



MIDDLE CLASS IN AMERICA

Prepared by the
**U.S. DEPARTMENT OF COMMERCE
ECONOMICS AND STATISTICS ADMINISTRATION**

for the
**OFFICE OF THE VICE PRESIDENT OF THE UNITED STATES
MIDDLE CLASS TASK FORCE**

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MIDDLE CLASS IN AMERICA

EXECUTIVE SUMMARY

Most Americans consider themselves middle class. This raises the question, what does it mean to be middle class? This report examines various definitions, discusses middle class values and aspirations, and presents hypothetical budgets showing how these aspirations might be achieved with different incomes. Finally, we consider whether or not it is harder to live a middle class lifestyle today than it was twenty years ago.

Income levels alone do not define the middle class. Many very high and very low income persons report themselves as middle class. Social scientists have explained this by defining “middle class” as a combination of values, expectations, and aspirations, as well as income levels. Middle class families and those aspiring to be part of the middle class want economic stability, a home and a secure retirement. They want to protect their children’s health and send them to college. They also want to own cars and take family vacations. However, aspirations alone are not enough; middle class families know that to achieve these goals they must work hard and save.

This report examines how two-parent two-child families and single-parent two-child families at different income levels might achieve a middle class lifestyle. The result is a snapshot of hypothetical family finances during a single year when both children are in school and before they start college. The estimates in this report present a picture of the possible spending and saving decisions that families might make. A major conclusion to be drawn from this report is that planning and saving are critical elements in attaining a middle class lifestyle for most families.

Our results indicate how difficult it might be for many families to achieve these goals, particularly families in areas with higher housing prices. In addition, any number of uncontrollable events can make it hard to achieve middle class aspirations, including extra medical bills, payments for child care or elder care, or other demands on income. Families also face uncertainty about their future income, especially in an environment of high unemployment.

Finally, we look back two decades to examine whether it is more or less difficult to attain a middle class lifestyle today. While incomes for married-couple and single-parent families with two children have increased significantly, much of this rise occurred in the 1990s. In part, these increases occurred because parents are working more hours in order to maintain higher income levels. Unfortunately, while incomes have risen, the prices for three large components of middle class expenses have increased faster than income: the cost of college, the cost of health care and the cost of a house. Thus, we conclude that it is harder to attain a middle class lifestyle now than it was in the recent past.

One of the hallmarks of American society has been the common desire among families of all backgrounds for economic security and a better life for their children. Unfortunately, many families are not able to afford the sort of expenditures that we lay out in this report. If American families are to realize their middle class dreams, the nation must have a healthy economy, a responsible private sector that offers decent jobs with benefits, and an effective public sector that provides high quality schools for all children.

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PRINCIPAL FINDINGS

- Middle class families are defined by their aspirations more than their income. We assume that middle class families aspire to home ownership, a car, college education for their children, health and retirement security and occasional family vacations.
- Families at a wide variety of income levels aspire to be middle class and under certain circumstances can put together budgets that allow them to obtain a middle class lifestyle.
- Planning and saving are critical elements in attaining a middle class lifestyle for most families. Under the right circumstances, even lower-income families may be able to achieve many of their aspirations if they are willing to undertake present sacrifices and necessary saving.
- However, many families, particularly those with less income, will find attaining a middle class lifestyle difficult if not impossible. Areas with high housing costs can make even higher-income families feel pinched. Lack of employer-provided health insurance can confront a family with bankrupting health costs. And unforeseen expenses can ruin even the best-laid budget plans.
- It is more difficult now than in the past for many people to achieve middle class status because prices for certain key goods – health care, college and housing – have gone up faster than income.

MIDDLE CLASS IN AMERICA

Most Americans consider themselves middle class. A 2005 New York Times survey found that only 1% of respondents considered themselves to be ‘upper class’ and only 7% considered themselves part of the ‘lower class.’ The remainder said that they were either ‘middle class’ or ‘working class’ (Cashell, 2008).

The fact that so many people consider themselves part of the middle class raises the question of what it means to be middle class. What characteristics are shared by so many people?

This report assumes that middle class families and those who wish to be middle class have certain common aspirations for themselves and their children. They strive for economic stability and therefore desire to own a home and to save for retirement. They want economic opportunities for their children and therefore want to provide them with a college education. Middle class families want to protect their own and their children's health. And they want enough income for each adult to have a car and for a family vacation each year. Middle class families are forward-looking, and they know that to achieve these goals, they must work hard, plan ahead and save for the future. Indeed, being middle class may be as much about setting goals and working to achieve them as it is about their attainment.

This report presents hypothetical budgets to show how families with middle class aspirations might achieve these goals at different income levels. The report suggests that even some lower-income families can achieve middle class lifestyles (particularly if they live in lower-cost housing areas), although they would have to make more difficult trade-offs and settle for less than would higher-income families. For many families, however, these goals will be difficult to achieve. In some areas of the country, higher housing prices make a middle class lifestyle hard even for those above the middle of the income distribution. Extra medical bills or higher family expenses for child care or elder care can easily make a middle class lifestyle unattainable.

We end by comparing the opportunities facing middle class families two decades ago, in 1990, versus today. While incomes have increased substantially among families with two children, even after accounting for inflation, much of this rise occurred in the 1990s; incomes have been relatively stagnant since 2000. In addition, many of the adults in these families are working more hours to support their higher incomes. Most importantly, prices of three big expenditure items – housing, health care, and college – have gone up faster than incomes. These factors make attaining a middle class lifestyle harder today than it was two decades ago.

I. How is the Middle Class Defined?

No single accepted definition of middle class appears in the academic or popular literature but numerous definitions have been suggested. A few of the most common definitions are outlined below.

The Pure Income Definitions. Most economic analyses of the middle class use income as the sole defining measure (Frank, 2007; Isaacs, *et al.*, 2008). Examples of income definitions include ranges based on:

- absolute dollar-value income levels;
- income levels relative to median household income;
- fixed portions of the income distribution (*e.g.*, quartiles or quintiles); and
- income levels relative to the poverty line.

In this report we have selected two-parent two-child families and one-parent two-child families as the focus for analysis. A family with two children under age 18 is often considered the typical American family. Table 1 shows the median, lowest quartile and highest quartile income levels for these two types of families in 2008. (The median is the income level at which half of all families earn less and half of all families earn more; the 25th percentile is the income level at which one-quarter of all families earn less; and the 75th percentile is the income level at which three-quarters of all families earn less.)

Table 1
Income Levels for Selected Families, 2008

	In the distribution of two-parent two-child families	In the distribution of one-parent two-child families
Lowest quartile cut-off (25th percentile)	\$50,800	\$13,200
Median (50th percentile)	\$80,600	\$25,200
Highest quartile cut-off (75th percentile)	\$122,800	\$44,000
Poverty Line	\$21,800	\$17,300

Sources:

Incomes: U.S. Census Bureau, Current Population Survey, 2009 Annual Social and Economic (ASEC) Supplement and ESA calculations.

Poverty lines: <http://www.census.gov/hhes/www/poverty/threshld/thresh08.html>

Note: Calculations are based on the income distribution of each family type with two children under age 18.

The family at the middle of the income distribution of two-parent two-child families has \$80,600 in income. In contrast, one-parent families have significantly lower incomes. The family at the middle of the income distribution of one-parent two-child families has only \$25,200 in family income, far below the 25th percentile among two-parent families. More than one-fourth of single-parent two-child families have incomes below the poverty line, an income level that cannot support a middle class lifestyle.

The data in Table 1, which we use throughout this report, are based on family income, which combines the income of all related individuals who live together. This includes the income of the primary family with any related secondary family living in the same household. The income of unrelated cohabiters, including unmarried partners, is not included in family income. While this has little effect on the income of married couples, it does reduce potential income among single-parent families. About 20% of single-parent families with two children reside with an unrelated individual. Including the income of unrelated individuals would increase the total median income available to single-parent families by about \$5,000. The research on how much income is shared among non-related cohabiters shows mixed results, however. Cohabiters share some income, but much less than married couples. Most family income statistics count only income of related individuals and we follow this convention, excluding the income of unrelated cohabiters. Throughout this report, “income” refers to gross money income (before tax payments and tax credits) which includes earnings and nonlabor income such as interests and dividends, child support and cash payments. It does not include in-kind (noncash) benefits.

Self-Reported Class. Another approach to defining the middle class has been to simply ask people to identify their social class. Respondents generally choose from the following options: lower class, middle class, and upper class. (Some surveys also provide a ‘working class’ option.) A 2008 Congressional Research Service report summarized results from three surveys in which people were asked about both their income and their class status and concluded that the self-defined middle class consists of people with household incomes roughly between \$40,000 and \$250,000 (Cashell, 2008).

A 2008 Pew Research Center survey found that there is not always a good match between a respondent's class identification and reported income (Pew Research Center, 2008). In the Pew survey, 40% of respondents with incomes below \$20,000 considered themselves to be middle class as did a third of those with incomes above \$150,000. About half of each racial and ethnic category – blacks, whites and Hispanics – indicated they were middle class even though minority income levels are lower in general. These findings suggest that income alone is not a good indicator of class.

Multidimensional Definitions. Some researchers have attempted to create indexes that aggregate occupation, income, education, and other observable characteristics in order to rank people by social standing or living standards (Nam and Boyd, 2004; Gilbert, 2008). Such rankings can be used to indicate middle class status.

Other social scientists define the middle class more broadly by taking into account harder-to-observe, non-monetary attributes like emotional state and morale (Chen and Newman, 2007; Newman, 2006; Sullivan, *et al.*, 2000). This is based on the perception that certain values and

expectations, primarily about economic security, safety, and protection, are strongly associated with the middle class. Examples of middle class values discussed in this literature include:

- strong orientation toward planning for the future;
- control over one's destiny;
- movement up the socio-economic ladder through hard work and education;
- a well rounded education for one's children;
- protection against hardship, including crime, poverty, and health problems;
- access to home ownership and financial assets such as a savings account; and
- respect for the law.

While difficult to quantify, these characteristics would explain the survey responses that suggest a middle class orientation is about more than just income.

Overall, the literature on the middle class leads to a conclusion that income levels alone do not define the middle class. Members of the middle class tend to be defined more by their values, expectations, and aspirations than their income level although income may constrain the manner in which some of their aspirations can be realized. We follow this approach by assuming that middle class families have certain common aspirations, which we lay out in the following section.

II. What Are Middle Class Aspirations?

Several key elements characterize what seem to be fairly standard middle class values and aspirations. These include economic stability, a better life for one's children, and a current lifestyle that allows for a few creature comforts. One characteristic that stands out in the literature on the middle class is that middle class families emphasize their expectations about the future; this means they work hard, plan ahead, and expect to save in order to attain those plans. Indeed, being middle class may be as much about setting goals and working to achieve them as it is about their actual attainment.

Our assumptions about what is included in middle class aspirations are discussed below. These are general aspirations and different families may weight them differently. Some families may spend vacation time with relatives and some may not feel the need for two cars. Others live in areas where house prices are high and more resources have to be expended for housing. While we do not assume that all families have exactly the same goals, we posit that, in general, these are items that most middle class families value and wish to attain.

Home Ownership

Owning one's own home is part of the middle class American dream. We assume that families with two children will aspire to be homeowners.

A Car for Each Adult

Car ownership has often served as shorthand for attainment of the middle class lifestyle. Ever since Henry Ford's introduction of the Model T, no other object has so strongly typified the American middle class. On average there are two vehicles on the road for every American family (Bureau of Labor Statistics, 2008). Cars allow families a wider choice of residential and work locations and better access to many desired activities. We assume that middle class families want one car per adult. Indeed, many middle class families have job, school, and housing arrangements that make it difficult to manage without two cars.

A College Education for Children

Education provides a clear example where planning for the future, hard work, and movement up the socio-economic scale converge. Much of the planning and sacrifice families make is for the benefit of the next generation. We assume that middle class families aspire to a college education for all their children, seeing college as a ladder to future economic opportunities.

Health Security

Middle class families want to protect their children's health and their own health – and protect their hard-earned lifestyles from the economic impacts of catastrophic medical expenses. This requires health insurance.

We assume middle class Americans desire employer-provided health insurance. This means that they must pay their share of premiums for employer-provided health insurance and for medical expenses not covered by insurance.

Retirement Security

Middle class families expect to have some economic security in retirement, and want to be able to retire at an age when they can enjoy their retirement. This means that they must save for retirement. Middle class families also strive to live within their means and avoid unsustainable levels of debt.

We assume that middle class families save enough that their accumulated savings with interest, together with Social Security, can provide income equal to at least 50% of their earnings at retirement at age 65. While this is not a high level of retirement savings, many families also have employer-provided contributions to their retirement savings, which add to their retirement income.

Family Vacations

Being middle class means having enough economic security to take well-deserved breaks. We assume that middle class families want occasional family vacations.

III. What Does it Cost Families to Achieve Middle Class Aspirations?

In this section, we present some hypothetical budgets as examples of how families at different levels of income with middle class aspirations might achieve these goals.

This exercise has at least three distinct purposes:

- We show how families at quite a wide range of incomes, under the right circumstances, may be able to attain a middle class lifestyle, and what sort of expenditures this might involve.
- We show the variation in what different families at different income levels might buy to achieve their goals.
- We indicate how constrained some of these choices are, and point out the difficulties that could prevent families from achieving a middle class lifestyle. While this is particularly true for families below the middle of the income distribution, even higher-income families may have problems achieving a middle class lifestyle in certain circumstances.

It is important to emphasize that the budgets we present below are examples of possible budgets. They do not indicate what families *should* spend. Rather, we estimate the costs of the six middle class aspirational items (housing, health care, car, college education, vacation, and retirement savings) that we described in the last section. We make assumptions about what families at different income levels are likely to buy and these estimates are based on our calculations of what it would cost to attain these items. We also take account of what families at different income levels actually spend on non-aspirational items (food, clothing, utilities, and taxes) based on the best available expenditure data. Adding these expenses together, our budgets indicate how a family at a given income level *might* choose to allocate their money across different goods and services in order to achieve their middle class aspirations. As we emphasize below, different families will make different trade-offs and some will choose to spend more on some items and less on others. And, as we also emphasize, many families will find these suggestive budgets unrealistic and will not be able to attain all of the items that make up a middle class lifestyle.

We focus on two different types of families in this report:

- A four-person family with two parents and two children under age 18 who are both in school; and
- A three-person family with one parent and two children under age 18 who are both in school.

About 38% of Americans live in married-couple families with one or more related children under age 18; another 13% live in other family arrangements with at least one related child under age 18, predominantly single-mother families. It is important to consider what it means to be middle class for persons who live in other types of families, including retirees, older workers without children at home and younger people just starting out. This is beyond the scope of this current report, however.

We draw on many different sources to inform our cost estimates of each component of a middle class lifestyle at various income levels. We necessarily make some basic assumptions about when various life milestones take place in order to provide structure for our estimates. For instance, we assume that parents save for retirement over their entire career. Details on how these cost estimates are derived, and the assumptions that underlie them, are in Appendix Table 1.

We recognize that many families incur expenses for child care when children are young. This is a particularly important issue for single-parent families but is also a major concern for two-parent families in which both parents work. We assume that families begin to save for college when the second child enters kindergarten. The presumption is that child-care costs prevent earlier college savings. Any ongoing child-care costs for families with school-age children are subsumed in the ‘other expenditure’ category.

The estimates that we present describe a single year, providing a snapshot of hypothetical family finances during the period after both children start grade school and before they start attending college. We do not model the complete lifecycle of consumption and income paths for our hypothetical families. If we did so, we might have them spend more in certain periods of their life and save more in other periods. Or we might have them pay off big expenses in ‘lumpy’ ways, rather than spreading the cost of items like a car over long periods of time through borrowing. The intent of this paper is not to replicate family finances over their lifetime, but to show what a reasonable set of possible expenses might look like for families at different income levels who seek a middle class lifestyle.

A. Middle Class Spending for Two-Parent Families with Two Children

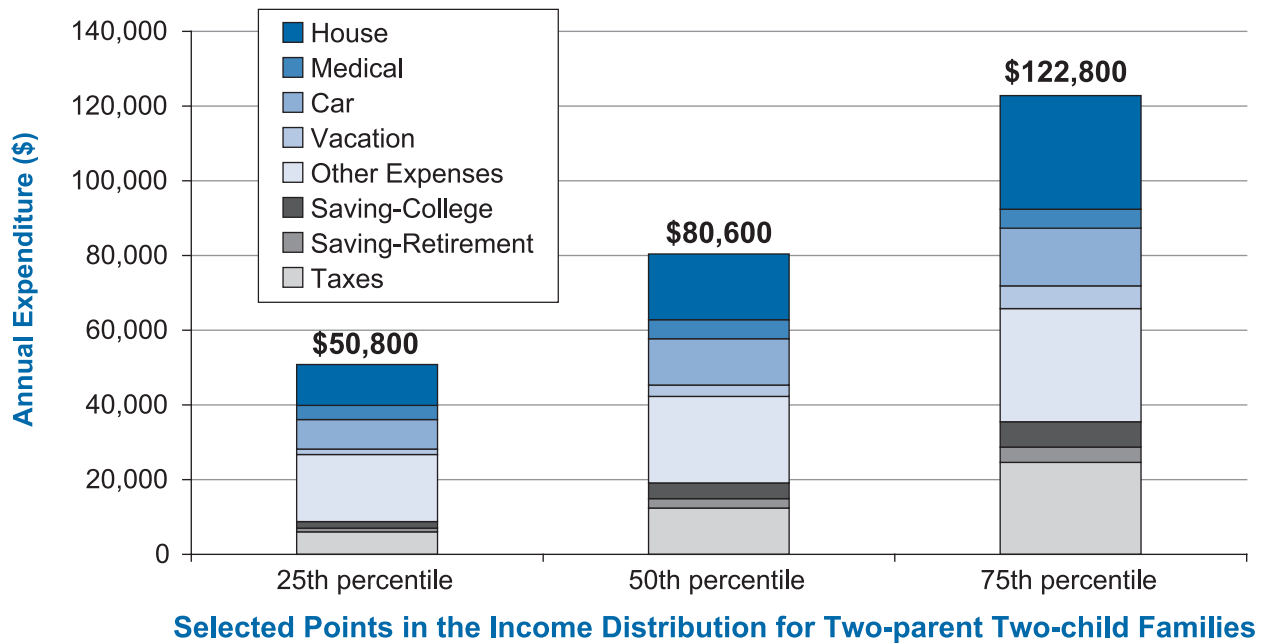
To illustrate how families might achieve middle class status, we focus on three hypothetical two-parent two-child families at three different income levels. We start by looking at a family whose income is at the median income level for two-parent two-child families in the U.S., and investigate what their expenditure patterns might look like if they wanted to attain those things we characterize as goals of the middle class. This family has \$80,600 in total annual income, as we saw in Table 1. But we want to see how these goals might be attained by higher- and lower-income families as well. So we also consider families whose income is at the 25th percentile (\$50,800 in income) and at the 75th percentile (\$122,800 in income) of income among two-parent two-child families. This allows us to observe the additional trade-offs lower-income families would have to make, or what additional luxuries higher-income families could afford.

Appendix Table 1 lays out our cost estimates in more detail. A quick description here is probably useful. We have six middle class items we assume these families want – home ownership, cars, college education for children, family vacations, health security and retirement security. We estimate the cost for each of these items, except housing, using the data described in Appendix Table 1. We use published estimates of what similar families are paying in federal, state and local income taxes. Using data on family consumption expenditures, we estimate the actual dollars spent on all other items (*i.e.*, everything except the six things in our middle class consumption bundle) by families at these income levels. Hence, we allow these families to spend on average as much on ‘everything else’ as they do in reality. Finally, we estimate how much money this leaves in the family

budget for house payments and estimate the affordable mortgage (and the resulting value of the house) that these families can pay each month. In this sense, housing is our ‘residual item’ and we balance the family budget by having them purchase only the house that they can afford.

Figure 1 demonstrates our hypothetical budgets for these three married-couple two-parent two-child families. Table 2 provides more details about the costs and expenditures in these budgets.

Figure 1
Hypothetical Budgets for Married-Couple Families with Two School-Age Children



See Appendix Table 1 for data sources.

Table 2
Hypothetical Budgets for Married-Couple Families
with Two School-Age Children

Annual Income	\$50,800 (25th percentile)	\$80,600 (50th percentile)	\$122,800 (75th percentile)
House			
▪ Total house value	\$143,800	\$231,400	\$400,300
▪ Annual cost	\$10,900	\$17,600	\$30,400
Annual medical expenses	Assumes children are covered by CHIP and a parent purchases health insurance through employer. \$3,800	Out-of-pocket premiums for employer-sponsored health insurance plus non-covered expenses. \$5,100	Out-of-pocket premiums for employer-sponsored health insurance plus non-covered expenses. \$5,100
Car ownership			
▪ Annual cost	Two small used sedans with \$7,500 purchase price, driven a total of 25,000 miles/year. \$7,900	Two medium-sized sedans each with \$20,000 purchase price, driven a total of 25,000 miles/year. \$12,400	Two large sedans and/or SUVs each with \$30,000 purchase price, driven a total of 25,000 miles/year. \$15,400
Saving for college education to cover 75% of expenses			
▪ Annual cost	Two years of community college plus two years at an in-state public college, with financial aid; assumes live at home with parents. \$1,800	Four years at in-state public college with financial aid; live at home with parents for one year. \$4,200	Four years at private college with financial aid; live on campus. \$6,800
Family vacation			
▪ Annual cost	One week family vacation travel every other year. \$1,500	One week family vacation travel every other year. \$3,000	Two weeks of family vacation travel every year. \$6,100
Annual retirement savings needed to achieve a 50% income replacement rate in combination with Social Security			
▪ Annual cost	2.0% saving rate = \$1,000	3.2% saving rate = \$2,500	3.3% saving rate = \$4,100
Annual food, clothing, utilities, and other "non-aspirational" expenditures	\$17,900	\$23,200	\$30,300
Taxes on income			
▪ Average federal rate	2.20%	5.30%	10.20%
▪ Average state & local rate	1.90%	2.50%	3.50%
▪ FICA rate	7.65%	7.65%	6.33%
▪ Total tax rate	11.75%	15.45%	20.03%
▪ Total annual cost	\$6,000	\$12,400	\$24,600

See Appendix Table 1 for data sources.

Note: FICA = Contributions to Social Security's Old-Age, Survivors, and Disability Insurance and Medicare's Hospital Insurance programs under the Federal Insurance Contributions Act. CHIP = Children's Health Insurance Program.

As is apparent from the table, families at these different income levels will have to make quite different choices in order to live within their budget. The range in income from \$50,800 to \$122,800 is wide. Nonetheless, with careful planning, some families at all these levels can realize these aspirations.

- **Homeownership.** Housing makes up a significant portion of any household's expenses. These costs will vary among families depending on a variety of factors. Geographic location matters since housing prices throughout the country vary considerably. There are also other trade-offs families make in selecting affordable housing. For example, many urban families must choose between living in the far suburbs with long commuting times in exchange for a larger house at a given price versus living closer in but making do with less living space. Others choose between lower down payments and higher monthly mortgage costs.

We assume that all families would pay 20% down on a house and take out a 30-year fixed mortgage for the remaining 80% of house value. We estimate that middle-income two-parent families will be able to afford a \$231,400 house, while our lower-income two-parent family can only afford a \$143,800 house. Our higher-income family can afford a \$400,300 house. This compares to an overall median house price in the U.S. of \$197,600 in 2008 (U.S. Census Bureau, 2008a).

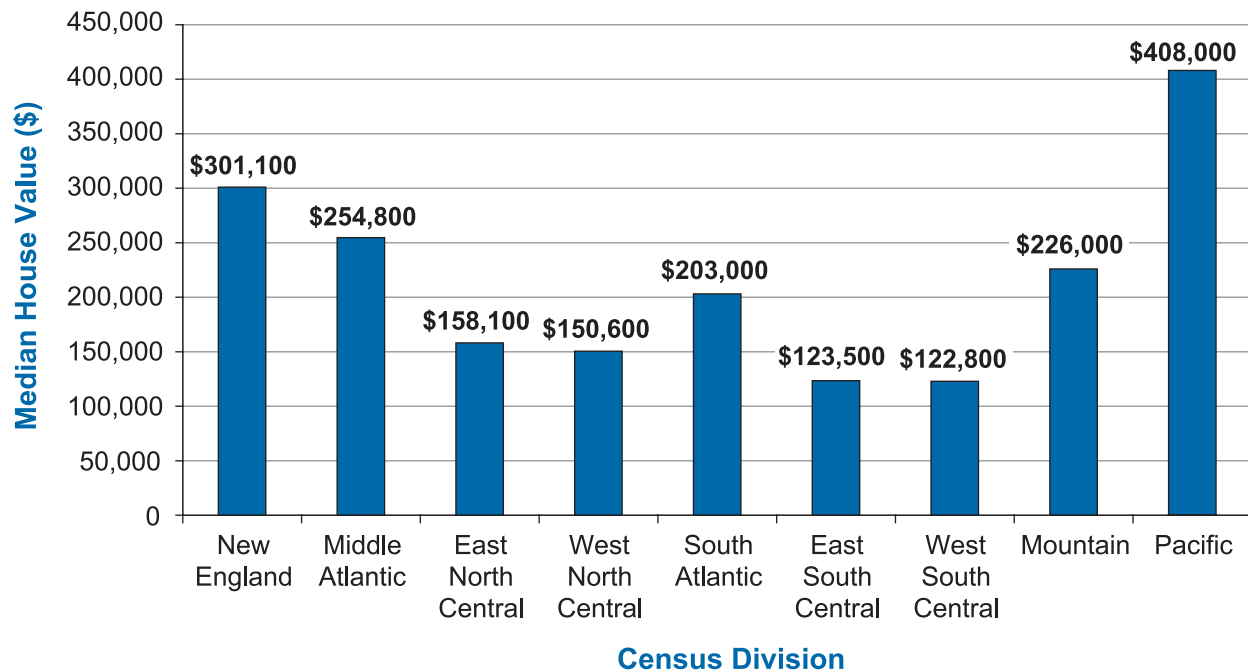
These housing expenses as a share of annual income range from 21.5% for the 25th percentile family to 24.8% for the 75th percentile family – well below the 30% of income rule of thumb often used as a benchmark of housing affordability (Stone, 2006). For the nation as whole, 30.9% of owner-occupied housing units with a mortgage were valued at less than \$150,000 (U.S. Census Bureau, 2008b), suggesting that home-ownership is possible in some places even for the 25th percentile family.

Of course, housing prices differ across and within regions, reflecting differences in housing quality and size, as well as important neighborhood characteristics such as crime levels and school quality. Middle class families will have to adjust their housing budgets in different regions of the country, and may be forced to make trade-offs in their housing choices. In order to compare our estimated housing values with actual housing values in different parts of the country, Figure 2 shows median values of owner-occupied housing in nine major regions.

The data in Figure 2 imply that attaining the middle class dream of owning a home is likely to be difficult for many at the lower end of the income scale. We estimate that our middle-income two-parent family can afford a mortgage for a house worth \$231,400. According to Figure 2, while this amount is sufficient for purchasing the median house in certain parts of the country, in other regions (particularly in the Northeast and West) this amount will fall short. This suggests that many of these families may have to devote more of their income to housing or perhaps live in smaller houses or in neighborhoods with lower school quality than they might prefer. As we will see below, the situation is much worse for single-parent families who have significantly lower incomes.

As it turns out, wages and cost of living are correlated, so family incomes also vary regionally. Incomes on average are higher in some of the high housing-cost areas like the Northeast and West regions. This somewhat offsets housing cost differences. These regional income differences are, however, outside the scope of our estimates.

Figure 2
Median House Value of Owner-Occupied Housing, 2008



Source: U.S. Census Bureau, 2008a.

Note: The high point for housing price in the 2000s occurred in 2007. Prices fell in 2008 but year-to-date data in 2009 show little further decline.

- Health security.** All two-parent two-child families, regardless of income, are assumed to be covered under an employer-sponsored health insurance plan, and to pay the average employee share of health insurance premiums as well as expenses not covered by insurance. We estimate these premiums and expenses cost \$5,100 for both the median and 75th percentile married-couple families with two children.

However, the 25th percentile family income is low enough that the children in these families are eligible for low-cost health insurance under the Children's Health Insurance Program (CHIP) in many states. (Based on October 2009 eligibility rules following enactment of the Children's Health Insurance Program Reauthorization Act of 2009, 53% of the population of the United States live in states where children in such families would be covered by CHIP (Center for Children and Families, 2009).) We assume that the parents of such families purchase health insurance only for themselves through their

employer. Out-of-pocket premiums and uncovered medical expenses are estimated to total \$3,800 for these families. This corresponds to 7.5% of annual income for our lower-income family, which is a significant share (absent CHIP eligibility, the cost would be 10.0%). For our higher-income family, medical expenses account for a smaller 4.2% of income.

In the absence of health insurance, it would be difficult for a family facing serious illness to maintain other elements of a middle class lifestyle. If at least one parent does not have employer-provided health insurance available through his or her job, the cost of directly purchasing health insurance on the open market is high. The average annual premium for non-group family coverage on the open market can be twice as high as out-of-pocket premiums under employer-sponsored plans, roughly \$6,200 compared to \$3,100 in 2005-2006 (Bernard and Banthin, 2008). Unfortunately, employer-based health insurance coverage has been declining, from 64.2% in 2000 to 58.5% in 2008 (U.S. Census Bureau, 2008c), suggesting that more families are struggling to find health insurance coverage.

- **Car ownership.** We assume all two-parent families would like to own two cars, one for each adult. We assume each car is driven the national average of about 12,500 miles per year, but that the likely size and purchase price of cars would increase with income. We assume these cars are bought with a loan and that the monthly costs include the loan repayment fees. We also include the cost of gas and car maintenance expenses. We estimate the annual cost of owning cars would range from \$7,900 (15.5% of annual income) among lower-income families to \$15,400 (12.5% of annual income) among higher-income families. All three of our families spend a significant share of their income on cars.
- **Saving for college.** Family expectations about the type of higher education institution their child will attend and their child's living arrangements in college will likely vary by income level. This is one of the trade-offs that families at lower income levels make. We assume that a family at the lower end of the income distribution would plan for their children to attend a community college for two years and then transfer to a four-year public institution, receiving financial assistance that provides a considerable discount from published tuition and fee rates. Their children are assumed to live at home to save on room and board expenses. Of course, this assumes that a family lives within commuting distance of a community and/or four-year college. While this is true for most urban and suburban families, it may not be possible for rural families.

We assume that a medium-income family would plan to send their children to a four-year public institution for a full four years. On average, 25% of students at public institutions live at home. We embed this into our family cost estimates by assuming the child lives at home for one year (25% of their time). A higher-income family is presumed to plan to send their children to live and study at a private four-year college or university.

We also assume that 25% of out-of-pocket college expenses (equivalent to one year's expense) will be financed by loans incurred by college students. College saving by parents for the remaining 75% of expenses ranges from \$1,800 (3.5% of annual income) for our

lower-income family to \$6,800 (5.5% of annual income) for our higher-income family. Higher-income families must save a larger fraction of their income to meet college expenses.

- **Family vacation.** We estimate the cost of one week of travel for a family vacation. This could involve a visit to national parks and historical sites, to a theme park, or to an interesting urban area. For many families, such vacations often include time with relatives. We assume that the frequency of such vacations increases with income: a lower-income family would take a week's travel vacation every other year, while a higher-income family would take two week-long vacations every year. We estimate one week's travel, lodging, and expenses for this family at \$3,000. This means that vacation costs range from \$1,500 (3.0% of annual income) to \$6,100 (5.0% of annual income) among our families. Of course, although we characterize this as 'one week', many families may choose to spend this money on several trips over the year rather than during a single week.
- **Saving for retirement.** Social Security replaces a decreasing share of pre-retirement earnings as incomes rise, so families with higher incomes need to save at a higher rate in order to attain our assumed target (namely, a high-enough savings amount by age 65 so that the annuity income combined with Social Security equals 50% of pre-retirement income). As a result, retirement saving rates range from 2.0% for a lower-income family to 3.3% for a higher-income family.

The sum of retirement savings plus college savings indicate the total amount of savings needed to meet middle class aspirations. For two-parent two-child families, total saving as a share of income ranges from 5.5% at the 25th percentile to 8.9% at the 75th percentile. As a share of after-tax income, the saving rates are 6.2% and 11.1%, respectively.

These rates are higher than the aggregate savings rates that are published regularly. Among all households, savings rate averaged 4.2% of after-tax income during 1990-2008 (Bureau of Economic Analysis, 2009), which is lower than our estimated total saving rates. Saving rates were particularly low in the mid 2000s but have risen since the recession that began in 2008. Is it reasonable for us to suggest higher savings for our three hypothetical families? Families with pre-college-age children are typically headed by middle-aged persons, who tend to save more than younger persons (who have not yet reached their full earnings potential) and older persons (who may be working fewer hours.) (For example, see Dynan, *et al.*, 2009.) A broader definition of savings that includes capital gains, however, would also add to the savings rate among families with children. This is because capital gains on houses (and to a lesser extent on retirement and college investments) would loom larger for typical middle-aged adults with two children at home than for younger families (who have fewer assets) or older persons (who are more likely to spend down savings after retirement).

Our estimates underscore the fact that saving is an important component of any middle class lifestyle. However, when families face high expenses, whether for housing, child care, education or other needs, savings are often sacrificed first. A previous report for the Middle Class Task Force discussed various tax-advantaged plans that encourage saving, such as Section 529 college savings plans (U.S. Department of the Treasury, 2009).

As some have suggested, low saving rates among American families in the recent past may indicate that some families believed that their appreciating housing values in the mid-2000s meant they did not have to save in other ways. But, as we also show below, over the past decade many families have faced significant costs that rose faster than their income. One response to this may have been lower savings.

- **Other living expenses.** All families have to pay certain basic expenses. Our calculation for expenditures for non-aspirational items is based on average expenditures for consumption items such as groceries, clothing, and utilities for families at each income level, although it also includes non-essential expenses, such as entertainment expenses and the purchase of food at restaurants. Such expenses will clearly vary among families and perhaps across geographic areas where costs differ, although the regional differences in prices for these items are quite small relative to the differences in housing prices.

We estimate that these other living expenses vary from \$17,900 for families at the 25th percentile to \$30,300 at the 75th percentile. Because this category includes many items often considered necessities, expenditures do not vary as much across households as other items.

- **Taxes.** Before families can decide how to spend their income on purchases or savings, they have to pay taxes. We estimate that tax rates will range from 11.75% to 20.0%. This means that after tax income for these three families will range from \$44,800 to \$98,200. However, it should be noted that a large share of taxes represents contributions toward future Social Security and Medicare benefits; absent such programs, a significant share of such contributions would have to be saved to ensure similar security after retirement.

What do these budgets show for our married-couple four-person families? First, they suggest how families who do not face unexpected expenses can attain a middle class lifestyle at quite different income levels. Second, they show the differences in quality and quantity of goods that families at different income levels must purchase, so that our lower-income family makes different car, vacation, and college choices.

Finally, it should be clear from these budgets that many families will face difficulties achieving their middle class aspirations. Families without employer-provided insurance may face much larger out-of-pocket medical expenses. Families in rural areas may face much greater car and transportation costs. Families in high-cost housing areas may be unable to afford a three-bedroom house (or any house.) Many families may find that their college or retirement savings disappear in a year when they face unexpected expenses. While our hypothetical budgets show that some families can attain a middle class lifestyle at quite different income levels, the assumptions necessary to make these family budgets balance also suggest that many families will find this difficult.

B. Middle Class Spending for Single-Parent Families with Two Children

We now turn from married-couple families to single-parent families with two school-age children. Table 1 showed that families at the 25th percentile of the income distribution for this group had only \$13,200 in income and were below the poverty line. A family income at or below the poverty

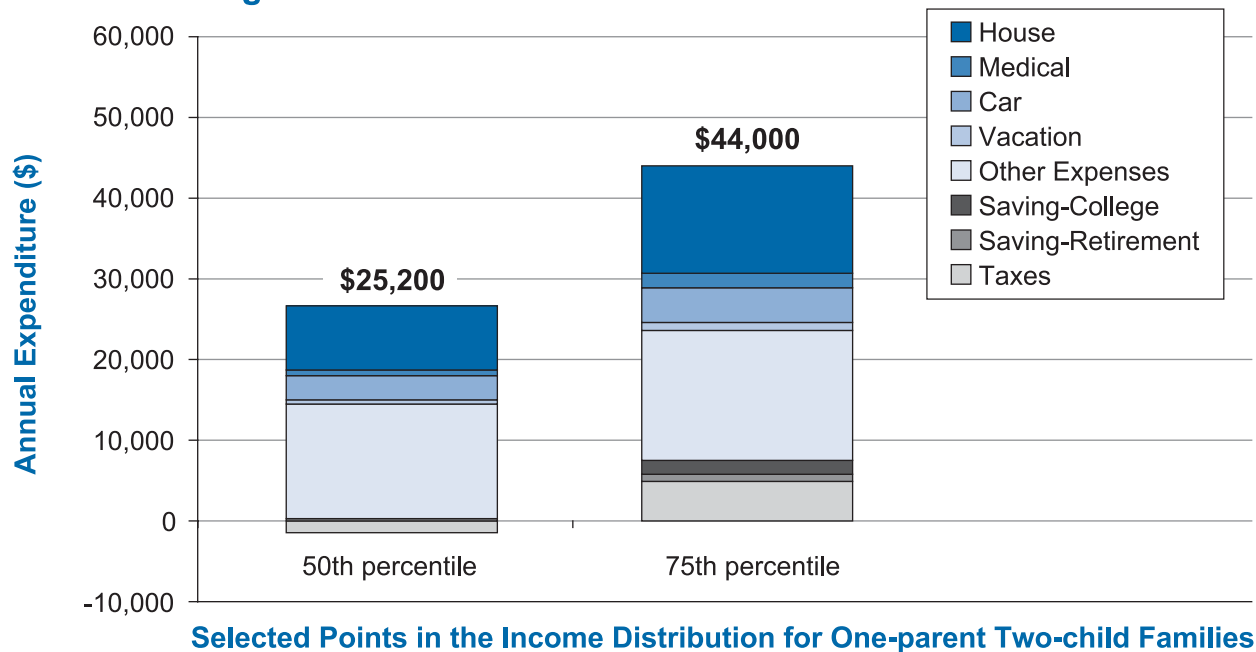
line for single-parent families cannot sustain the middle class lifestyle that we define in this report. Therefore, this report considers only hypothetical budgets for two sets of single parents, at the median (\$25,200 annual income) and at the 75th percentile (\$44,000 annual income).

Single-parent families with two children have only three people to support while the two-child married-couple families that we discussed in the last section supported four people. Hence, single-parent families need less income to live an equivalent lifestyle. The differences in income between these two types of families are much, much larger, however, than any adjustment for family size would suggest. Because of their low incomes, these families will have to make steeper trade-offs than any except the lowest-income married-couple families in order to maintain a middle class lifestyle.

Why are incomes among single-parent families so low? One-parent families generally rely on only one primary earner while many two-parent families have two earners. One-parent families are typically headed by women who work in lower-wage jobs and (often because of child-care responsibilities) work fewer hours. Furthermore, parents in one-parent families have less education, on average, than parents in two-parent families, and this also limits their earning potential.

Figure 3 shows the potential budget that single-parent families at these two income levels would have to maintain in order to attain a middle class lifestyle, while Table 3 provides more details on the hypothetical expenditures that underlie these budgets for single-parent two-child families. The text following the table highlights the assumptions and implications of the findings. Appendix Table 1 indicates in more detail how we calculate these expenditure levels.

Figure 3
Hypothetical Budgets for Single-Parent Families with Two School-Age Children



See Appendix Table 1 for data sources.

Table 3
Hypothetical Budgets for Single-Parent Families
with Two School-Age Children

Annual Income	\$13,200 (25th percentile)	\$25,200 (50th percentile)	\$44,000 (75th percentile)
House	Unable to achieve a middle class lifestyle		
▪ Total house value		\$104,900	\$175,500
▪ Annual cost		\$7,950	\$13,300
Annual medical expenses		Assumes children are covered by CHIP and parent is uninsured.	Assumes children are covered by CHIP and parent purchases health insurance through employer.
		\$700	\$1,800
Car ownership		One small used sedan with \$7,500 purchase price, driven a total of 7,500 miles per year.	One small used sedan with \$10,000 purchase price, driven a total of 12,500 miles per year.
▪ Annual cost		\$3,000	\$4,300
Saving for college education to cover 75% of expenses		Assumes a combination of financial aid, loans taken out by students, and living with parents cover full cost to parents.	Two years of community college plus two years at an in-state public college, with financial aid; assumes live at home with parents.
▪ Annual cost		\$0	\$1,700
Family vacation		One week family vacation visiting relatives/friends every other year.	One week family vacation travel every other year.
▪ Annual cost	\$500	\$1,000	
Annual retirement savings needed to achieve a 50% income replacement rate in combination with Social Security			
▪ Annual cost	1.2% saving rate= \$300	2.0% saving rate= \$900	
Annual food, clothing, utilities, and other "non-aspirational" expenditures			
	\$14,200	\$16,100	
Taxes on income			
▪ Average federal rate	-14.50%	1.55%	
▪ Average state & local rate	1.10%	1.88%	
▪ FICA rate	7.65%	7.65%	
▪ Total tax rate	-5.75%	11.08%	
▪ Total annual cost	-\$1,450	\$4,900	

See Appendix Table 1 for data sources.

Note: FICA = Contributions to Social Security's Old-Age, Survivors, and Disability Insurance and Medicare's Hospital Insurance programs under the Federal Insurance Contributions Act. CHIP = Children's Health Insurance Program.

Income levels among single-parent two-child families are low and this is a major constraint on their ability to achieve middle class goals. For the two families that we consider, at the median and the 75th percentile of income, a middle class lifestyle can be achieved but only with substantial budget discipline. Emergencies don't fit into these budgets.

- **Homeownership.** A median-income single-parent family can afford only a \$104,900 home, while the higher-income single-parent family can afford a home valued at \$175,500. Note that the 75th percentile single-parent family can afford a higher-valued house than the 25th percentile married-couple family, despite the similarity in their incomes. We estimate that the median single-parent two-child family would spend 31.5% of their annual income on housing, while the 75th percentile family would spend 30.2%. These expenditures approximately meet the traditional 30% of income affordability benchmark.

In 2008, 16.1% of owner-occupied housing units with a mortgage nationwide were valued at less than \$100,000 (U. S. Census Bureau, 2008b), which suggests that in some parts of the country it may be feasible – albeit challenging – for the median single-parent two-child family to afford a house, given our hypothetical budget. According to the housing data presented in Figure 2, however, it is probably impossible for median-income single-parent families to attain homeownership in many parts of the country. No matter where they live, they will have to buy a small home, well below the median-priced house in their area. In many areas, these families are likely to end up renting a lower-cost apartment or living with others and will have to give up the middle class dream of homeownership.

- **Health security.** We assume that single-parent family medical expenses would be lower than for married-couple families, reflecting smaller family size. We assume children in both the median and 75th percentile families are eligible for CHIP coverage. (The income of the 75th percentile family is 250% of the federal poverty guideline for a family of three – \$17,600 in 2008 – used by the states to determine eligibility.) Given their low overall incomes, however, we assume that median-income parents decline to purchase health insurance for themselves through their employer and opt instead to apply the money that could have been spent on out-of-pocket premiums toward housing expenses. Consequently, medical expenses (\$700) account for only 2.7% of income at the median for these families, but these lower costs come with much less security in health care.

We assume that parents with the 75th percentile income do purchase health insurance for themselves through their employers and incur costs totaling \$1,800 (4.1% of income). If the parent does not have a job that provides health insurance (and this is common among jobs held by lower-wage female earners) or lives in a state with less generous CHIP eligibility requirements, this family will almost surely have to forego health insurance coverage or forego other middle class goals in order to either buy high-priced health insurance on the open market or to pay health expenses if a family member becomes seriously ill.

- **Car ownership.** We assume single-parent families would own one car, but that the likely size, annual mileage, and purchase price of a car would increase with income. The cost of

car ownership ranges from \$3,000 (11.9% of income) to \$4,300 (9.8% of income) for the median and 75th percentile families, respectively.

- **Saving for college.** We assume that the 75th percentile single-parent family would plan for their children to attend a community college for two years and then transfer to a four-year public institution, while living at home to save on room and board expenses; children would be expected to borrow to cover 25% of their college expenses. This requires them to save \$1,700 each year.

The median-income single-parent family does not have the money to save for college and must forego the security of college savings. Because of very low family income, however, if the children have reasonably good high school grades and standardized test scores, they will be able to receive financial aid from almost any college to which they apply. We assume that this aid, combined with loans incurred by the children, will cover all college expenses.

- **Family vacation.** All families want occasional vacations. This may be more difficult to attain for single-parent families but it is likely that vacations are considered desirable and important. We assume that the median and 75th percentile families spend a week traveling every other year, but the median-income family spends less and must stay with relatives and friends.
- **Saving for retirement.** The median-income single-parent family would need to save an estimated 1.2% of income for retirement – less than the higher-income family because of higher Social Security replacement ratios for lower-income workers. This is a very low estimate of needed retirement savings. Living on 50% of current income after retirement will be a challenge, given these parents' low income levels during their working years.
- **Other living expenses.** This calculation is based on average expenditures on consumption items such as food, clothing, and utilities among families at this income level. These expenses are likely to vary among families and perhaps across geographic areas where costs differ.

We estimate that these living expenses vary from \$14,200 (56.3% of annual income) for families at the median to \$16,100 (36.6% of annual income) at the 75th percentile.

- **Taxes.** Tax rates range from -5.75% to 11.1%. This means that after-tax income ranges from \$26,650 to \$39,100. The middle-income single-parent family has a negative tax rate and is actually receiving some money back from the government, because the parent is eligible for the Earned Income Tax Credit.

The budgets for single-parent families are much tighter than for most two-parent families. It may be possible for these parents to attain a middle class lifestyle and to do the saving necessary for retirement and college if the family lives in a low-cost housing area. But any sort of emergency, from unemployment to illness to unexpected home or car repairs, will make these budgets difficult, if not impossible.

IV. How Is This Income Earned?

While the focus of this report is on the expenditures that different families would have to adopt in order to attain certain middle class goals, it is perhaps valuable to say something about the sources of income that these families are likely to have. Table 4 shows the share of families with different numbers of earners among both two-parent two-child families and among one-parent two-child families. We show the number of earners among income groups that bracket our 25th, 50th, and 75th percentiles of income.

A substantial minority (22.7%) of married-couple families has only one earner, while 76% have at least two earners. Most of these families are able to maintain their income because both parents are employed. Earnings from employment accounted for 95% of total family income in 2008 for married-couple families with two children. Lower-income married-couple families are more likely to have only one earner, suggesting that some of them may be trading off lower incomes for one parent's time at home.

Among single-parent families, the majority (55.2%) has only one earner and 12.1% have no earners. Single-parent families with no earners are likely getting income from other sources whether governmental (*e.g.*, Social Security or disability income) or private (*e.g.*, child support, alimony or retirement). Many of them are likely to be living with other adults. Table 4 suggests one reason why many single-parent families have much lower incomes than married-couple families. They have far fewer earners. Earnings from employment accounted for 81.5% of total family income in 2008 for single-parent families with two children. The parents in these single-parent families (who are typically mothers) have less education than the typical parent in a married-couple family, which also reduces their income.

Table 4

Percentage of Families by Number of Earners, Selected Income Groups, 2008

a. Married-Couple Families with Two Children

Number of Earners	All	Family Income Levels		
		Less than \$70,000	\$70,000 to \$90,000	Greater than \$90,000
None	1.3	3.3	0.0	0.1
One	22.7	34.8	16.0	14.3
Two or more	76.0	61.9	84.0	85.7
All	100.0	100.0	100.0	100.0

b. Single-Parent Families with Two Children

Number of Earners	All	Family Income Levels		
		Less than \$20,000	\$20,000 to \$30,000	Greater than \$30,000
None	12.1	27.4	5.6	3.4
One	55.2	52.7	63.7	53.5
Two or more	32.7	19.9	30.7	43.1
All	100.0	100.0	100.0	100.0

Source: U.S. Census Bureau, Current Population Survey, 2009 ASEC and ESA calculations.

V. Changes Over Time

It is interesting to consider how the situation of these families might have changed over the last two decades. In order to look at changes in the situation of those who seek to attain a middle class lifestyle, we compare the estimates above from 2008 with data from 1990.

Figure 4 shows how incomes among our two types of families have changed over these two decades. In 1990, two-parent two-child families reported a median income of \$67,100, increasing to \$80,600 by 2008, a 20% increase. (All of these income data are reported after adjusting for inflation by stating the 1990 data in 2008 inflation-adjusted dollars using the Consumer Price Index Research Series, known as CPI-U-RS.) Families at the 25th percentile of the income distribution of two-parent two-child families experienced an income increase of 14% and those at the 75th percentile experienced an income increase of 28%.

One-parent two-child families also experienced substantial income gains. At the median, their income went from \$20,800 to \$25,200, a 21% gain. At the 75th percentile of the income distribution of one-parent two-child families, income rose 10%. (As noted previously, we consider it almost impossible for one-parent two-child families at the 25th percentile of the income distribution among these families to achieve a middle class lifestyle and do not include them in our analysis. All of them are below the poverty line.)

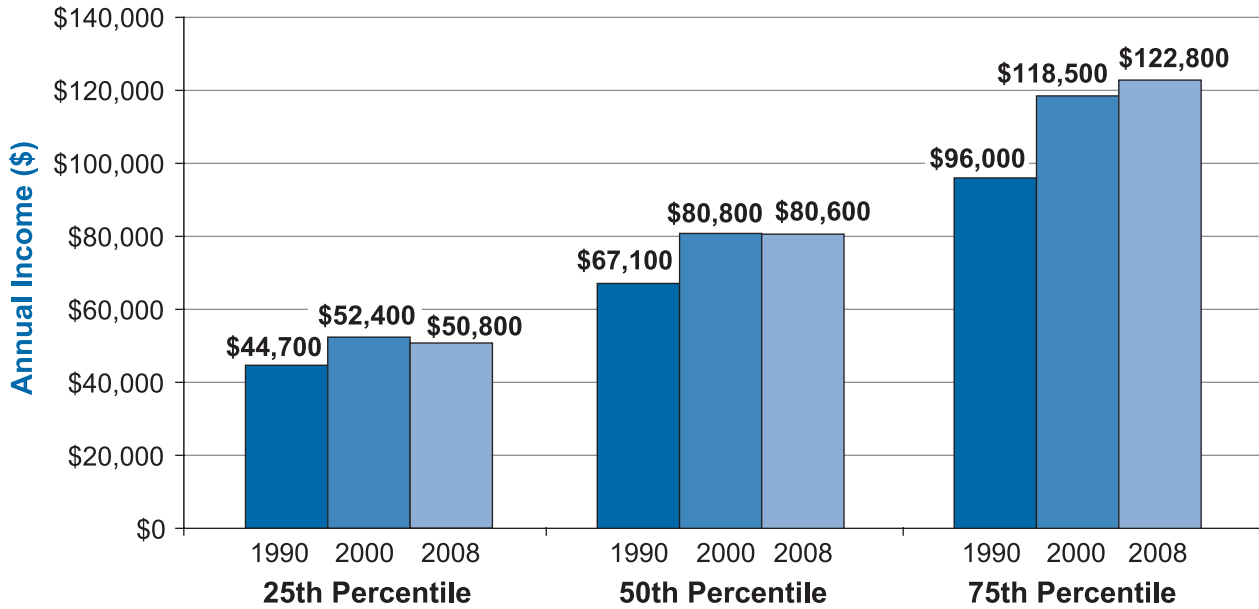
These are substantial income gains. However, as also shown in Figure 4, incomes rose significantly for families during the 1990s but few gains occurred during the decade of the 2000s. For two-parent two-child families, the gains in income between 1990 and 2000 ranged from 17% at the 25th percentile to 23% at the 75th percentile. For one-parent two-child families, the gains were 32% at the median and 20% at the 75th percentile. However, incomes for most of these groups either stagnated or declined during the 2000s. (Note that this is not a function of using 2008 as the end-point in this analysis. Although 2008 was a recession year, the income gain patterns would look very similar if we used 2007 as our end-point comparison year.)

Figure 4

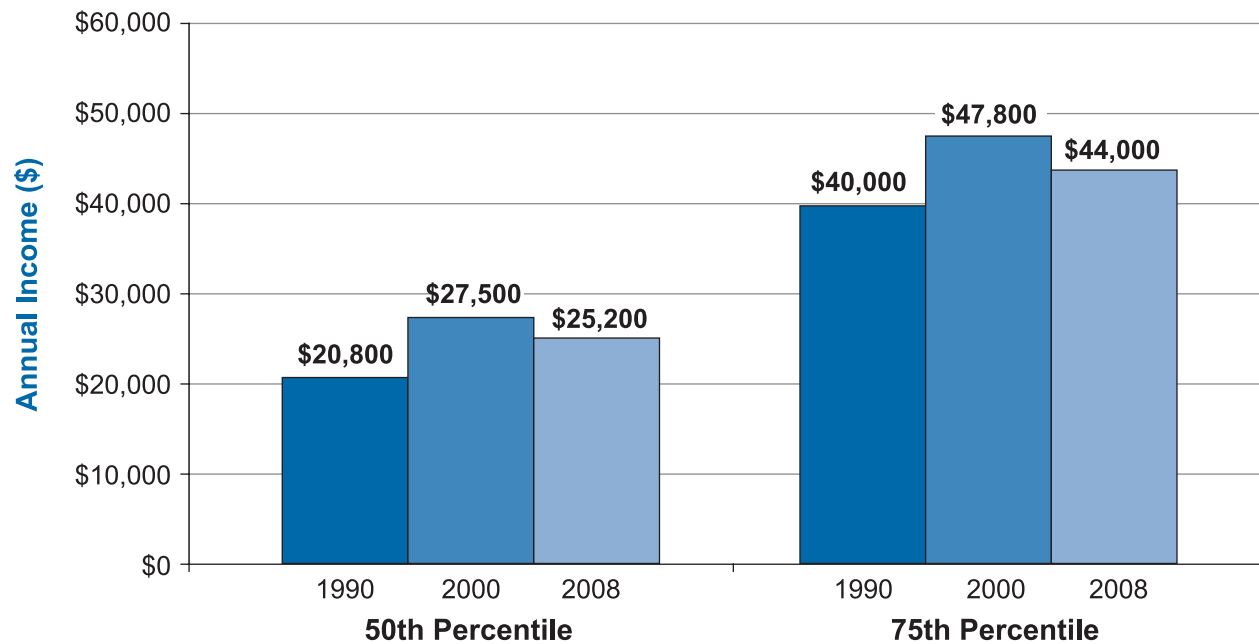
Family Income Over Time

All 1990 and 2000 data are adjusted for inflation and expressed in 2008 dollars

a. Married-Couple Families with Two Children



b. Single-Parent Families with Two Children



Source: U.S. Census Bureau, Current Population Survey, 2009, 2001 and 1991 ASEC and ESA calculations.

The income gains over these two decades for our two-child families are far higher than that indicated by the aggregate data, which show that median income rose only 9% between 1990 and 2008 among all American households. Why are the gains so much larger among these two-child families?

There are four reasons (Appendix Table 2 provides background information for the facts cited below):

- Almost all of these families show greater hours of work in 2008 than in 1990. For instance, two-parent families have experienced a 5% increase in their annual work hours (from 3,567 to 3,747, equivalent to almost 5 weeks of additional full-time work). Single-parent families have experienced a 13% increase in work hours. Increases in work hours can help families raise their income, but this comes at the cost of less time at home with children and less time for non-market-work activities. This might also mean greater child-care expenses, which are not accounted for in this analysis.
- Parents of two children are a different group in 2008 than in 1990. They are older and better educated. This reflects both increases in the age of first births and increases in education levels (particularly among women). The median two-parent family is now headed by someone with more years of college than in 1990. The median one-parent family is now headed by someone with some college rather than by someone with only a high school degree. More skilled and older parents have higher earnings and hence higher incomes.
- Families with two children are a declining share of the overall population, with particularly large declines in the share of the population living in two-parent two-child families. More people are living in single-parent families (even though the share of people in families with single parents and two children has fallen), living alone or living in families without children. So, even while incomes among families with two children are growing, aggregate incomes are growing much more slowly because fewer people are living in this family structure.
- Finally, there have been real gains in wages over these time periods among female workers at all skill levels and among more educated male workers. One reason why incomes at the 75th percentile went up more rapidly than at the median is that wage gains over the past two decades have been concentrated among higher-skilled and higher-wage workers.

This means that families who strive to attain middle class status have more income now than in the past, although they are also working more. This suggests that it would be easier to reach middle class goals with their income in 2008 than in 1990. Unfortunately, income gains have to be contrasted with changes in the prices of goods that middle class families strive to attain. And the unpleasant fact is that the prices of some of the biggest expenditure items for middle class families have increased much more rapidly than their incomes.

Table 5 shows how prices have changed for three of the major components in the middle class family budgets we describe above, namely, housing, health care, and college. In putting this table together, we try to compare items that are as identical as possible in both years. The first three

columns on Table 5 present the actual price levels for 1990 and 2008 and the change in these prices from 1990 to 2008. The last three columns look at inflation-adjusted price levels and changes. We adjust the 1990 prices for economy-wide inflation levels (using the CPI-U-RS price series), so the last column shows the increase in the price of these items over and above the average level of inflation. Hence, the price changes from the last column of Table 5 can be directly compared to the increases in income between 1990 and 2008, shown in Figure 5, since incomes are adjusted for inflation in the same way.

As Table 5 indicates, the actual price of the median house has increased by 150%, from \$79,100 to \$197,600 over the past two decades. The last column indicates that this was 56% faster than the overall rate of inflation. This means that the equivalent down-payment and mortgage payments for a house have gone up at a rate faster than the increase in family incomes for many families.

As many have noted, the price of health care expenditures paid by families, including both premiums and out-of-pocket medical expenditures has soared over the past two decades. We estimate this has gone from \$1,200/year to \$5,100/year, a 325% increase in price. This is 155% more than the overall rate of inflation and far above the rate of increase in incomes.

Finally, the price of college has also gone up rapidly. Tuition, fees, and room and board at four-year public colleges have increased 60% faster than the overall rate of inflation over this time period, while they have increased 43% faster at four-year private schools.

Figure 5 compares the gains in inflation-adjusted median income between 1990 and 2008 among our two types of families with the increases in prices (after adjusting for economy-wide inflation) of housing, health care and college. Parents with growing children are most likely to make investments in housing and in college, and to care about purchasing health insurance for their families. Hence, they are more affected by these large price rises than are other persons. Prices of other items (not listed on Table 5) that are likely to be consumed by the average family do not show increases of the same magnitude. For example, prices of toys, apparel, televisions and computers have declined during the last two decades while prices of food, new and used vehicles, and furniture have increased at less than the rate of overall inflation.

Even though incomes among families with two children have been rising, equivalent families are likely to feel further behind in 2008 than in 1990. The main reason is that prices for some of their big-ticket expenditures are much higher, relative to their incomes, than they were in 1990. In addition, the adults in many of these families are working more hours to support their increased income. We conclude that it is harder to attain a middle class lifestyle in 2008 than it was two decades ago. The goods that parents want to buy for themselves and for their children to live a middle class lifestyle are harder to attain now at current income levels than they were in the past.

Table 5
Price Changes in Key Middle Class Items: 1990 - 2008

	Actual 1990 prices	Actual 2008 prices	Actual price changes	Inflation Adjustment		
				1990 prices in 2008 dollars	Actual 2008 prices	Price changes in inflation- adjusted terms*
Housing (Median value)	\$79,100	\$197,600	150%	\$126,600	\$197,600	56%
Health Care (Premiums and out-of-pocket expenses)	\$1,200	\$5,100	325%	\$2,000	\$5,100	155%
College						
Four-year public college (Tuition, fees, and room and board)	\$5,200	\$13,400	158%	\$8,400	\$13,400	60%
Four-year private college (Tuition, fees, and room and board)	\$13,200	\$30,400	130%	\$21,200	\$30,400	43%

* One way to interpret this column is to recognize that it shows price changes in excess of economy-wide inflation.

Sources:

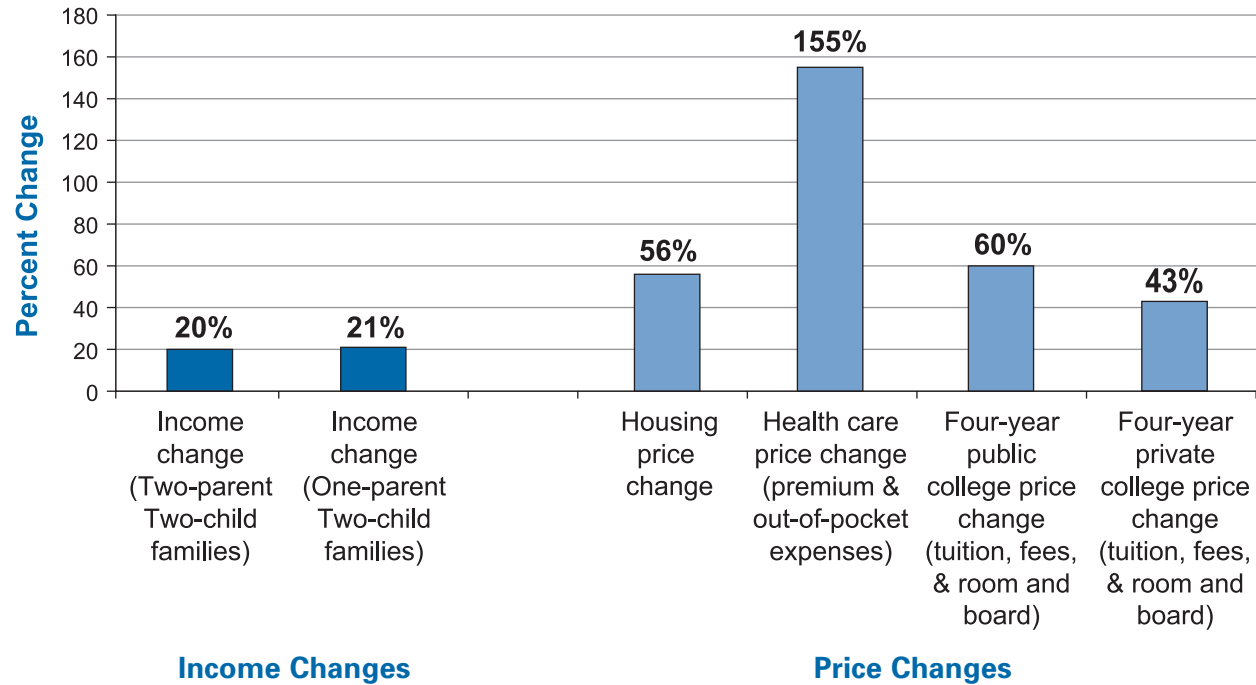
Housing: U.S. Census Bureau, 2008 American Community Survey (Table B25077) and 1990 Decennial Census (Table H023B).

Health Care Expenses: Bernard D., Bantlin J. Family Level Expenditures on Health Care and Insurance Premiums among the Nonelderly Population, 2006. Research Findings No. 29. March 2009. Agency for Healthcare Research and Quality, Rockville, MD. Gabel, Jon R., Paul B. Ginsburg, Jeremy D. Pickreign, and James D. Reschovsky "Trends In Out-Of-Pocket Spending By Insured American Workers, 1990–1997." Health Affairs. March/April 2001.

College: U.S. Department of Education, National Center for Education Statistics. (2009). Digest of Education Statistics, 2008 (NCES 2009-020), Table 331.

Note: While we calculated the 1990 and 2008 prices for housing, health care and college using actual information on their cost, there are also published price indexes for housing, medical care, and college. Consistent with this table, all of these indexes also show substantially higher price increases in these commodities than is shown in the aggregate CPI.

Figure 5
Changes in Median Real Family Income vs. Price Changes
in Key Middle Class Items: 1990 - 2008



See Figure 4 and Table 5 for data sources.

VI. Conclusion

Families across the income spectrum often report themselves as middle class. This suggests that most American families share the desire for economic stability and a better life for their children. Income may not be the primary determinant of whether a family considers itself middle class, although income will shape and constrain choices. We assume that families that strive to be middle class want to attain certain things, including their own home, a car for each adult, retirement and college savings, adequate health care, and a regular family vacation.

Our hypothetical budgets indicate that a middle class lifestyle is possible even among relatively lower-income families under the right circumstances. Of course, lower-income families will face many more trade-offs and saving will be much harder for them. Single-parent families face particular difficulties in reaching these goals because of their lower income levels.

Yet, it should be clear that only a few unplanned expenses can dispossess any of these families from their middle class dreams. Loss of a job, unexpected illness that isn't covered by health insurance, or the need to help out an elderly parent can create a severe budget crisis for any of the families that we describe above. This will require them to forego some of the things that middle class American families expect.

Housing is the biggest wild card in these budgets. In some areas of the country, even the two-parent family at the 75th percentile of the income distribution would be unable to buy the average available house and would have to select a smaller-than-average house or live further away from their jobs and pay higher commuting expenses.

In fact, while we've focused particular attention on the lower-income families, it is easy to see why even the 75th percentile family may feel very budget-constrained. We are not assuming an extravagant lifestyle for this family. Particularly if this higher-income family lives in a high-cost housing area and wishes to send their children to a private college while also accumulating adequate retirement savings, the family will quickly face real difficulties putting together a workable budget.

Not all families will value the aspirations that we describe in this report and this is both expected and appropriate. There is no reason to expect that all families want the same things. Some families consider two or even three cars essential for their well-being, while others prefer to rely on public transportation. Similarly, some families may choose to forgo vacations and other luxuries to send children to private colleges. These are all personal preferences and trade-offs across these choices are expected.

The income of families with two children has risen substantially over time, in part because the parents of two children are a different group now versus two decades ago. They have become more educated and older, earning more income and working more hours. At the same time, despite these income increases, these middle class goals have become harder to attain because the costs of three big items – housing, health care, and college – have risen faster than their incomes. Thus, we conclude that it is harder to attain a middle class lifestyle now than it was in the recent past.

A major conclusion to be drawn from this report is that planning and saving are critical elements in attaining a middle class lifestyle for most families. Under the right circumstances, even families at the lower end of the income scale may be able to achieve many of the aspirations listed if they are willing to undertake present sacrifices and necessary saving, and if nothing unexpected happens to their income or their budget needs.

One of the hallmarks of America has been the common dreams among families of all backgrounds for economic security and a better life for their children. Many middle class families have been able to achieve this dream. Unfortunately, not all families are able to afford the sort of expenditures that we lay out in this report. Even those families that can afford a middle class lifestyle must make regular sacrifices and may be one unexpected event away from disaster. To provide stability for American families, our nation needs a healthy economy, a responsible private sector that offers decent jobs with health care and pension plans, and an effective public sector that provides high quality schools for all children. When these goals are met, more families will be able to reach their middle class dreams.

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Appendix 1 Assumptions, Sources and Methods Used in Tables 2 and 3

	General		Married-Couple Families with Two Children		Single-Parent Families with Two Children	
	25th Income Percentile	50th Income Percentile	50th Income Percentile	75th Income Percentile	50th Income Percentile	75th Income Percentile
Annual Income						
	Data from the 2009 Annual Social and Economic (ASEC) Supplement of the Current Population Survey. Downloaded from U.S. Bureau of the Census website (http://dataferrett.census.gov/index.html).					
House	The house value is determined by how much disposable income is left over after accounting for all other aspirational and non-aspirational expenses. We assume that a 20% down payment is made and that a fixed rate mortgage is obtained to finance the rest of the house value. The costs of repairs, maintenance, and insurance are assumed to vary in direct proportion to the cost of the house. Sources: Rate for conventional fixed-rate 30-year mortgage: 4.94% (http://www.federalreserve.gov/releases/h15/update/). Property taxes (\$2,779) and maintenance, repairs, insurance, other expenses (\$1,616) for average home-owner with mortgage from "Table 7. Housing tenure and type of area: Average annual expenditures and characteristics, Consumer Expenditure Survey, 2007" (http://www.bls.gov/cex/2007/Standard/tenure.pdf) and scaled by value of house.					
Medical expenses	<p>Out-of-pocket premiums for employer-sponsored health insurance plus non-covered expenses. Source: Bernard D., Banthijn J. <i>Family Level Expenditures on Health Care and Insurance Premiums among the Nonelderly Population, 2006</i>. Research Findings No. 29. March 2009. Agency for Healthcare Research and Quality, Rockville, MD. (http://www.meps.abrq.gov/mepsweb/data_files/publications/rf29/rf29.pdf).</p> <p>2006 values adjusted to 2008 prices using the Consumer Price Indices (CPI) for medical care services (2006=350.6 and 2008=384.943) and health insurance (2006=103.1 and 2008=114.221) downloaded from the U.S. Bureau of Labor Statistics CPI website (http://www.bls.gov/cpi/home.htm).</p>	<p>2006 mean out-of-pocket expenditures for employer-sponsored health insurance premiums for two-person families (\$2,490).</p> <p>2006 mean out-of-pocket expenditures on health care services for families with two adults and at least one child with partial public health insurance (\$959).</p>	<p>2006 mean out-of-pocket expenditures for premiums among 3+ person families with private coverage all year (\$2,846). 2006 mean out-of-pocket expenditures on health care services among families with 3+ members with private coverage (\$1,795)</p>	<p>Premiums = \$0 (Assumes CHIP coverage for children; parent declines to purchase insurance coverage for self).</p> <p>2006 mean out-of-pocket expenditures on health care services for families with one adult and at least two children with partial public health insurance (\$616).</p>	<p>2006 mean out-of-pocket expenditures for employer-sponsored health insurance premiums for single-person families (\$1,002).</p> <p>2006 mean out-of-pocket expenditures on health care services for families with one adult and at least two children with partial public health insurance (\$616).</p>	

	General	Married-Couple Families with Two Children			Single-Parent Families with Two Children	
		\$50,800 25th Income Percentile	\$80,600 50th Income Percentile	\$122,800 75th Income Percentile	\$25,200 50th Income Percentile	\$44,000 75th Income Percentile
Car Ownership and Operation	<p>Sources: Gasoline price: \$2.53 from Energy Information Administration. <i>Monthly Energy Review</i>. August 2009.</p> <p>Interest rate (3.43%) and approximate term of loan (5 years): Federal Reserve Board G19 (Consumer Credit) release; July 2009 "new car loans by auto finance companies" (http://www.federalreserve.gov/releases/g19/current/g19.htm).</p> <p>All other items: American Automobile Association. <i>Your Driving Costs 2008 Edition</i>. Assumes interest and principal for car loan are averaged over eight years (assumed life of car).</p>	<p>Costs per mile:</p> <p>Gas: \$0.0812</p> <p>Maint.: \$0.0398</p> <p>Tires: \$0.0055</p> <p>Fixed costs:</p> <p>Ins.: \$949</p> <p>License, registration, taxes: \$410</p>	<p>Costs per mile:</p> <p>Gas: \$0.1067</p> <p>Maint.: \$0.0467</p> <p>Tires: \$0.0085</p> <p>Fixed costs:</p> <p>Ins.: \$907</p> <p>License, registration, taxes: \$562</p>	<p>Costs per mile:</p> <p>Gas: \$0.1148</p> <p>Maint.: \$0.0507</p> <p>Tires: \$0.0077</p> <p>Fixed costs:</p> <p>Ins.: \$907</p> <p>License, registration, taxes: \$562</p>	<p>Costs per mile:</p> <p>Gas: \$0.0812</p> <p>Maint.: \$0.0398</p> <p>Tires: \$0.0055</p> <p>Fixed costs:</p> <p>Ins.: \$949</p> <p>License, registration, taxes: \$410</p>	<p>Costs per mile:</p> <p>Gas: \$0.0812</p> <p>Maint.: \$0.0398</p> <p>Tires: \$0.0055</p> <p>Fixed costs:</p> <p>Ins.: \$949</p> <p>License, registration, taxes: \$410</p>
		College Education	<p>Assumes earnings on college savings exceed college expense inflation by one percentage point.</p> <p>Sources: Costs of college: The College Board. Trends in College Pricing 2008. (http://professionals.collegeboard.com/profdownload/rends-in-college-pricing-2008.pdf). Percent of undergraduates living at home with parents (25%— basis for assumption that students at four-year public colleges live at home with parents for one year): National Center for Education Statistics. <i>Profile of Undergraduates in U.S. Postsecondary Education Institutions: 2003-04</i>. June 2006. (http://nces.ed.gov/pub20062006184_rev.pdf). Ratios of grants to tuition, 2007-2008: computed using DAS-T online version 5.0 (http://nces.ed.gov/das/). Assumes all families borrow one year of college costs.</p>	<p>Two-year public college: Published tuition: \$2,402; books: \$1,036; transportation: \$1,380; other expenses: \$1,895; room & board: assumed \$0.</p> <p>Four-year public college: Published tuition: \$6,585; books: \$1,077; transportation: \$1,010; other expenses: \$1,906; room & board (full year) \$7,748.</p> <p>Four-year private college: Published tuition: \$25,143; books: \$1,054; transportation: \$807; other expenses: \$1,397; room & board: \$8,990.</p> <p>Ratio of grants to published tuition:</p> <ul style="list-style-type: none"> 2-parent, 2-child \$50,800 income: 70% 2-parent, 2-child \$80,600 income: 35% 2-parent, 2-child \$122,800 income: 35% 1-parent, 2-child \$25,200 income: 142% for 2-year college; 257% for 4-year public college 1-parent, 2-child \$44,000 income: 88.5% for 2-year college; 78% for 4-year public college 		

	General	Married-Couple Families with Two Children		Single-Parent Families with Two Children		
		\$50,800 25th Income Percentile	\$80,600 50th Income Percentile	\$122,800 75th Income Percentile	\$25,200 50th Income Percentile	\$44,000 75th Income Percentile
Family Vacation	<p>For median two-parent two-child family: benchmarked to cost of one-week vacation package to Disney World originating in Chicago, including air fare, hotel, and park admission (package offered by Southwest Airlines for February 2010). Cost halved for 25th percentile two-parent two-child family and doubled for 75th percentile two-parent two-child family.</p> <p>Cost for 75th percentile single-parent two-child family is two-thirds of cost for 25th percentile two-parent two-child family; this cost is halved for the median single-parent two-child family.</p>					
Retirement	<p>After-tax savings rate needed to achieve a 50% income replacement rate in combination with Social Security starting at age 65.</p> <p>Interest rate: Assumed at 5%.</p> <p>Annual rate of salary increase: 4% (average growth in average wages by Social Security over past 10 years).</p> <p>Life expectancy at 65 for all persons: <i>Statistical Abstract of the United States 2008</i> (http://www.census.gov/compendia/statab/tables/09s0101.pdf).</p> <p>Social Security replacement ratios: <i>The 2009 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds</i>, p. 198 (http://www.ssa.gov/OACT/TR/2009/tr09.pdf).</p> <p>Average Wage Index in 2008: \$41,334.97 (http://www.socialsecurity.gov/OACT/COLA/awidevelop.html)</p>	<p>Social Security replacement rate: 36% (assumes career-average earnings at "scaled medium earnings" = about 100% of the national average wage index (AWI)).</p>	<p>Social Security replacement rate: 27% (assumes career-average earnings at mean of scaled medium and scaled high earnings = about 130% of AWI).</p>	<p>Social Security replacement rate: 24% (assumes career-average earnings at "scaled high earnings" = about 160% of AWI).</p>	<p>Social Security replacement rate: 43% (assumes career-average earnings at "low earnings" = about 45% of AWI).</p>	<p>Social Security replacement rate: 36% (assumes career-average earnings at "scaled medium earnings" = about 100% of AWI).</p>

	General	Married-Couple Families with Two Children		Single-Parent Families with Two Children		
		25th Income Percentile	50th Income Percentile	75th Income Percentile	50th Income Percentile	75th Income Percentile
"Non-aspirational" Expenditures	<p>Estimated average share of disposable income spent on food, utilities, entertainment, household furnishings and equipment, apparel, household operations, and other items. Includes sales taxes. Sources: U.S. Bureau of Labor Statistics, "Table 2. Income before taxes: Average annual expenditures and characteristics, Consumer Expenditure Survey, 2008" (http://www.bls.gov/cex/2008/StandardIncome.xls) and "Table 2301. Higher income before taxes: Average annual expenditures and characteristics, Consumer Expenditure Survey, 2008" (http://www.bls.gov/cex/2008/StandardHigherIncome.xls).</p>	39.75% = average for \$40,000-\$49,999 income households (41.3%) and \$50,000-\$59,999 income households (38.3%)	34.1% = share for \$80,000-\$99,999 income households	30.8% = share for \$120,000-\$149,000 income households	53.3% = average for \$20,000-\$29,999 income households (57.6%) and \$30,000-\$39,999 income households (49.0%)	41.3% = share for \$40,000-\$49,999 income households
		<p>Taxes</p> <p>FICA: 1.4% of all income plus 6.2% of income up to 2008 Social Security Wage Base (\$106,800). Federal Income Taxes: Average tax rates drawn from Greg Leisteron, "Income Taxes and Tax Rates for Sample Families, 2006," Urban Institute, December 2006 (http://www.urban.org/publications/411402.html) for filing statuses "married filing joint" with two children and "head of household" with two children. Based on Urban-Brookings Tax Policy Center Microsimulation Model (version 1006-1). State and Local Income Taxes: Average tax rates are population-weighted averages for the largest city in each state and the District of Columbia, based on Government of the District of Columbia, Office of Revenue Analysis, <i>Tax Rates and Tax Burdens in the District of Columbia – A Nationwide Comparison 2008</i>. (September 2008), (http://www.cfo.dc.gov/cfo/frames.asp?doc=/cfo/lib/cfo/casb_reports/08study-final.pdf) and ESA calculations.</p>	2.2% = rate for family with Adjusted Gross Income = \$50,000	5.3% = rate for family with AGI = \$75,000	10.2% = rate for family with AGI = \$125,000	14.5% = rate for family with AGI = \$25,000

Appendix 2**Data for Section V: Changes Over Time****Family Characteristics at Selected Percentile Ranges of Family Income****Part 1. Married-Couple Families with Two Children**

	1990	2008	Change*
a. 20th to 30th percentile of Family Income			
Age (in years) of Family Head	35.2	37.6	2.5
Average Education (in years) of Family Head	12.4	13.2	0.9
Annual Hours Worked, all Adults in Family	3,167	3,303	4.3%
b. 45th to 55th percentile of Family Income			
Age (in years) of Family Head	37.1	38.5	1.5
Average Education (in years) of Family Head	13.1	14.3	1.1
Annual Hours Worked, all Adults in Family	3,567	3,747	5.0%
c. 70th to 80th percentile of Family Income			
Age (in years) of Family Head	38.7	40.8	2.2
Average Education (in years) of Family Head	14.3	15.5	1.2
Annual Hours Worked, all Adults in Family	3,878	4,011	3.4%

Part 2. Single-Parent Families with Two Children

	1990	2008	Change*
a. 45th to 55th percentile of Family Income			
Age (in years) of Family Head	33.9	35.4	1.4
Average Education (in years) of Family Head	11.9	13.0	1.1
Annual Hours Worked, all Adults in Family	1,890	2,143	13.4%
b. 70th to 80th percentile of Family Income			
Age (in years) of Family Head	36.9	38.2	1.3
Average Education (in years) of Family Head	13.1	13.7	0.6
Annual Hours Worked, all Adults in Family	2,328	2,389	2.6%

* Change was calculated using unrounded data.

Source: U.S. Census Bureau, Current Population Survey, 2009 and 1991 ASEC and ESA calculations.

Note: Education is a rough approximation for 1990.



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