with at least one working member were poor by today's standards, compared with 7.2 percent of similar families in 1988. In 1938 Congress enacted the first national minimum wage law, which set an hourly minimum of 25 cents. Congress has periodically raised the minimum wage and expanded coverage to more than 90 percent of nonsupervisory workers. The minimum wage, if earned for a 40-hour workweek year round, paid wages equal to at least a poverty level income for a three-person family during most of the 1960's and 1970's. By 1989 the minimum wage yielded only an estimated 70.5 percent of a poverty level income. The scheduled $4.25 hourly rate in 1991 will yield four-fifths of a poverty line income for a family of three for full-time, year-round work.

Congress introduced the Earned Income Tax Credit in 1975 to offset Social Security payroll taxes paid by low earners. If the amount of the credit exceeds tax liability, beneficiaries receive a tax rebate. The credit is restricted to working parents, and since 1987, its value has been automatically adjusted for inflation. The maximum allowable credit in 1989 was $910.

Federal and State Governments have enacted other laws to expand employment opportunities, protect workers from discrimination in the workplace, and boost the income of single parents. Starting in the 1930's the Federal Government began taking steps to prevent work-related discrimination against certain groups. During the 1960's and 1970's, Federal and State Governments banned discriminatory workplace practices relating to race, ethnic background, gender, age, disability, and religion. The 1988 Family Support Act requires States to establish guidelines for child support payments. By 1994 these payments will be automatically deducted from the absent parent's wages.

The Federal Government has instituted a variety of programs to provide the poor or jobless with job search assistance, education or training, or jobs. The 1933 Wagner-Peyser Act established a network of public employment offices to match jobseekers with job openings. These offices were dismantled during World War II when the Nation achieved full employment. The Federal Government created a variety of training programs during the early 1960's. Congress reintroduced public jobs programs in the 1970's, but in 1981, Congress almost entirely abolished public service employment.

Of the major governmental programs, only Old Age Insurance and child labor and overtime restrictions intentionally discourage able-bodied individuals from working. In addition, unemployment insurance, various programs designed to aid the disabled, and AFDC have some work disincentive, since assisting those who are jobless or under-employed may encourage some individuals to choose benefits rather than work. The U.S. Congressional Budget Office has estimated that the availability of unemployment insurance increases the unemployment rate by about 10 to 15 percent during periods of low unemployment, and by about 5 percent during recessions.

Work disincentives associated with unemployment insurance have diminished since the 1970's. Less than one-third of the currently unemployed receive benefits (a record low). The average weekly benefit, adjusted for inflation, has declined by 12 percent from its 1971 peak, and benefits, which were tax-free until 1979, are now fully subject to Federal income taxes. Also, the maximum duration of benefits has been greatly reduced since the 1970's.

The expansion of disability assistance may contribute to declining labor force participation rates among preretirement-age men. Between 1948 and 1969, labor force participation rates of men 45 to 54 years old remained steady at 95 to 96 percent, then dropped to 91 percent by 1977 as disability programs grew dramatically. More than half of severely disabled working-age individuals currently receive Disability Insurance, Supplemental Security Income, or both, and an unknown proportion of the remainder obtain assistance from other disability programs. Some 43 percent of Disability Insurance beneficiaries are poor.

The AFDC program contains stronger work disincentives than other social programs because: (1) the program assists many able-bodied individuals; (2) participants are not required to establish a work history; and (3) benefits may be provided for many years. Begun as "mothers' pensions" in 1911 in Illinois and Missouri for widows with children, such programs were available in almost all States by 1935. By 1976 nearly 90 percent of potential eligibles received assistance, decreasing over the next decade to 80 percent or less. In 1989, AFDC and food stamps (received by 80 percent of AFDC beneficiaries) provided a single mother with three children nearly 20 percent more income than she could earn from a full-time, year-round minimum wage job.

Source: Levitan, S.A. and Gallo, F., 1990, Work and family: The impact of legislation, *Monthly Labor Review* 113 (*3*):34-40, U.S. Department of Labor, Bureau of Labor Statistics.

Who's Minding the Kids?

Data on child care arrangements have been collected by the Census Bureau in supplements to the Current Population Survey (CPS) since 1958 and in supplements to the Survey of Income and Program Participation (SIPP) since 1984. The most recent statistics on child care arrangements in the United States are based on data collected in the SIPP for the September-November 1987 period. The child care statistics reflect arrangements used for children under 15 years old during the time their parents (or guardians) were at work or in school. Data from earlier CPS and SIPP supplements on child care show a historical perspective on changes that have occurred in the way working parents arrange for the care of their children.

Some parents use more than one type of child care arrangement in a typical week. Therefore, primary and secondary arrangements are reported. The primary child care arrangement refers to what the child was usually doing or the way the child was usually cared for during most of the hours the child's parent was at work or in school. If other arrangements were used in addition to the primary arrangement, the one used second most frequently was called the secondary arrangement.

Child Care Arrangements Used by Employed Mothers

In the fall of 1987, there were about 52.1 million children under age 15 living with their mothers in the United States. About 59 percent of these children had mothers who were employed. Another 3 percent had mothers who were enrolled in school. The remaining children were living with mothers who were neither employed nor attending school. Data on child care arrangements were collected only for the three youngest children under age 15 in the family, which represents 94.2 percent of all children under 15 years of age of employed mothers.

Of the 19.7 million *grade-school-age* children of employed mothers, 14 million (71 percent) were in either kindergarten or grade school most of the hours their mothers were at work (table 1). Of the 5.7 million grade-school-age children not attending kindergarten or grade school while their mother worked, 2.7 million were cared for in their own home. One-half of the total care in the children's homes was provided by the children's fathers. About 800,000 children were left unsupervised most of the time that their mothers worked.

Of the 9.1 million *preschoolers* with employed mothers, 30 percent were cared for in their own homes, mainly by their fathers, and 36 percent were cared for in another home. Organized child care facilities were used for 24 percent of preschoolers. An additional 9 percent of preschoolers were cared for by their mothers while working, either at home or away from home. Preschool-age children of mothers employed full time in the fall of 1987 were less likely to be cared for at home (24 percent) than were children of mothers employed part time (39 percent). Child care provided by the father was also less frequently used by women who worked full time (10 percent) than by those who worked part time (25 percent).

About 8 million children of employed mothers used a secondary child care arrangement in the fall of 1987. Secondary child care arrangements were used by 12 percent of preschool-age children and by 35 percent of children ages 5 to 14 years. The most frequently mentioned location of the secondary arrangement was in the child's home (38 percent), followed by care in another home (25 percent), self-care (22 percent), and organized child care facilities (10 percent).

Table 1. Primary child care arrangements used by employed mothers for children under age 15: Fall 1987

Type of arrangement	Total	Under age 5	Age 5 to 14
		Percent	
Care in child's home	18.7	29.9	13.5
By father	9.4	15.3	6.7
By grandparent	2.6	5.1	1.5
By other relative	3.8	3.3	4.0
By nonrelative	2.9	6.2	1.4
Care in another home	14.9	35.6	5.4
By grandparent	4.1	8.7	1.9
By other relative	2.1	4.5	.9
By nonrelative	8.8	22.4	2.5
Organized child care facilities	9.3	24.3	2.3
Day/group care center	6.3	16.1	1.7
Nursery school/preschool	3.0	8.3	.6
Kindergarten/grade school	48.9	1.0	71.1
Child cares for self	2.9	.3	4.1
Mother cares for child at work[1]	5.3	8.9	3.6

[1]Includes women working at home or away from home.

Source: O'Connell, M., and Bachu, A., 1990, *Who's minding the kids? Child care arrangements: Winter 1986–87,* Current Population Reports, Household Economic Studies, Series P-70, No. 20, U.S. Department of Commerce, Bureau of the Census.

Child Care Arrangements Used by Custodial Fathers

Among the 1.4 million grade-school-age children living with their fathers, 71 percent had their child care needs met by attending kindergarten or grade school (the same percentage reported by employed mothers). In contrast, the half million preschoolers living with their fathers were more likely to receive primary care in organized child care facilities (39 percent) than those living with an employed mother (24 percent). Mothers who lived elsewhere provided child care for 19 percent of preschoolers living with their fathers.

Trends in Child Care Arrangements

In the June 1977 Current Population Survey, information was collected about the child care arrangements used by employed women for their two youngest children under 5 years old. Since 1977 there has been a decline in the utilization of relatives (except fathers) as child care providers both in the child's home and in the provider's home. The proportion of children cared for by their mothers while at work also declined during this 10-year period, from 11 percent to 9 percent. In the fall of 1987, 24 percent of children under age 5 were in organized child care facilities, compared with 13 percent in June 1977 (table 2).

Estimates from the June 1987 CPS show that 51 percent of all women 18 to 44 years old who had given birth in the 12-month period preceding the survey were in the labor force, up from 31 percent in 1976.

Child Care Arrangements by Age of Child and Economic Status

In the fall of 1987 there were 1.5 million children under age 1 whose mothers were employed in the labor force. Seventy percent of these infants were cared for either in the child's home or another home. Another 14 percent were cared for in organized child care facilities (day

Table 2. Primary child care arrangements used by employed mothers for children under age 5: Fall 1987 and June 1977

Type of arrangement	Fall 1987	June 1977[1]
	Percent	
Care in child's home	29.9	33.9
By father	15.3	14.4
By other relative	8.4	12.6
By nonrelative	6.2	7.0
Care in another home	35.6	40.7
By relative	13.2	18.3
By nonrelative	22.4	22.4
Day care/nursery school	24.3	13.0
Child cares for self	.3	.4
Mother cares for child at work[2]	8.9	11.4
Other arrangements[3]	1.0	.6

[1]Data only for the two youngest children under 5 years of age.
[2]Includes women working at home or away from home.
[3]Includes children in kindergarten/grade school.

Source: Tabulations derived from the June 1977 Current Population Survey, Current Population Reports, Series P-70, No. 9, and O'Connell, M., and Bachu, A.,1990, *Who's minding the kids? Child care arrangements: Winter 1986–87*, Current Population Reports, Household Economic Studies, Series P-70, No. 20, U.S. Department of Commerce, Bureau of the Census.

or group care centers, nursery, or preschools). Among 1- and 2-year-olds, 74 percent were cared for either in the child's home or in another home, and 18 percent were in organized child care facilities. For 3- and 4-year-olds, 56 percent were cared for either in the child's home or in another home, while 34 percent were cared for in organized child care facilities.

The economic status of the family is related to the use of organized child care facilities as the primary child care arrangement. Children of employed mothers whose family income exceeded $45,000 per year were twice as likely to be using organized child care facilities (34 percent) as were children living in families with incomes of less than $15,000 per year (16 percent). Also, children whose mothers had completed at least 1 year of college used organized child care facilities twice as often (29 percent) as children whose mothers failed to complete high school (15 percent).

Cost of Child Care Arrangements

Loss of Time at Work. Employed women were asked about any time they lost because the person who usually cared for their child (or children) was not available. This question was asked of women who had any of their three youngest children under age 15 cared for either by a grandparent or another relative (excluding the child's parents or siblings), a nonrelative, or in an organized child care facility. Of the 9 million women who used these arrangements, 7 percent reported losing some time from work in the past month as a result of a failure in a child care arrangement. Women with infants and 1- and 2-year-olds generally experienced more work disruptions than women with grade-school-age children. Also, women whose children were cared for in another home experienced more work disruptions than women using organized child care centers.

Cash payments[1] for child care services were made by 33 percent of employed women for at least one of their children. Average child care costs of $49 per week per family were reported. The average monthly family income of women who paid for child care was about $3,200, so these payments represented 7 percent of their income. Costs varied according to region, from a high of $57 per week in the Northeast to a low of $43 per week in the South.

A higher percentage of women with preschool-age children (between 53 percent and 59 percent, depending on child's age) made cash payments for the care of their children, compared with women whose youngest child was 5 years old or over (16 percent). Women with preschoolers also paid more per week ($51 to $58) than did those with older children ($35 per week). Women in poverty paid an average of $35 per week, compared with $50 by women who were not living in poverty. Among women making child care payments, those in families with monthly income less than $1,250 spent 21 percent of this income on child care. Those with monthly family income of $3,750 or higher spent only 5 percent of their family income on child care services.

[1]Cash transfers to family members or payments for schooling were not included in child care costs.

Source: O'Connell, M., and Bachu, A., 1990, *Who's minding the kids? Child care arrangements: Winter 1986-87*, Current Population Reports, Household Economic Studies, Series P-70, No. 20, U.S. Department of Commerce, Bureau of the Census.

Residents of Farms and Rural Areas: 1989

The United States has witnessed a continuous decline in its farm and rural populations. In 1920 approximately 31,974,000 (30 percent) of the resident population lived on farms. By 1989 the figure had dropped to 4,801,000 (2 percent). A little less than half (49 percent) of the resident population lived in rural areas in 1920. In 1989 the rural population had dropped to 27 percent of the civilian, noninstitutionalized population.

Estimates of the 1989 rural and farm population are derived from data from the Current Population Survey (CPS), using annual averages of monthly data and data from the March 1989 CPS supplement. Estimates were prepared by the Bureau of the Census of the U.S. Department of Commerce and the Economic Research Service of the U.S. Department of Agriculture.

Where were rural and farm residents? In 1989 there were 243.5 million people in the civilian, noninstitutionalized population. Approximately 66.2 million lived in rural areas: 4.8 million (2 percent) lived on rural farms, and 61.4 million (25 percent) lived in rural, nonfarm areas (see box for definition of terms). Most (73 percent) of those on rural farms were in nonmetropolitan areas, whereas about half (52 percent) of those living in rural nonfarm areas were in nonmetropolitan areas.

Regional distribution of the rural population is essentially unchanged since 1950. In 1989 the South had the highest percentage of rural residents (44 percent) (see figure), followed by the Midwest (27 percent), the Northeast (17 percent), and the West (12 percent). The farm population, however, has experienced significant regional redistribution since 1950. The Midwest had 51 percent of the Nation's farm residents in 1989, compared with 32 percent in 1950. In contrast, the South had 29 percent of the Nation's farm residents in 1989, compared with 52 percent in 1950. Between 1950 and 1989 U.S. farm population in the West increased from 8 percent to 15 percent and that in the Northeast decreased from 8 percent to 5 percent.

Urban population comprises all persons living in incorporated cities, villages, boroughs, and towns of 2,500 or more inhabitants. Excluded are persons living in rural portions of extended cities. **Metropolitan population** includes persons living in a city of at least 50,000 population or persons living in urbanized areas of at least 50,000 with a total metropolitan population of at least 100,000.

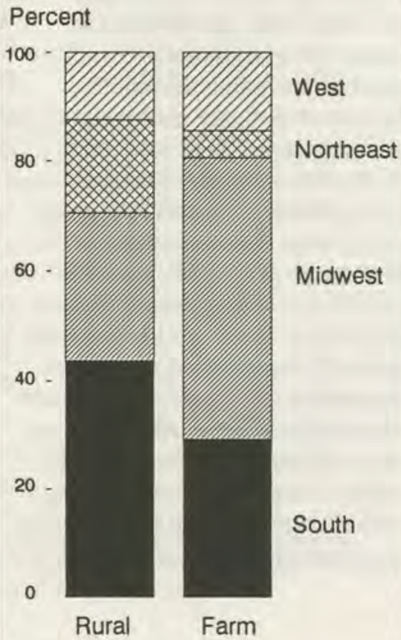
Rural population includes persons living in the open countryside and also in places with fewer than 2,500 residents that are not suburbs of large cities.

Farm population consists of all persons living in rural areas on places from which $1,000 or more of agricultural products were sold during the preceding year. The farm population constitutes only a part of the total rural population. It does not include residents of the relatively small number of farms located in urban areas.

Nonfarm population includes persons not living on farms in rural areas *and* persons living in urban areas.

Rural nonfarm population consists of persons not living on farms in rural areas.

Geographic Distribution of Rural and Farm Populations, 1989



Who were rural and farm residents? In 1989 most rural residents were white (92 percent). In rural nonfarm areas, 50.4 percent were female. In rural farm areas, the majority (52.1 percent) of residents were male (table 1).

A larger percentage of farm (69 percent) than nonfarm (55 percent) *residents* were married with their spouses present. Also a larger percentage of farm (92 percent) than nonfarm (79 percent) *families* were headed by married couples. Most families consisted of two to four persons (85 percent farm and 87 percent nonfarm).

A larger percentage of farm families (34 percent) than nonfarm families (28 percent) received less than $20,000 during the preceding year in money income (table 2). Also, a larger percentage of nonfarm families (26 percent) than farm families (18 percent) received $50,000 or more in money income.

In 1989, 87 percent of farm and rural nonfarm residents were wage and salary employees. Of those living in rural nonfarm areas, 90 percent received wages and salary. This compared with 58 percent of farm residents who worked as wage and salary employees. In addition, 38 percent of farm residents were self-employed. Only 10 percent of rural

Table 1. Race, Hispanic origin, and sex of the population, by urban-rural residence: 1989

Characteristics	Total	Urban	Rural nonfarm	Rural farm
		Percent distribution		
Race:				
White	84.2	81.4	91.6	97.5
Black	12.3	14.5	6.6	1.8
Other races	3.5	4.1	1.8	.7
Hispanic origin	8.3	10.4	2.7	2.9
Sex:				
Female	51.5	52.1	50.4	47.9
Male	48.5	47.9	49.6	52.1

Table 2. Income of farm and nonfarm families: 1988

Total money income[1]	Families	
	Farm	Nonfarm
	Percent distribution	
<$10,000	10.7	10.7
$10,000 - $19,999	23.7	17.8
$20,000 - $29,999	20.6	17.4
$30,000 - $39,999	17.8	16.0
$40,000 - $49,999	9.5	12.3
$50,000 +	17.7	25.8

[1]Includes money wages or salary; net income from nonfarm or farm self-employment; Social Security or Railroad Retirement; Supplemental Security Income; public assistance or welfare payments; interest on savings or other investments which pay interest; dividends, income from estates or trusts, or net rental income; Veterans payments or unemployment and workers' compensation; private pensions or government employee pensions; alimony or child support, or other regular contributions by persons not living in the household.

Table 3. Workers in agriculture by sex and urban-rural residence:1989

Class of worker	Total	Urban	Rural nonfarm	Rural farm
		Percent distribution		
Male:				
Self-employed	46.0	27.5	32.5	72.8
Wage and salary	52.0	72.1	66.1	23.2
Unpaid family member	2.0	.4	1.4	4.0
Female:				
Self-employed	33.9	19.1	25.4	52.8
Wage and salary	53.0	79.2	67.0	20.7
Unpaid family member	13.1	1.7	7.6	26.5

Source: U.S. Department of Agriculture, Economic Research Service and U.S. Department of Commerce, Bureau of the Census, 1990, *Residents of farms and rural areas: 1989*, Current Population Reports, Population Characteristics, Series P-20, No. 446.

nonfarm residents were self-employed.

More than half of all workers in agriculture[1] (52 percent of males and 53 percent of females) received wages and salaries (table 3). A majority of agricultural workers in rural nonfarm areas received wages and salaries. Among farm residents working in agriculture, 73 percent of males and 53 percent of females were self-employed.

Families and unrelated individuals are classified as being above or below the poverty level using the poverty index that is based solely on money income and reflects different consumption requirements based on family size and composition. The U.S. Department of Commerce reported that 13 percent of all persons and 10 percent of all families were below the poverty level in 1989. On farms, 12 percent of persons and 11 percent of families were below the poverty level.

[1]The industry category "agriculture" includes (1) farm operators, managers, and laborers; (2) persons employed on farms in occupations such as truck driver, mechanic, and bookkeeper; and (3) persons engaged in certain activities other than strictly farm operation such as cotton ginning, contract farm services, veterinary and breeding services, hatcheries, experiment stations, greenhouses, landscape gardening, tree service, trapping, hunting preserves, and kennels.

Source: U.S. Department of Agriculture, Economic Research Service and U.S. Department of Commerce, Bureau of the Census, 1990, *Residents of farms and rural areas: 1989*, Current Population Reports, Population Characteristics, Series P-20, No. 446.

Money Income and Poverty Status in the United States: 1989

Data on the income and poverty status of households, families,[1] and persons in the United States for the calendar year 1989 were compiled from the March 1990 Current Population Survey (CPS) conducted by the Bureau of the Census. Official income and poverty estimates are based solely on money income before taxes and do not include the value of noncash benefits such as food stamps, Medicare, Medicaid, public housing, and employer-provided fringe benefits. Year-to-year income changes and trends in poverty status are highlighted.

Money Income

In 1989 real median incomes for households and families were up 1.3 percent and 1.4 percent over 1988 (table 1). Per capita income reached a new high in 1989, having risen steadily since 1982.

Households in the Northeast and West experienced significant increases in real median income (2.4 percent and 2.8 percent), whereas those in the South or Midwest showed no significant change. Suburban[2] households in large metropolitan areas fared better than their central city counterparts, with a significant real median income increase of 2.0 percent.

There were no significant increases in the median incomes of White *households* or those of Hispanic origin. Black households, however, experienced a 5.1-percent increase in real median income. In contrast, 1989 median income in White *families* showed a real increase of 1.2 percent

[1]Households are defined as any person or persons occupying a housing unit. Families are defined as groups of two or more persons related by birth, marriage, or adoption who reside together.

[2]Suburban areas refer to portions of metropolitan areas outside central cities.

Table 1. Percent change in median household and family income: 1988 to 1989 (1989 dollars)

Characteristics	Median income 1989	Median income 1988	Percent change
Households			
All households	$28,906	$28,537	*1.3
Region:			
Northeast	32,643	31,891	*2.4
Midwest	28,750	28,867	–0.4
South	25,870	25,793	0.3
West	31,086	30,225	*2.8
Residence:			
Inside metropolitan areas	31,124	30,760	*1.2
1 million or more	33,163	32,640	*1.6
Inside central cities	26,049	25,686	1.4
Outside central cities	38,510	37,758	*2.0
Under 1 million	27,827	27,738	0.3
Inside central cities	25,000	24,571	1.7
Outside central cities	30,442	30,312	0.4
Outside metropolitan area	22,417	22,415	–
Race and Hispanic[1] origin:			
White	30,406	28,781	0.8
Black	18,083	16,407	*5.1
Hispanic[1]	21,921	20,359	2.7
Families			
All families	34,213	33,742	*1.4
Age of householder (years):			
15 - 24	17,064	17,612	–3.1
25 - 34	30,873	30,954	–0.3
35 - 44	40,202	40,711	–1.3
45 - 54	46,101	44,225	*4.2
55 - 64	37,643	36,868	2.1
65 and over	23,083	22,751	1.5
Race and Hispanic[1] origin:			
White	35,975	35,549	*1.2
Black	20,209	20,260	–0.3
Hispanic[1]	23,446	22,818	2.8
Type of family:			
Married-couple	38,547	38,142	*1.1
Female householder, no husband present	16,442	16,085	2.2
Earnings of full-time, year-round workers:			
Male	27,430	27,940	*–1.8
Female	18,778	18,454	*1.8
Per capita income:			
All races	14,056	13,755	*2.2
White	14,896	14,566	*2.3
Black	8,747	8,670	0.9
Hispanic[1]	8,390	8,339	0.6

*Significant at the 90 percent confidence level.
[1]Persons of Hispanic origin may be of any race.

Source: U.S. Department of Commerce, Bureau of the Census, 1990, *Money income and poverty status in the United States: 1989*, (Advance data from the March 1990 Current Population Survey), Current Population Reports, Consumer Income, Series P-60, No. 168.

Table 2. Poverty rates for persons and families with selected characteristics: 1989

Characteristics	Poverty rate	Characteristics	Poverty rate
All persons	12.8	All families	10.3
Race and Hispanic origin:		Type of family:	
White	10.0	Married couple	5.6
Black	30.7	Female householder, no spouse present	32.2
Other races	16.4	Male householder, no spouse present	12.1
Hispanic origin	26.2	Unrelated subfamilies	51.4
Age:		Work experience of householder:	
Under 18 years	19.6	Worked full time, year round	2.9
18 to 64 years	10.2	Worked 49 weeks or less	19.0
65 years and over	11.4	Did not work	23.4
Residence in:		Education of householder:	
Central cities	18.1	Completed 1 or more years of college	3.6
Suburban areas	8.0	High school graduate with no college	8.9
Nonmetropolitan areas	15.7	Some high school	20.7
South	15.4	Age of householder:	
Northeast	10.0	Under 25 years	30.4
Midwest	11.9	25 to 64 years	9.9
West	12.5	65 years and over	6.6

Source: U.S. Department of Commerce, Bureau of the Census, 1990, *Money income and poverty status in the United States: 1989*, (Advance data from the March 1990 Current Population Survey), Current Population Reports, Consumer Income, Series P-60, No. 168.

while Black and Hispanic median family income showed no significant change. White married couples were the only family type to realize significant gains in real median income (1.5 percent).

Between 1988 and 1989 real median earnings of females who worked full time, year round increased by 1.8 percent to $18,778. Males' real median earnings declined by the same percentage to $27,430.

Income inequality measures, such as the Gini index and share of aggregate income received by each population quintile, show the income distribution has become less equal over the past 20 years. This growing inequality can be attributed to changing family composition (more elderly persons living alone or with nonrelatives, and more families headed by women), aging baby boomers, increased labor force participation of women, and changing occupational structure.

Poverty Status

Poverty rates for persons and families showed no significant changes between 1988 and 1989. In 1989, 12.8 percent of the Nation's population (31.5 million) were below the official Government poverty level (table 2). Both the number of poor and the poverty rate have declined since 1983 (recent high point) but have remained above 1978 levels (recent low point). Half the Nation's poor were either children under 18 years old (39.9 percent) or the elderly (10.7 percent). Since 1975 the poverty rate for children has been higher than for any other age group. In 1989 one in five children were living in poverty.

Trends in income and poverty using the CPI-U and the CPI-U-X1 were compared (see box). Results imply that CPI-U overstated the change in cost of living between 1967 and 1989 by 8.0 percent.

Source: U.S. Department of Commerce, Bureau of the Census, 1990, *Money income and poverty status in the United States: 1989*, (Advance data from the March 1990 Current Population Survey), Current Population Reports, Consumer Income, Series P-60, No. 168.

> To accurately assess changes over time in economic well-being, an adjustment for cost-of-living changes is required. The Census Bureau uses the official Consumer Price Index (CPI-U), provided by the Bureau of Labor Statistics, to compare changes in real income over time and to adjust annual poverty thresholds for inflation. Prior to 1983, the measurement of homeowner costs for the CPI included changes in the asset value of homes. Because this approach mixed the investment and consumption aspects of home ownership, the CPI-U was converted to a rental equivalence measure in 1983. The series prior to 1983 were not revised; rather an experimental CPI-U-X1 was developed for researchers who wish to make historical comparisons.

Expenditures on a Child by Husband-Wife Families, Lower Income Level, 1990

Age of Child	Total	Housing	Food	Transportation	Clothing	Health Care	Education, Child Care, and Other
U.S. Overall (Income: <$29,900)							
0 - 2	4,330	1,760	670	590	320	230	760
3 - 5	4,630	1,700	750	650	350	210	970
6 - 8	4,620	1,700	960	690	380	230	660
9 - 11	4,480	1,580	1,090	620	390	230	570
12 - 14	5,150	1,520	1,170	940	630	240	650
15 - 17	5,490	1,490	1,320	1,190	590	250	650
Total	86,100	29,250	17,880	14,040	7,980	4,170	12,780
Urban West (Income: <$29,900)							
0 - 2	4,580	2,050	730	540	300	200	760
3 - 5	4,900	2,030	810	580	330	190	960
6 - 8	4,940	2,030	1,030	620	360	200	700
9 - 11	4,820	1,900	1,180	550	370	210	610
12 - 14	5,480	1,840	1,250	870	610	210	700
15 - 17	5,810	1,810	1,400	1,130	570	220	680
Total	91,590	34,980	19,200	12,870	7,620	3,690	13,230
Urban Northeast (Income: <$30,600)							
0 - 2	4,500	2,020	780	490	310	210	690
3 - 5	4,820	2,000	870	530	340	190	890
6 - 8	4,860	2,000	1,100	570	370	200	620
9 - 11	4,740	1,870	1,250	500	380	210	530
12 - 14	5,420	1,800	1,330	820	630	220	620
15 - 17	5,720	1,760	1,480	1,070	580	230	600
Total	90,180	34,350	20,430	11,940	7,830	3,780	11,850
Urban South (Income: <$29,600)							
0 - 2	4,460	1,770	670	630	340	260	790
3 - 5	4,790	1,750	760	670	370	240	1,000
6 - 8	4,750	1,740	960	720	400	250	680
9 - 11	4,610	1,620	1,100	650	410	260	570
12 - 14	5,280	1,560	1,180	970	660	260	650
15 - 17	5,640	1,530	1,320	1,230	620	280	660
Total	88,590	29,910	17,970	14,610	8,400	4,650	13,050
Urban Midwest (Income: <$29,600)							
0 - 2	4,240	1,690	620	560	330	210	830
3 - 5	4,590	1,670	710	600	370	200	1,040
6 - 8	4,550	1,660	910	640	400	210	730
9 - 11	4,400	1,540	1,040	570	410	220	620
12 - 14	5,080	1,480	1,120	890	670	220	700
15 - 17	5,430	1,450	1,260	1,150	630	240	700
Total	84,870	28,470	16,980	13,230	8,430	3,900	13,860
Rural (Income: <$29,700)							
0 - 2	3,840	1,280	560	720	300	250	730
3 - 5	4,170	1,250	650	760	340	230	940
6 - 8	4,130	1,250	830	820	370	240	620
9 - 11	3,980	1,130	960	740	380	250	520
12 - 14	4,660	1,070	1,040	1,070	620	260	600
15 - 17	4,990	1,030	1,180	1,330	580	270	600
Total	77,310	21,030	15,660	16,320	7,770	4,500	12,030

Source: USDA, ARS, Family Economics Research Group. 1991. *Expenditures on a Child by Husband-Wife Families: 1990.*

Expenditures on a Child by Husband-Wife Families, Middle Income Level, 1990

Age of Child	Total	Housing	Food	Transportation	Clothing	Health Care	Education, Child Care, and Other
U.S. Overall (Income: $29,900 to $48,300)							
0 - 2	6,140	2,330	830	990	400	290	1,300
3 - 5	6,540	2,270	960	1,050	440	280	1,540
6 - 8	6,500	2,280	1,220	1,130	470	290	1,110
9 - 11	6,330	2,150	1,370	1,060	480	300	970
12 - 14	7,050	2,090	1,450	1,370	790	310	1,040
15 - 17	7,490	2,060	1,620	1,630	750	320	1,110
Total	120,150	39,540	22,350	21,690	9,990	5,370	21,210
Urban West (Income: $29,900 to $48,300)							
0 - 2	6,340	2,590	880	950	380	270	1,270
3 - 5	6,740	2,570	1,020	990	420	250	1,490
6 - 8	6,750	2,570	1,280	1,070	450	260	1,120
9 - 11	6,610	2,440	1,450	1,000	460	270	990
12 - 14	7,340	2,380	1,530	1,320	760	280	1,070
15 - 17	7,730	2,350	1,690	1,580	720	290	1,100
Total	124,530	44,700	23,550	20,730	9,570	4,860	21,120
Urban Northeast (Income: $30,600 to $49,400)							
0 - 2	6,290	2,590	930	900	390	270	1,210
3 - 5	6,710	2,570	1,080	940	430	250	1,440
6 - 8	6,710	2,560	1,360	1,010	460	270	1,050
9 - 11	6,560	2,430	1,530	940	470	280	910
12 - 14	7,290	2,370	1,610	1,260	780	280	990
15 - 17	7,700	2,330	1,770	1,520	740	300	1,040
Total	123,780	44,550	24,840	19,710	9,810	4,950	19,920
Urban South (Income: $29,600 to $47,800)							
0 - 2	6,260	2,300	830	1,040	430	330	1,330
3 - 5	6,660	2,280	960	1,080	470	300	1,570
6 - 8	6,610	2,270	1,210	1,170	500	320	1,140
9 - 11	6,420	2,150	1,370	1,090	510	330	970
12 - 14	7,180	2,090	1,450	1,420	830	340	1,050
15 - 17	7,630	2,060	1,610	1,680	780	360	1,140
Total	122,280	39,450	22,290	22,440	10,560	5,940	21,600
Urban Midwest (Income: $29,600 to $47,800)							
0 - 2	6,050	2,220	780	970	420	280	1,380
3 - 5	6,470	2,200	920	1,010	460	260	1,620
6 - 8	6,390	2,200	1,160	1,090	490	270	1,180
9 - 11	6,200	2,070	1,310	1,010	510	280	1,020
12 - 14	6,960	2,010	1,390	1,330	840	290	1,100
15 - 17	7,400	1,980	1,540	1,590	790	310	1,190
Total	118,410	38,040	21,300	21,000	10,530	5,070	22,470
Rural (Income: $29,700 to $48,100)							
0 - 2	5,660	1,810	730	1,130	390	320	1,280
3 - 5	6,050	1,790	860	1,170	420	300	1,510
6 - 8	5,980	1,780	1,080	1,270	460	310	1,080
9 - 11	5,790	1,660	1,230	1,190	470	320	920
12 - 14	6,520	1,600	1,310	1,510	780	330	990
15 - 17	6,960	1,570	1,460	1,770	730	350	1,080
Total	110,880	30,630	20,010	24,120	9,750	5,790	20,580

Source: USDA, ARS, Family Economics Research Group. 1991. *Expenditures on a Child by Husband-Wife Families: 1990.*

Expenditures on a Child by Husband-Wife Families, Higher Income Level, 1990

Age of Child	Total	Housing	Food	Transportation	Clothing	Health Care	Education, Child Care, and Other
U.S. Overall (Income: >$48,300)							
0 - 2	8,770	3,490	1,010	1,360	500	360	2,050
3 - 5	9,260	3,430	1,220	1,420	540	340	2,310
6 - 8	9,130	3,440	1,460	1,530	570	360	1,770
9 - 11	8,950	3,310	1,640	1,460	590	380	1,570
12 - 14	9,780	3,250	1,790	1,780	940	380	1,640
15 - 17	10,270	3,220	1,890	2,030	890	400	1,840
Total	168,480	60,420	27,030	28,740	12,090	6,660	33,540
Urban West (Income: >$48,300)							
0 - 2	8,890	3,710	1,050	1,330	470	340	1,990
3 - 5	9,380	3,680	1,270	1,370	510	310	2,240
6 - 8	9,300	3,680	1,510	1,490	540	330	1,750
9 - 11	9,140	3,560	1,710	1,410	560	340	1,560
12 - 14	9,950	3,490	1,860	1,730	890	350	1,630
15 - 17	10,400	3,460	1,950	1,990	850	370	1,780
Total	171,180	64,740	28,050	27,960	11,460	6,120	32,850
Urban Northeast (Income: >$49,400)							
0 - 2	8,910	3,760	1,100	1,280	480	340	1,950
3 - 5	9,420	3,730	1,330	1,320	520	320	2,200
6 - 8	9,330	3,730	1,580	1,420	560	340	1,700
9 - 11	9,150	3,600	1,780	1,350	570	350	1,500
12 - 14	9,990	3,530	1,940	1,670	920	360	1,570
15 - 17	10,440	3,500	2,030	1,930	870	380	1,730
Total	171,720	65,550	29,280	26,910	11,760	6,270	31,950
Urban South (Income: >$47,800)							
0 - 2	8,830	3,390	1,000	1,420	530	400	2,090
3 - 5	9,320	3,360	1,210	1,460	570	380	2,340
6 - 8	9,190	3,360	1,450	1,580	600	400	1,800
9 - 11	8,990	3,240	1,630	1,510	620	410	1,580
12 - 14	9,840	3,180	1,780	1,830	980	420	1,650
15 - 17	10,360	3,140	1,870	2,090	930	440	1,890
Total	169,590	59,010	26,820	29,670	12,690	7,350	34,050
Urban Midwest (Income: >$47,800)							
0 - 2	8,620	3,320	950	1,350	510	350	2,140
3 - 5	9,130	3,290	1,160	1,390	560	330	2,400
6 - 8	8,970	3,290	1,390	1,500	590	350	1,850
9 - 11	8,760	3,170	1,570	1,420	610	360	1,630
12 - 14	9,610	3,110	1,720	1,740	980	360	1,700
15 - 17	10,130	3,070	1,810	2,000	930	380	1,940
Total	165,660	57,750	25,800	28,200	12,540	6,390	34,980
Rural (Income: >$48,100)							
0 - 2	8,210	2,900	900	1,510	480	390	2,030
3 - 5	8,710	2,880	1,100	1,550	520	370	2,290
6 - 8	8,570	2,880	1,320	1,680	550	390	1,750
9 - 11	8,340	2,750	1,490	1,600	570	400	1,530
12 - 14	9,180	2,690	1,640	1,930	920	410	1,590
15 - 17	9,710	2,660	1,730	2,190	870	430	1,830
Total	158,160	50,280	24,540	31,380	11,730	7,170	33,060

Source: USDA, ARS, Family Economics Research Group. 1991. *Expenditures on a Child by Husband-Wife Families: 1990.*

Recent Legislation Affecting Families

Public Law 101-392 – The Carl D. Perkins Vocational and Applied Technology Education Act authorizes funds, through the close of fiscal year 1995, for vocational education programs designed to serve students unlikely to pursue a traditional college education. The bill authorizes $125 million in fiscal year 1991 for a new Tech-Prep Program in which students start a vocational training program in their last 2 years of high school and complete it during 2 years at a community college or postsecondary technical school. In the allocation of Federal funds, priority will be granted to special populations, including individuals with disabilities, educationally and economically disadvantaged individuals, individuals with limited English proficiency, individuals who participate in programs designed to eliminate sex bias, and individuals in correctional institutions.

Enacted September 25, 1990.

Public Law 101-433 – overturns a 1989 Supreme Court ruling allowing age discrimination in certain employee benefits. The bill bans age discrimination in employee benefits unless such bias is due to age-based cost differences. The final version of the bill was a compromise between advocates of tough anti-bias provisions and business supporters concerned about the effects on company benefit packages. The bill gives employers "safe harbor" for the two most widely used types of early retirement incentives: pension subsidies, which supplement pension benefits, and Social Security "bridge" payments, which substitute for Social Security payments until a worker reaches retirement age. Employees participating in these types of incentive programs could sue for age discrimination only if they claimed their participation was coerced.

Enacted October 16, 1990.

Public Law 101-501 – reauthorizes the Head Start program at $2.4 billion in fiscal year 1991, increasing to $7.7 billion in 1994. By 1995 all eligible preschoolers will be able to participate in the program. The bill also authorizes $60 million for a series of programs aimed at better integrating and coordinating Federal, State, and local programs for children and teenagers.

Enacted November 3, 1990.

Public Law 101-508 – authorizes $750 million in fiscal year 1991, $825 million in 1992, and $925 million in 1993 for block programs to States to provide child care services and to help poor parents pay for child care. Funds can also be used to improve early childhood development. The bill includes a special increase in the earned income tax credit (EITC) for families with infants.

Enacted November 5, 1990.

Public Law 101-535 – The Nutrition Labeling and Education Act of 1990 requires comprehensive nutrition labeling on most food products. The following information must be stated on a food product's label: serving size, caloric content, total fat, saturated fat, cholesterol, sodium, carbohydrates, sugars, fiber, and protein. The following terms used to characterize the level of any nutrient in food will be defined: free, low, light or lite, reduced, less, and high. Under the bill, the Secretary of Health and Human Services is required to educate consumers about the availability of nutrition information in the labeling of food and the importance of that information in maintaining healthy dietary practices. Misleading claims are prohibited. For example, a claim may not state the absence of a nutrient unless the nutrient is usually present in the food.

Enacted November 8, 1990.

Current Regional Research Project

NE-167. At-Home-Income-Generation: Impact on Management, Productivity, and Stability in Rural/Urban Families

Administrative advisor:
Dr. D.L. Brown
Cornell University
Ithaca, NY 14853

Cooperating States: University of Hawaii, Iowa State University, Michigan State University, Lincoln University (Missouri), Cornell University (New York), The Ohio State University, The Pennsylvania State University, Utah State University, and University of Vermont

Project dates: October 1987 to September 1992

Objectives: To determine a profile of at-home-income-generating families and the communities in which they live. To analyze and measure the effectiveness of management behaviors and strategies used by women who generate income at home. To study the relationships among work activities, work environments, and family functioning within at-home-income-generating families.

Approach: A stratified random sample was selected from household telephone listings. Each participating State was divided into rural and urban strata (urban counties contained at least one city with a population of 25,000 or more). Major metropolitan counties were excluded. A survey research instrument was developed, pretested, revised, and administered via telephone interviews. The interview included questions about the home-based worker and types of work, the household manager, household members, the intrusion of the home-based work into family life, and the community in which the home-based worker resided. Appropriate statistical measures will be used to identify management strategies and styles and to determine the relationship between management behaviors and subsequent outcomes.

Progress: Almost 1,600 screening interviews and 899 half-hour telephone interviews with managers of households in which a member generated income at home were completed by the Iowa State University Statistical Laboratory in the spring of 1989. Responses were coded, edited, and verified. Data tapes were made available to each participating research station.

A workshop, <u>Profile of Workers and Households Engaged in Home-Based Employment</u>, will be presented at the 37th Annual Conference of the American Council on Consumer Interests in Cincinnati, OH (April 1991). Speakers will include:

Furry, M., Walker, R., and Masuo, D. "Working at Home: Who Is and At What?"

Heck, R., Stafford, K., and Winter, M. "Home-Based Work and Management Practices,"

Heck, R., Rowe, B., Owen, A., and Saltford, N. "Child Care and Home-Based Employment,"

Owen, A., Brown, D., Rowe, B., and Gritzmacher, J. "Home-Based Work and Family Functioning."

Another workshop, <u>Employment Moves Back to the Home</u>, is planned for the Family Economics Pre-Conference at the annual meeting of the American Home Economics Association to be held in Minneapolis, MN, in June 1991. Presenters include:

Furry, M. and Masuo, D. "Home-Based Workers: Self-Employed vs. Wage Workers,"

Heck, R., Stafford, K., and Winter, M. "Family Management Practices,"

Rowe, B. and Williams, K. "Types of Families Engaged in Home-Based Work,"

Scannell, E. and Loker, S. "A Typology of Home-Based Workers."

Findings: Of the home-based workers, 55 percent were male and 57 percent were also the household manager, i.e., the person who takes care of the house, children, scheduling for the family, etc. Seventy-eight percent owned their own business; 28 percent were currently working outside the home.

Results indicate the proportion of households with at least one adult who worked at home for pay at least 1 day a week (or 320 hours a year) varied from 12.8 percent in rural Vermont to 5.5 percent in urban Pennsylvania.

The types of home-based work varied widely. Classification into nine categories was completed: professional and technical, marketing and sales, clerical and administrative support, mechanical and transportation, crafts and artisans, manager, services, contractors, and agricultural products and sales.

Selected publications:

Loker, S., Scannell, E., Furry, M.M., and Heck, R.K.Z. 1990. Building home businesses in rural communities. *Journal of Extension* Volume 28 (Summer 1990), pp. 18-20.

Heck, R.K.Z. 1987. A profile of home-based workers. *Human Ecology Forum* 16(*4*):15-18.

Cost of Food at Home

Cost of food at home estimated for food plans at four cost levels, December 1990, U.S. average[1]

Sex–age group	Cost for 1 week: Thrifty plan	Low-cost plan	Moderate-cost plan	Liberal plan	Cost for 1 month: Thrifty plan	Low-cost plan	Moderate-cost plan	Liberal plan
FAMILIES								
Family of 2:[2]								
20 - 50 years	$48.10	$60.60	$74.70	$92.70	$208.30	$262.60	$323.60	$401.60
51 years and over	45.60	58.30	71.80	85.80	197.90	252.50	310.90	371.70
Family of 4:								
Couple, 20 - 50 years and children –								
1 - 2 and 3 - 5 years	70.10	87.30	106.60	131.00	303.70	378.50	462.00	567.10
6 - 8 and 9 - 11 years	80.10	102.60	128.30	154.40	347.10	444.30	555.60	668.90
INDIVIDUALS[3]								
Child:								
1 - 2 years	12.70	15.40	18.00	21.80	55.10	66.90	77.90	94.30
3 - 5 years	13.70	16.80	20.70	24.90	59.20	72.90	89.90	107.70
6 - 8 years	16.60	22.20	27.90	32.50	72.00	96.20	120.70	140.70
9 - 11 years	19.80	25.30	32.50	37.60	85.70	109.40	140.70	163.10
Male:								
12 - 14 years	20.60	28.60	35.70	42.00	89.30	124.00	154.80	181.80
15 - 19 years	21.40	29.60	36.80	42.60	92.80	128.30	159.30	184.60
20 - 50 years	22.90	29.30	36.60	44.30	99.40	126.90	158.60	191.80
51 years and over	20.90	27.90	34.30	41.10	90.50	120.70	148.50	177.90
Female:								
12 - 19 years	20.80	24.80	30.10	36.30	90.10	107.40	130.20	157.50
20 - 50 years	20.80	25.80	31.30	40.00	90.00	111.80	135.60	173.30
51 years and over	20.60	25.10	31.00	36.90	89.40	108.80	134.10	160.00

[1]Assumes that food for all meals and snacks is purchased at the store and prepared at home. Estimates for the thrifty food plan were computed from quantities of foods published in *Family Economics Review* 1984(*1*). Estimates for the other plans were computed from quantities of foods published in *Family Economics Review* 1983(*2*). The costs of the food plans are estimated by updating prices paid by households surveyed in 1977–78 in USDA's Nationwide Food Consumption Survey. USDA updates these survey prices using information from the Bureau of Labor Statistics, *CPI Detailed Report*, table 4, to estimate the costs for the food plans.

[2]Ten percent added for family size adjustment. See footnote 3.

[3]The costs given are for individuals in 4-person families. For individuals in other size families, the following adjustments are suggested: 1-person – add 20 percent; 2-person – add 10 percent; 3-person – add 5 percent; 5- or 6-person – subtract 5 percent; 7- or more-person – subtract 10 percent.

Consumer Prices

Consumer Price Index for all urban consumers [1982-84 = 100]

Group	Unadjusted indexes			
	December 1990	November 1990	October 1990	December 1989
All items	133.8	133.8	133.5	126.1
Food	134.2	134.0	133.6	127.4
Food at home	133.8	133.8	133.4	126.5
Food away from home	135.7	135.4	135.0	129.8
Housing	130.5	130.4	130.6	124.9
Shelter	142.7	142.4	142.4	135.6
Renters' costs[1]	149.5	149.0	148.9	140.1
Homeowners' costs[1]	147.5	147.3	147.2	140.9
Household insurance[1]	136.5	136.3	135.9	134.0
Maintenance and repairs	123.8	123.9	123.4	119.5
Maintenance and repair services	128.9	128.8	128.8	122.2
Maintenance and repair commodities	116.8	117.3	115.9	115.8
Fuel and other utilities	112.7	112.9	113.4	108.4
Fuel oil and other household fuel commodities	114.1	117.0	118.5	88.7
Gas (piped) and electricity	108.6	108.0	109.0	107.0
Household furnishings and operation	113.7	113.8	114.2	111.7
Housefurnishings	106.1	106.6	107.4	105.5
Housekeeping supplies	127.5	126.5	125.8	123.6
Housekeeping services	122.3	122.0	121.8	117.6
Apparel and upkeep	125.3	127.5	128.4	119.2
Apparel commodities	123.0	125.4	126.4	117.1
Men's and boys' apparel	122.3	123.7	123.6	118.8
Women's and girls' apparel	123.5	126.6	128.6	116.4
Infants' and toddlers' apparel	125.6	126.2	126.8	115.3
Footwear	118.4	119.6	120.5	114.7
Apparel services	140.2	140.0	139.4	131.3
Transportation	127.2	126.9	125.8	115.2
Private transportation	125.1	125.1	124.2	113.9
New vehicles	124.3	122.8	121.1	121.9
Used cars	117.1	117.2	118.1	119.7
Motor fuel	117.1	119.0	118.9	85.8
Automobile maintenance and repair	132.5	132.5	132.1	126.9
Other private transportation	146.7	146.2	144.8	139.0
Other private transportation commodities	103.8	103.5	102.1	102.3
Other private transportation services	156.3	155.7	154.3	146.9
Public transportation	154.4	150.3	146.6	131.7
Medical care	169.2	168.4	167.1	154.4
Medical care commodities	169.1	167.8	166.8	156.0
Medical care services	169.3	168.6	167.2	154.1
Professional medical services	160.0	159.6	158.9	149.9
Entertainment	134.6	134.4	134.3	129.1
Entertainment commodities	125.2	125.2	125.3	121.6
Entertainment services	146.3	146.0	145.7	138.8
Other goods and services	164.5	163.6	163.2	152.9
Personal care	132.4	131.9	131.7	127.1
Toilet goods and personal care appliances	129.9	129.5	129.3	124.7
Personal care services	135.0	134.5	134.2	129.7
Personal and educational expenses	176.3	176.1	175.9	164.0
School books and supplies	174.7	174.6	174.5	164.0
Personal and educational services	176.6	176.5	176.2	164.2

[1]Indexes on a December 1982 = 100 base.

Source: U.S. Department of Labor, Bureau of Labor Statistics.

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