Defining Utah's Middle Class

By: Levi Pace, Ph.D., Senior Research Economist | Kem C. Gardner Policy Institute

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Executive Summary

At the request of the President's Office at the University of Utah and in support of the Alliance for the American Dream, the Kem C. Gardner Policy Institute reviewed leading definitions of the middle class, with an emphasis on income-based measures. We estimated middle class income levels and populations for Utah and the U.S. for selected years since 1980. We expect these definitions and results will support efforts to create pathways to Utah's middle class and improve stability for people already there.

"Middle class" is a malleable, multifaceted identity tied to opportunity, quality of life, and financial stability. There is no standard definition for the U.S. or Utah. Researchers measure this fluid concept with criteria such as income, wealth, occupation, educational attainment, and self-perception.

We define the middle class based on household income, compared to median income and federal poverty guidelines. In 2016, the regionally adjusted lower and upper income bounds for Utah's middle income households were $39,690 to $98,270 (Table 1).

Table 1: Utah Middle Class Income, 2016
(2017 Dollars)

Persons per Household	Household Income Range	
	Lower Bound	**Upper Bound**
1	$17,320	$47,150
2	$38,890	$95,170
3	$47,030	$111,390
4	$49,580	$120,860
5+	$54,080	$123,480
All Households	**$39,690**	**$98,270**

Source: Kem C. Gardner Policy Institute analysis of Utah data in the 2016 American Community Survey, U.S. Census Bureau.

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Kem C. Gardner Policy Institute | 411 East South Temple Street, Salt Lake City, Utah 84111 | 801-585-5618 | gardner.utah.edu
D A V I D   E C C L E S   S C H O O L   O F   B U S I N E S S

By this definition, just under half of Utah's population belonged to the middle class in 2016 (Figure 1). From 1980 to 2016, middle-income earners as a share of the population decreased from 51.4 percent to 48.6 percent. The lower and upper classes claimed people leaving the middle class. The share of Utah's population with incomes below middle class levels approached one-fourth in 2016.

Utah's middle class population share was larger than that of the U.S. from 1980 to 2016 (Figure 2). In 1980, the U.S. middle class population share was 48.3 percent, 3.1 percentages points below the Utah share. The gap favoring Utah widened to 4.2 percentage points in 2016.

Figure 1: Utah Population by Income Class, Selected Years 1980–2016
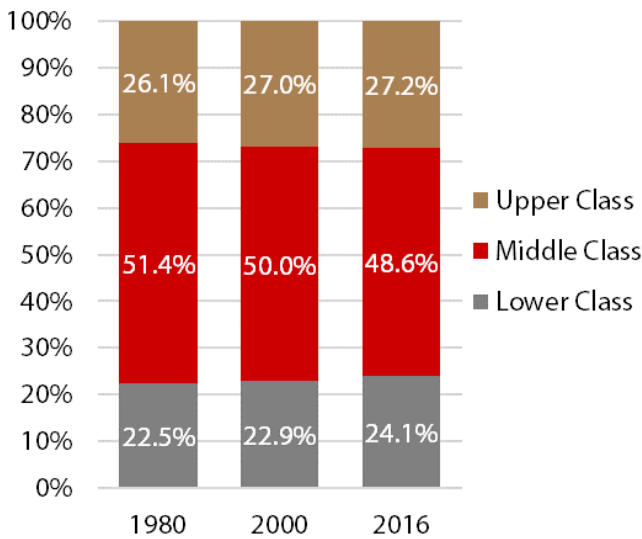
Source: Kem C. Gardner Policy Institute, U.S. Census Bureau.

Figure 2: Middle Class Population, Utah and U.S., Selected Years 1980–2016
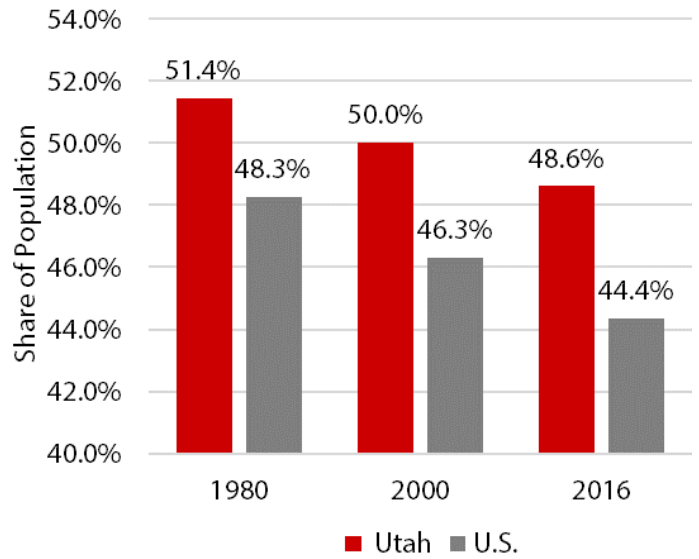
Source: Kem C. Gardner Policy Institute, U.S. Census Bureau.

Since 2010, improving economic conditions in Utah contributed to a pause in the long-term trend of slow decline in the middle class. Yet, even with favorable market conditions, people in lower income brackets benefitted less than their peers from economic gains, and challenges and outcomes were not equal for all groups in the state.

Section 1. Who Counts as Middle Class?

Many understandings shed light on middle class identity. We address definitions related to people's opportunities and standard of living. Criteria for defining the middle class include financial measures (income, spending, and wealth), human capital (personal capacity), social mobility (lifetime and intergenerational), and self-identification (Table 2).

Table 2: Criteria for Middle Class Definitions

Type	Measures	Examples	Strengths
Income	Annual household income adjusted for household size	- 20th to 80th percentiles - 50% to 150% of median - 150% to 500% of poverty guidelines	High data quality, income closely related to other middle class criteria
Spending	Consumer expenditures	- Basic needs, such as housing and health care - Children's education - Occasional vacations	Addresses affordability and quality of life in specific areas
Wealth	Net worth overall and for specific assets	- Total assets minus debts - Adequate retirement savings - Value of own business - Homeowner status	Reflects long-term financial security and potential income sources
Human capital	Career-related learning and accomplishments	- Educational attainment - Work experience - Occupation type and job skills	Addresses people's ability to participate in the economy and society
Social mobility	Changes in a person's social class over a lifetime and between generations	- A person's current, past, and prospective social class - Inflation-adjusted income of parents or children at same age	Measures access to the middle class and people's ability to maintain or increase their standard of living
Self-identification	People self-identify their social class.	- What percent of adults consider themselves middle class	Incorporates any economic and non-economic factors that matter to middle class individuals

Source: Kem C. Gardner Policy Institute literature review (e.g., Chetty et al. 2016, Easterly 2001, Krueger 2012, Pew 2008, and U.S. Department of Commerce 2010).

Becoming middle class means gaining a foothold in society in terms of opportunity, prosperity, resources, and self-determination. While middle class households still struggle to improve their conditions, financial pressures are not regularly foremost in their decisions, as they are capable of weathering setbacks such as an unanticipated expense (Board of Governors of the Federal Reserve System 2018).

Finances: Income, Spending, and Wealth

Wealth, spending, and income measure economic status and suggest whether someone enjoys a middle class standard of living (U.S. Department of Commerce 2010). Measures of wealth include homeowner status, home value, and home equity. Non-real estate categories of physical and financial assets are automobiles and savings. Another approach is to look more broadly at total assets or total net worth, as wealth may generate income such as investment gains and retirement account disbursements.

Consumer spending addresses people's standard of living in specific areas, such as food, transportation, education, and health care. State-level data quality for personal and household income is better than data for spending or wealth, and income is associated with total spending and wealth.

Human Capital

Human capital refers to a person's capacity to contribute to the economy. Two human capital measures of a middle class status are education and occupation (Easterly 2001; Pew 2008). Formal schooling, job training, and informal education improve financial well-being, especially in the long term. Job skills, work experience, social networks, and occupational prestige enable households to reach the middle class and stay there. Besides economic rewards, learning and career investments can improve a person's social standing, their quality of life, and their ability to support and connect with others.

Social Mobility

We define social mobility with respect to the likelihood of an individual having a higher (or lower) income than his or her parents did at the same age.[1] Open societies promote upward mobility; they enable resourceful people with adequate social supports to find well-being, regardless of where they started (Krueger 2012).

Increased separation between income strata in the U.S. in recent decades suggests increasing social class rigidity. From the 1980s through 2008, the probability of men and women advancing to a higher income level decreased (Carr and Wiemer 2016). Adults, ages 25–59, became more likely to remain in the same income decile throughout 15-year periods.

The percentage of Utahns who reach their parents' economic status declined in recent decades. In 2010, 53.1 percent of people ages 25–35 earned higher incomes than their parents had during that age range, after adjusting for inflation (Chetty et al. 2016). That share had fallen 11.2 percentage points since 1990, when it was 64.3 percent. Nationwide, the trend was more pronounced with a 12.2 percent decrease from 1990 to 2010 in the share of people who exceeded their parents' income. Downward mobility between generations became more common, and upward mobility became less common for the middle class and other social classes.

Besides securing their own economic well-being, middle class individuals can enable others to obtain a good standard of living (U.S. Department of Commerce 2010). In 2008, 71 percent of survey respondents nationally, who self-identified as middle class, expected their children's standard of living would be the same or better than their own, this is well above the 51 percent of parents in the lower class with that hopeful expectation (Pew 2008).[2]

Self-Identification

Middle class status rests on many economic and social factors. One way to incorporate them is by asking people if they are middle class. In the past 10 years, roughly half of adults in the U.S. considered themselves middle class depending on the year and the question's social class alternatives to middle class.

In 2017, 44 percent of adults self-identified as "middle class" (Figure 3). Another 36 percent considered themselves lower or lower-middle class, and 20 percent considered themselves upper-middle or upper class (Gallup 2017). For the same question asked in 17 Gallup surveys between 2000 and 2017, the middle class share declined by 4 percent and ranged from 38 percent to 48 percent of the population. Decreases in middle class population were more commonly associated with growth in the working and lower classes than with growth in the upper-middle and upper classes. The 2017 result of 44 percent was just above the median for all years (43 percent).

Figure 3: Self-Identified Social Class of U.S. Adults from Two Surveys
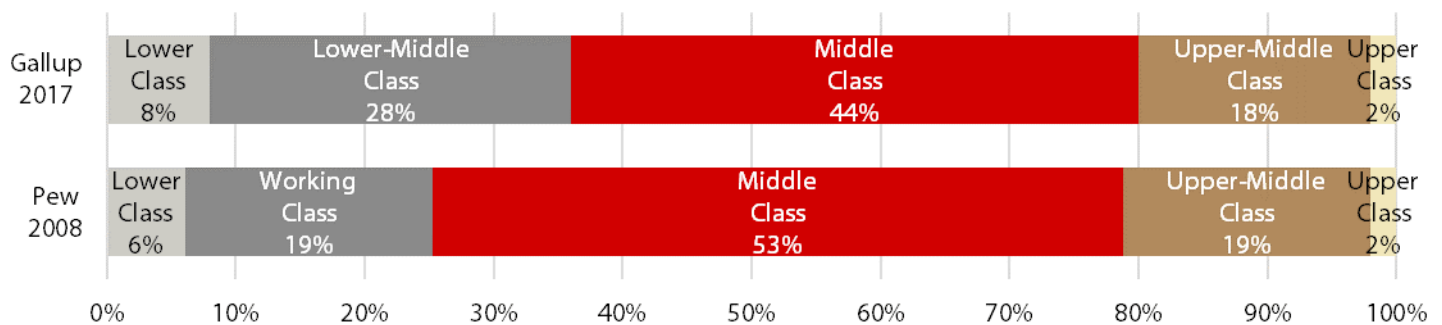
Note: The Gallup survey included 1,009 adults (Newton 2017). For the Pew survey, 2,413 adults were interviewed, of whom 1 percent abstained, explaining the 99 percent total (Pew Research Center 2008). Both employed nationwide, representative samples with a margin of error of ±5 percent or less. Since the surveys used different taxonomies (lower-middle and working classes), this chart does not support conclusions about changes in class shares over time.
Source: Gallup, Inc. and Pew Research Center.

A larger nationwide study by Pew used similar social class options, but replaced "working class" with "lower-middle class." More than half of adults surveyed in 2008 considered themselves middle class (Pew Research Center 2008). The middle class share of 53 percent was nearly 10 percent higher than the 44 percent average of four Gallup poll results that year.

The Pew survey also shows how self-identification can inform and challenge other methods of defining the middle class. In 2008, 41 percent of adults with household income below about $22,000 (inflation-adjusted 2017 dollars) considered themselves middle class. Most were on the younger and older reaches of the adult age distribution. The four income-based definitions in Section 2 of this report only have income bounds extending below $22,000 for one-person households, which made up about 11 percent of the U.S. population in 2008 and 2016. Pew survey participants in low-income households may subscribe to lower or fluid criteria for middle class income. They may consider themselves middle class for reasons besides income, such as quality of life, social status, and retrospective or prospective belonging.

Section 2. Four Types of Income-Based Middle Class Definitions

Income-based measures are the most common approach for defining the middle class. Annual income is a reasonable proxy for middle class markers like financial stability, good quality of life, and children's opportunities. Four categories of income-based definitions with different purposes use absolute dollar amounts, fixed income percentiles, percent of median income, and percent of poverty guidelines (Reeves, Guyot, and Krause 2018). All four definitions are based on household income, not personal income. A household is a group of people living together, whether it be a couple, friends, a parent and child, more than one family, or another configuration.

Absolute Dollar Amounts with no Automatic Rule

Researchers and managers can select absolute dollar amounts for middle class income bounds. This approach is versatile, as a variety of factors can be incorporated to select lower and upper income bounds. One should be transparent about the process

for selecting dollar amounts without an established rule. This approach allows comparisons between regions based on fixed income levels. On the other hand, income levels required to maintain a certain standard of living vary by region, and consumer prices change over time.

As shown in Table 3, a Congressional Research Service (CRS) report recommended U.S. middle class bounds of $45,000 to $230,000 in household income, expressed in inflation-adjusted 2017 dollars (Cashell 2008).[3] The upper income bound is higher than the other three in Table 3 because the CRS definition was the only one to include the upper-middle class along with the middle class. CRS income bounds were based loosely on national surveys asking people to name their social class. Other criteria and personal judgment can be used to define the middle class more narrowly or broadly and to specify different income bounds for each household size.

Fixed Income Percentiles Reflecting Relative Prosperity

The fixed income percentile approach selects middle class income levels based on a portion of the income distribution.[4] Under this method, middle class status is relative to all incomes in the state or country. Middle class income bounds readily adjust from year to year. This approach is not designed to identify changes in the size of the middle class, since the percentiles chosen stipulate its population share.

A common fixed income percentile definition includes households between the 20th and 80th percentiles of income, the middle three quintiles (Easterly 2001). Applied to Utah households in 2016, middle class income by Easterly's definition was $32,750 to $130,880 (Table 3). For a household of one person, middle class household income ranged from $13,300 to $61,400, appropriately much lower than the $51,170-to-$138,350 range for households with five or more members.

Alternative definitions are between the 25th and 75th percentiles, the middle two quartiles, (U.S. Department of Commerce 2010) or between the 20th and 60th percentiles, the second and third quintiles (Busette and Reeves 2018). By these definitions, middle class household shares remain 60 percent, 50 percent, or 40 percent, respectively, every year for any region.

Table 3: Utah Middle Class Household Income by Four Income Definitions (2017 Dollars)

Persons per Household	Absolute Dollar Amounts		Fixed Income Percentiles: 20th to 80th		Percent of Median Income: 50% to 150%		Percent of Poverty Guidelines: 150% to 500%	
	Lower	**Upper**	**Lower**	**Upper**	**Lower**	**Upper**	**Lower**	**Upper**
1	$45,000	$230,000	$13,300	$61,400	$15,400	$46,200	$18,240	$60,790
2	$45,000	$230,000	$34,180	$112,360	$32,750	$98,240	$24,590	$81,970
3	$45,000	$230,000	$42,570	$133,030	$38,780	$116,350	$30,950	$103,150
4	$45,000	$230,000	$44,210	$140,640	$41,850	$125,560	$37,300	$124,330
5+	$45,000	$230,000	$51,170	$138,350	$43,490	$130,470	$49,080	$163,590
All Households	**$45,000**	**$230,000**	**$32,750**	**$130,880**	**$33,280**	**$99,850**	**$31,160**	**$103,860**

Note: Absolute dollar amounts are based on research from 2005 and 2007, rounded to the nearest $5,000, with no variation by household size. Household income lower and upper bounds are estimates based on a 1 percent sample Utah households surveyed about their income in 2016, rounded to the nearest $10.

Source: Kem C. Gardner Policy Institute analysis of 2016 American Community Survey data. Middle class definitions, left to right, from Congressional Research Service (Cashell 2008), World Bank (Easterly 2001), Council of Economic Advisers (Krueger 2012), and Urban Institute (Rose 2016).

Percent of Median Income for Comparisons over Time

The middle class can be defined by multiplying median household income for a given year and region by chosen percentages below and above 100 percent. A median is the middle number or 50th percentile when all values for a population are ordered by size. Households with income within a specified distance of median income are considered middle class.

The percent of median income method serves well for revealing trends in the size of the middle class. Median income is a relatively stable metric. Since income bounds are only anchored at the median, this method is not very sensitive to changes in income distribution like rising income inequality. Changes at the 20th and 90th percentiles of income, for example, have little effect on the median.

Median income is available at local, state, and nationwide levels. Nationwide median income facilitates comparisons between states, whereas state and local median incomes represent their regions.

One definition of this type is 50 percent to 150 percent of median household income (Krueger 2012). Analysis using Krueger's definition suggests middle class incomes for Utah in 2016 ranged from a lower bound of $15,400 per year for a household with one person to an upper bound of $130,470 for a household with five or more people (Table 3).

Percent of Poverty Guidelines to Reflect Basic Spending Needs

Middle class incomes can be defined with reference to poverty guidelines for an income-to-needs measure. Federal poverty guidelines are widely used as a measure of the minimum income required for a household to meet its members' needs. Poverty guidelines reflect the historical cost of basic nutrition multiplied by three and adjusted for inflation each year.[5]

An Urban Institute report set the lower income bound for the middle class at 150 percent of federal poverty guidelines and the upper income bound at 500 percent of the poverty guidelines (Rose 2016). We applied this criteria to Utah households surveyed in 2016, and for a household with two people, annual middle class incomes were between $24,590 and $81,970, while a household with four people required at least $37,300 and less than $124,330 to be considered middle class (Table 3).

Section 3. Utah Definition Based on Income

"Middle class" is a malleable, multifaceted identity. There is no standard definition for the U.S. or Utah, even within the income-based category (U.S. Department of Commerce 2010; U.S. Department of Health and Human Services 2018). We reviewed definitions from prominent researchers, such as William Easterly and Alan Krueger, and organizations such as the Brookings Institution, Congressional Research Service, and Pew Research Center. We looked for income criteria that incorporated Utah's cost of living, varied by household size based on the state's unique demographics, and reflected people's basic needs, not just relative income. We preferred definitions that were not overly narrow or broad compared to the other leading definitions.

Utah Synthesis Definition Anchored to Spending Needs and Relative Income in the State

We adopted a definition of the Utah middle class that incorporates elements of three of the four income-based approaches from Section 2: fixed percentiles, median income, and poverty guidelines.

As chair of the Council of Economic Advisers, Alan Krueger defined the middle class as the range of households that earn between 50 percent and 150 percent of median household income, as we have noted (Krueger 2012). A Pew Charitable Trusts report defined the middle class as the 30th to 70th percentile of an income-to-needs ratio equal to household income divided by federal poverty guidelines by household size (Acs 2011).

For our synthesis definition, we calculated lower and upper income bounds for Utah under the Krueger and Pew definitions and reported combined midpoints. Similarly, to estimate how many Utah households and individuals were in the middle class that year, we averaged our results from both definitions. These results represent Utah's economic landscape by incorporating basic household consumption needs from federal poverty guidelines and Utah median income by household size.

Our definition does not explore subdivisions below or above the middle class. We refer simply to the "lower class" and "upper class." Some studies divide lower class into "lower class" and "working class," and separate upper class into "upper-middle class" and "upper class" (Cashell 2008; Gallup 2017; Pew Research Center 2008). The middle class income bounds for our analysis are centrist, not supposing most lower income households enjoy a middle class lifestyle, and not focusing on the financial circumstances of the upper-middle class or upper class.

We used household-level definitions and data for our analysis. This yielded no results based on personal characteristics of the middle class, such as gender, race, ethnicity, age, and educational attainment. Further research could undertake individual-level analysis. In sections 1 and 4, we review studies that address gender, race, and ethnicity (Busette and Reeves 2018; Carr and Weimer 2016; Kochhar and Cilluffo 2018).

Income Range for Utah's Middle Class Households

We estimated lower and upper bounds for Utah's middle class based on household income. To establish these levels, we applied our definition to Utah data from the 2016 American Community Survey. For all households, the average lower income bound was $39,690 per year, and the average upper income bound was $98,270 (Table 4). By household size, results ranged from $17,320–$47,150 for single-person households to $54,080–$123,480 for households with five or more people.

Table 4: Annual Household Income in Utah, 2016
(2017 Dollars)

Persons per Household	Federal Poverty Guidelines	Median Income	Middle Class Income	
			Lower Bound	Upper Bound
1	$12,160	$30,800	$17,320	$47,150
2	$16,390	$65,490	$38,890	$95,170
3	$20,630	$77,570	$47,030	$111,390
4	$24,870	$83,710	$49,580	$120,860
5+	$32,720	$86,980	$54,080	$123,480
All Households	**$20,770**	**$66,570**	**$39,690**	**$98,270**

Note: Except for federal poverty guidelines, amounts are household income estimates from a 1 percent sample of Utah households surveyed about their income in 2016. Amounts rounded to the nearest $10.

Source: Kem C. Gardner Policy Institute analysis of Utah household data from the 2016 American Community Survey, federal poverty guidelines from the U.S. Department of Health and Human Services.

How Many People are in Utah's Middle Class?

In 2016, 48.6 percent of Utah's population lived in households with middle class incomes, which is over 1,390,000 people in nearly 448,000 households (Figure 4). When we add people in households with incomes below middle class levels, we get 72.7 percent of the population, meaning that almost 2.1 million Utahns lived in households with incomes at or below middle class levels that year.

The American Dream Ideas Challenge focuses on individuals in households with incomes below the lower bound for Utah's middle class, with the intent to provide pathways for them to enter the middle class. By household size, 2016 populations ranged from a low of nearly 123,000 people in one-person households, 5.9 percent of the population, to a high of over 835,000 people in households with five or more people, 40.2 percent of the population (Figure 5 and Table 5). Compared to population, the number of Utah households is more evenly distributed by household size, particularly for the five-or-more category. Tables 5 and 6 present in more detail how many individuals and households are in the lower and middle classes in Utah.
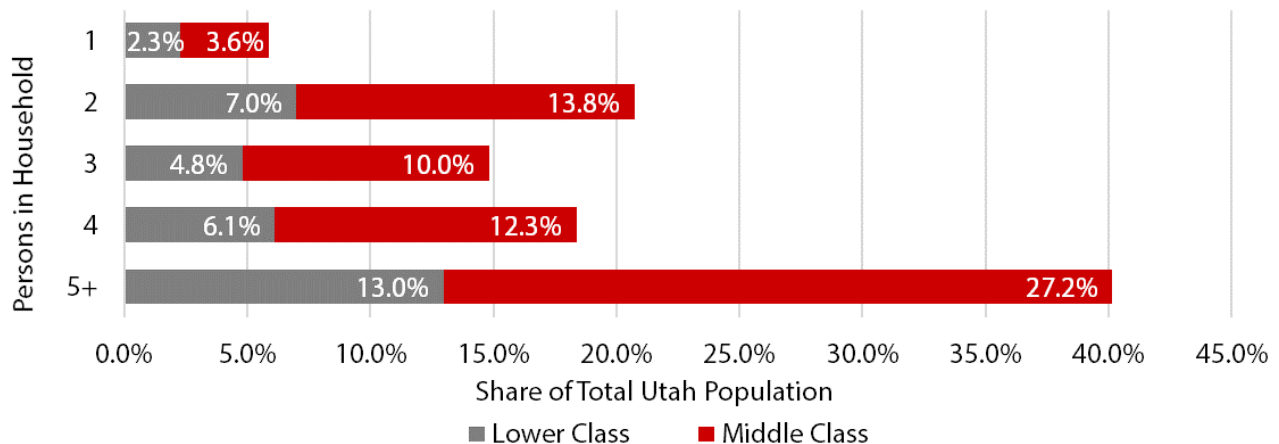
Figure 4: Utah's Middle Class, 2016
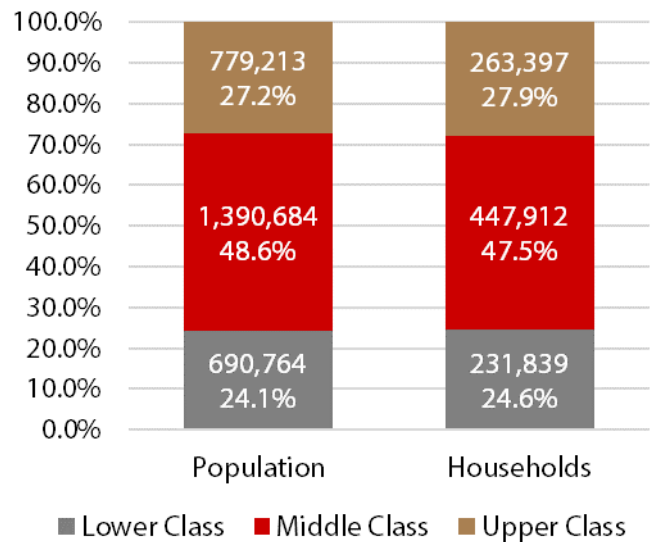
Note: Labels indicate the number and share of individuals and households in each class. See Tables 5 and 6 for more details.

Source: Kem C. Gardner Policy Institute, American Community Survey.

Figure 5: Utah Population Within and Below Middle Class Income Bounds, 2016

Source: Kem C. Gardner Policy Institute analysis of data from the American Community Survey.

Table 5: Utah Population with Incomes In and Below the Middle Class, 2016

Persons per Household	Total Population	Middle Class		Below Middle Class		Middle Class and Below	
		Number	Share	Number	Share	Number	Share
1	175,859	74,760	42.5%	47,775	27.2%	122,535	69.7%
2	598,462	286,310	47.8%	145,338	24.3%	431,648	72.1%
3	428,943	208,401	48.6%	100,076	23.3%	308,477	71.9%
4	529,072	255,324	48.3%	127,638	24.1%	382,962	72.4%
5+	1,128,325	565,889	50.2%	269,938	23.9%	835,827	74.1%
All Households	**2,860,661**	**1,390,684**	**48.6%**	**690,764**	**24.1%**	**2,081,448**	**72.8%**

Note: Shares equal the number of people in each category divided by the total population for each household size.
Source: Kem C. Gardner Policy Institute analysis of data from the American Community Survey.

Table 6: Utah Households with Incomes In and Below the Middle Class, 2016

Persons per Household	Total Population	Middle Class		Below Middle Class		Middle Class and Below	
		Number	Share	Number	Share	Number	Share
1	175,859	74,760	42.5%	47,775	27.2%	122,535	69.7%
2	299,231	143,155	47.8%	72,669	24.3%	215,824	72.1%
3	142,981	69,467	48.6%	33,359	23.3%	102,826	71.9%
4	132,268	63,831	48.3%	31,910	24.1%	95,741	72.4%
5+	192,808	96,699	50.2%	46,127	23.9%	142,826	74.1%
All Households	**943,147**	**447,912**	**47.5%**	**231,839**	**24.6%**	**679,751**	**72.1%**

Note: Shares equal the number of people in each category divided by the total population for each household size.
Source: Kem C. Gardner Policy Institute analysis of data from the American Community Survey.

Comparison to a Nationwide Study

A Pew Research Center study defined the middle class as people earning between two-thirds and double the median income (2016). Compared to our income criteria of one-half to 1.5 times the median, the Pew study has a higher starting point (two-thirds versus one-half of median income) and a wider range (1.33 versus one times the median). This is one of several reasons why we expect our results to be lower than the Pew results; the two studies are not equivalent.[6]

For the three Utah metropolitan areas in the study, 59.4 percent of adults had middle class incomes in 2014 (Table 7). As expected, this result is well above our statewide finding of 48.6 percent of the population. In both studies, Utah outperforms the U.S., though the disparity is larger in the Pew study. Utah's metro areas ranked in the top 10 percent of metro areas nationwide: Ogden-Clearfield at the 97th percentile and Provo-Orem and Salt Lake City at the 93rd percentile.[7] These three areas accounted for four-fifths of Utah's population in 2014.

Table 7: Middle Class Population in Utah's Three Largest Metro Areas, 2014

Metro Area	Share of Adults	Percentile
Salt Lake City	58.2%	93rd
Ogden-Clearfield	62.6%	97th
Provo-Orem	58.3%	93rd
Utah average	**59.4%**	**NA**
U.S. average	**51.0%**	**NA**

Notes:
NA = not available
Estimates are adjusted for household size and metro area cost of living (Pew Research Center 2016). Utah has five metro areas. The smallest two, Logan and St. George, were not in the study. Percentiles compare 229 of the nation's 381 metro areas. The Utah share is a population-weighted average of the three metro areas above. The U.S. share includes all households in and outside of metro areas, rounded to the nearest percent.

Source: Pew Research Center analysis of data from the 2014 American Community Survey.

Section 4. Middle Class Trends Since 1980

While incomes for Utah's middle class rose in recent decades, the share of the state's population belonging to it declined 3.9 percent from 1980 to 2016. The decline in Utah was slower than in the U.S., and a larger share of the population belonged to the middle class in Utah than in the U.S. Much of the decline in middle class population shares nationwide and in Utah was due to growing income inequality. This polarization created a larger low-income class, particularly in the Salt Lake City metro area, and a larger upper class, at the expense of the middle. With Utah's post-recession economic vitality, the middle class decline was interrupted between 2010 and 2016.

Below, we present original middle class income and population findings using the synthesis definition we introduced in Section 3, followed by comparisons to U.S. and Utah results from the literature.

Rising Middle Class Incomes

Lower and upper income bounds for our middle class definition incorporate year-to-year changes in median income, federal poverty guidelines, inflation, household composition, and the distribution of income. The middle class in Utah in 1980 earned annual household incomes between $30,170 and $72,940, expressed in 2017 dollars (Figure 6).[8] By 2016, the comparable income range had increased and widened: $39,690 to $98,270. Inflation-adjusted middle class incomes also rose nationwide (see Table 9).

Declining Middle Class Population

Consistent with nationwide trends, Utah's middle class population share has decreased since 1980, as the lower and upper classes grew. The size of Utah's middle class declined from 51.4 percent of the population in 1980 to 48.6 percent in 2016, a modest decrease of 2.8 percentage points (Figure 7). However, the middle class share stabilized during the economic recovery following the 2007–2009 recession, increasing by 0.4 percent.

We compared the Utah middle class and U.S. middle class in terms of size. We did not use the same income levels to define the middle class in the state and nationwide (see Tables 8 and 9). Instead, we calculated median incomes and income-to-needs ratio percentiles (based on poverty guidelines) separately for each place. This improves fit for each region at the expense of uniformity.

Utah's middle class shrank at a slower rate than the middle class nationwide. The U.S. middle class declined by 3.9 percentage points from 1980 (48.3 percent) to 2016 (44.4 percent). For each year observed since 1980, Utah's middle class was larger than the U.S. middle class, as a share of their total populations.

Tables 8 and 9 provide lower and upper income bounds for the middle class in Utah and the U.S. The tables show changes since 1980 in the number of middle class households and their combined population. We based our middle class definition and analysis on household income and the number of households. Subsequently, we calculated populations from household results based on household size.

Figure 6: Middle Class Household Income in Utah, Selected Years 1980–2016
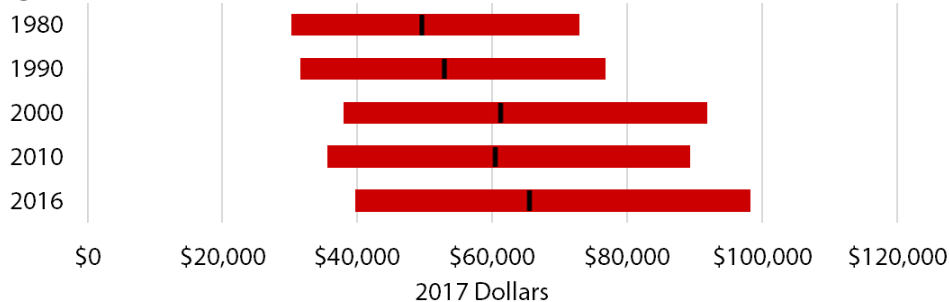
Note: Income ranges are based on the synthesis definition introduced in Section 3 (dollar amounts in Table 8). Vertical lines indicate median household income (see Table 4).
Source: Kem C. Gardner Policy Institute analysis of household income data from the U.S. Census Bureau with federal poverty guidelines from the Social Security Administration (2018).

Figure 7: Middle Class Share of Utah and U.S. Population, Selected Years 1980–2016
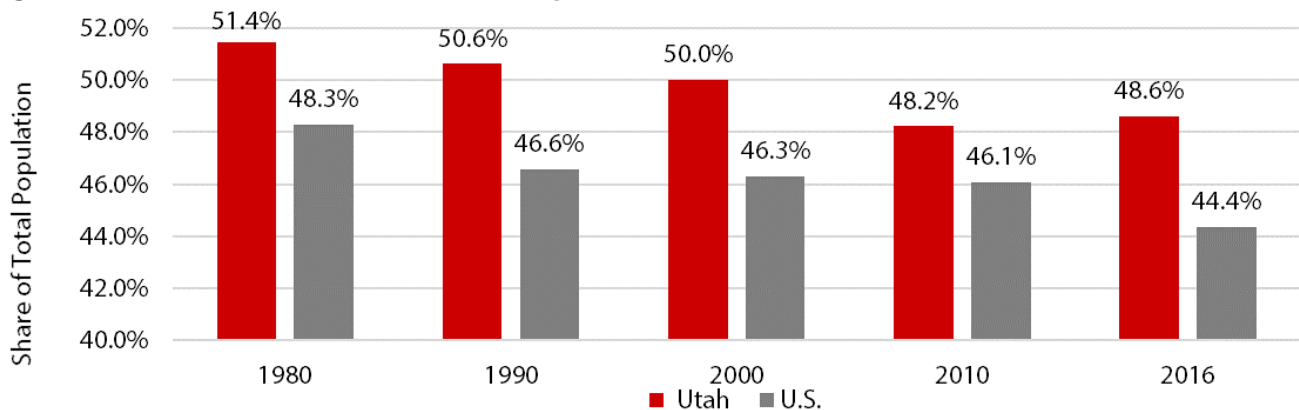
Source: Kem C. Gardner Policy Institute analysis of data from the U.S. Census Bureau.

Table 8: Utah Middle Class Trends, Selected Years 1980–2016 (2017 Dollars)

Year	Income Bounds		Households		Population	
	Lower	Upper	Number	Share	Number	Share
1980	$30,170	$72,940	222,200	49.4%	739,938	51.4%
1990	$31,590	$76,790	261,264	48.7%	854,550	50.6%
2000	$37,930	$91,890	342,176	48.8%	1,092,462	50.0%
2010	$35,520	$89,380	413,944	47.0%	1,296,333	48.2%
2016	$39,690	$98,270	447,912	47.5%	1,390,684	48.6%

Note: Dollar amounts rounded to the nearest $10.
Source: Kem C. Gardner Policy Institute analysis of data from the U.S. Census Bureau.

Table 9: U.S. Middle Class Trends, Selected Years 1980–2016 (2017 Dollars)

Year	Income Bounds		Households		Population	
	Lower	Upper	Number	Share	Number	Share
1980	$28,650	$72,760	37,491,670	46.6%	106,736,320	48.3%
1990	$31,510	$82,280	41,509,699	45.2%	112,346,360	46.6%
2000	$34,360	$89,320	47,752,190	45.3%	126,472,657	46.3%
2010	$31,500	$85,120	52,279,907	45.6%	133,004,486	46.1%
2016	$33,030	$89,310	51,737,906	43.5%	131,203,018	44.4%

Note: Dollar amounts rounded to the nearest $10.
Source: Kem C. Gardner Policy Institute analysis of data from the U.S. Census Bureau.

Comparison to Other Studies

Nationwide studies support our finding of a decline in the share of middle class households and individuals. The U.S. middle class shrank from 60 percent of adults in 1980 to 50 percent in 2015 (Pew Research Center 2015). Pew counted people in the middle class if their household income, adjusted for household size, fell between two-thirds and double the median. The declining middle class is associated with rising income inequality nationwide, which involves people leaving through both exits, to the lower class and the upper class (Krueger 2012).

For a more recent period, 2000 to 2014, middle class populations declined nationwide and for three Utah metro areas representing four-fifths of the state's population (Pew Research Center 2016). Again, middle class criteria was two-thirds to double median income, but this time with a local cost-of-living adjustment in addition to the household size adjustment. Nationwide, 89 percent of metro areas saw a decreasing share of adults in middle class households from 2000 to 2014. Fortunately, about three-fourths of the middle class decline of 4 percent during that period came from upper class growth, while only one-fourth of the decline was associated with growth in the lower class.

All three Utah metro areas were among the 88.6 percent of metro areas in the U.S. with a declining middle class (Figure 8). Salt Lake City's middle class population decreased by 4.8 percent, from 63.0 percent of adults in 2000 to 58.2 percent in 2014. The decline in this metro area with nearly 40 percent of Utah's population was faster than the national average of 4 percent. The corresponding increase in the lower class population share ac-counted for 70 percent of the middle class's loss. The growth of Salt Lake City's lower class exceeded the national average.

Declines in Provo-Orem and Ogden-Clearfield of 1.8 percent and 2.0 percent of all adults, respectively, were much smaller than the average U.S. decrease of 4.0 percent. Fortunately, the downward trend in those two metro areas with 41 percent of Utah's population was overwhelmingly due to growth in their upper classes.

In the past five years, the self-reported economic well-being of most households in the U.S. improved (Board of Governors of the Federal Reserve System 2018). From 2013 to 2017, the percent of adults who responded "living comfortably" to a question about how they were managing financially increased from 23 percent to 33 percent. The remaining two-thirds in 2017 reported "doing okay" (40 percent) or "just getting by" or "finding it difficult to get by" (27 percent combined, slightly larger than the size of the lower class in Utah and the U.S.).

Historical trends vary by race and ethnicity. People who are Hispanic or black reported lower levels of financial well-being than whites in 2017 (Board of Governors of the Federal Reserve System 2018). From 1980 to 2016, Hispanics experienced less income growth than other groups in the U.S., while black individuals made some headway in catching up to other groups (Kochhar and Cilluffo 2018).

Figure 8: Middle Class Population Changes in Utah Metro Areas, 2000 to 2014
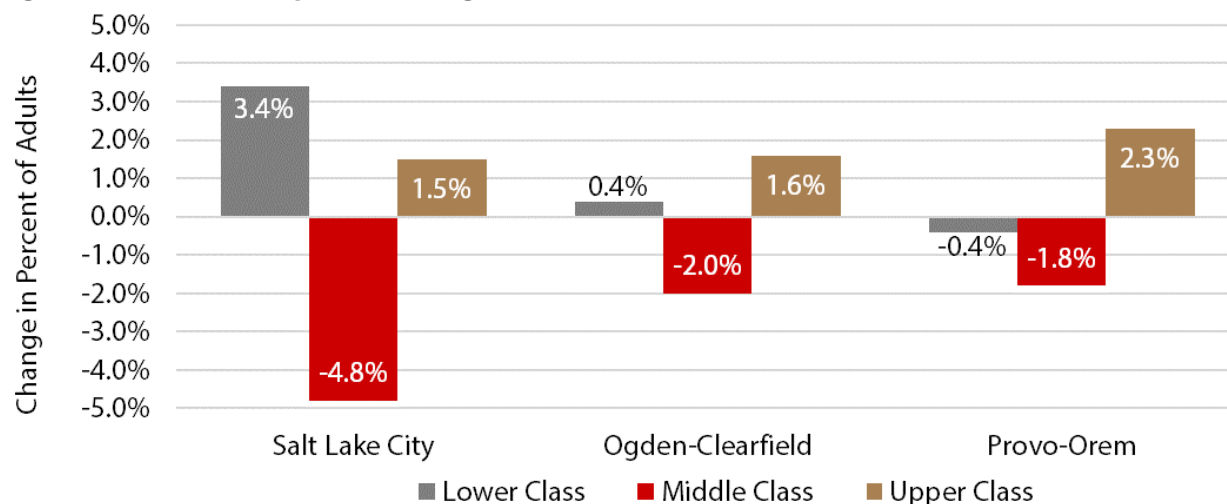
Note: For the Salt Lake City and Provo-Orem metro areas, the total change in lower class and upper class populations does not quite equal the change in the middle class populations due to rounding.
Source: Pew Research Center analysis of data from the U.S. Census Bureau's 2014 American Community Survey.

Reflecting changes in the broader population, the U.S. middle class became more racially diverse from 1980 to 2017 (Busette and Reeves 2018). For example, the share of Hispanic adults in the middle class rose from 6 percent to 22 percent, and the share of black adults in the middle class rose from 11 percent to 14 percent. Still, both groups were more likely than white adults to have below-middle class incomes. The middle class was specified to include people ages 25 through 54 living in households with incomes between the 20th and 60th percentiles (the second and third income quintiles). Additional research with person-level data could address access to the middle class by race and ethnicity in Utah.

Section 5. Research Methods

To explain sources and methods for original analysis in sections 2–4, we describe U.S. Census Bureau data, federal poverty guidelines, and adjusting for inflation. The last topic, regional adjustments, addresses state-specific demographic and economic differences between Utah and the U.S.

U.S. Census Bureau Data

The U.S. Census Bureau collects data well suited to middle class research. Its American Community Survey (ACS) data is available annually from 2001 to 2016, covering a 1 percent sample of Utah and U.S. households. Before 2001, responses to a long-form questionnaire are available for a 5 percent sample of households for decennial census years.[9] The University of Minnesota's Integrated Public Use Microdata Series (IPUMS) provides data from both sources (Ruggles et al. 2017).

We analyzed data for five census years back to 1980, plus the most recent year available, 2016 (Table 10). Because their income and household size were not reported, we omitted people in group quarters, such as senior care centers, the military, and prisons. To avoid making estimates from small samples for particular household size groups, particularly during the two ACS years, 2010 and 2016, we grouped together all households with five or more persons. For all years, sample sizes for households with one, two, three, four, and five or more persons varied from just under 1,300 households to nearly 3,300 households.

Table 10: Households Sampled for Selected Years, 1980–2016

Year	Share	Utah	U.S.
1980	5%	22,476	4,023,350
1990	5%	27,243	4,593,672
2000	5%	35,062	5,273,828
2010	1%	9,144	1,203,760
2016	1%	9,603	1,232,113

Note: For 1980, 1990, and 2000, we used long-form U.S. Census questionnaires. For 2010 and 2016, we used the American Community Survey.

Source: U.S. Census Bureau.

We analyzed data for five census years back to 1980, plus the most recent year available, 2016 (Table 10). Because their income and household size were not reported, we omitted people in group quarters, such as senior care centers, the military, and prisons. To avoid making estimates from small samples for particular household size groups, particularly during the two ACS years, 2010 and 2016, we grouped together all households with five or more persons. For all years, sample sizes for households with one, two, three, four, and five or more persons varied from just under 1,300 households to nearly 3,300 households.

Federal Poverty Guidelines

Federal poverty guidelines suggest minimal annual expenditures for food and other necessities, and these guidelines vary by the number of persons in a household (U.S. Department of Health and Human Services 2018). In the 1960s, the Social Security Administration determined the cost of basic nutrition and multiplied the amount by three to suggest a total household budget to cover basic needs. The U.S. Department of Health and Human Services has adjusted that amount for inflation based on the consumer price index (CPI).

While federal poverty guidelines are a simplistic measure, for example not adjusting for changes in the shares of food and non-food expenditures for over five decades, the guidelines are widely used to measure affordability for basic needs. They are

uniform for the 48 contiguous states and Washington, D.C. State-specific federal poverty guidelines are only provided for Alaska and Hawaii. Nonprofit and government programs for underserved populations commonly have eligibility thresholds above these low income levels, such as 200 percent of the poverty guidelines.

Inflation Adjustment

The Bureau of Labor Statistics (BLS) provides a nationwide CPI. Its survey estimates average prices of a comprehensive list of goods and services individuals buy across the country. The percentage change in CPI values is a good measure of inflation. The most recent complete year available is 2017. For original U.S. income results reported in this memo, we used the nationwide CPI to adjust income values to 2017 dollars, starting with income amounts reported in current-year dollars for 1980 through 2016.

For Utah, we prefer BLS's West B/C CPI, which measures price changes for urban areas in the West with populations similar to the Wasatch Front, where most Utahns live. However, the West B/C series only goes back to 1997. Thus, for original Utah income results for 2000 through 2016, we used the West B/C CPI, but for 1980 and 1990, we reverted to the U.S. CPI.

Regional Adjustments

Our analysis incorporates Utah's unique economic and demographic landscape. We adjusted our middle class definition to match household size and income in Utah. Future research would benefit from additional adjustments related to the cost of living.

Utah's median household income is above the nationwide median, but Utah households are also larger. In 2016, median household income was 14.8 percent higher in Utah ($66,570) than in the U.S. ($57,970), based on the American Community Survey and expressed in inflation-adjusted 2017 dollars (Table 4). That year, average household size was 3.19 persons in Utah, 20.4 percent higher than the national average of 2.65 persons (U.S. Census Bureau 2016).

Putting together these offsetting Utah differences—higher household income and larger household size—Utah's per capita income came out lower than the national average (Bureau of Economic Analysis 2016). In 2016, personal income per capita in Utah was 14.1 percent below than the national average. Demographics help explain these differences. For example, children earn less than adults, and children make up a larger share of the population in Utah than in the U.S. Furthermore, Utah and U.S. incomes are likely more similar for middle-income individuals than for their entire populations.

The cost of living was 2.7 percent lower in Utah than in the U.S. in 2016, a modest affordability advantage for a state with lower per capita income. Utah's regional price parity index value was 97.3 in 2016, compared to the U.S. average of 100 (Bureau of Economic Analysis 2018). The index includes the cost of housing, transportation, food, health care, and the other goods and services individuals buy.

To determine the middle class population share in Utah and the U.S., we first needed appropriate lower and upper income bounds as criteria for identifying middle class households. If uniformity were our primary objective, we could have applied the same income bounds for Utah and the U.S. to compare populations based on the same criteria. Rather, to accommodate Utah circumstances, we applied different lower and upper income bounds for Utah and the U.S. based on household incomes in each region. We adjusted income bounds for each household size category (one, two, three, four, and five or more). In this way, we accounted for differences in household size and incomes. Our tailored results are not fully comparable between state and country, but they are adequate for basic trends and comparisons.

Future research could make further allowance for the cost of living in Utah. One option is to multiply household incomes from the American Community Survey by Bureau of Economic Analysis regional price parities for each household's state of residence (Pew Research Center 2016). We could use this cost-of-living-adjusted income to estimate median income and income-to-poverty-guideline ratios by household size.

Endnotes

1. Our social mobility discussion focuses on economic mobility or even more narrowly on earnings mobility. Since these findings fit within a social class framework with economic underpinnings, we use the term social mobility. Social mobility affects the middle class in multiple ways. High levels of social mobility imply people can improve their condition, while low levels of social mobility imply people can maintain their standard of living.

2. Interviews included 2,413 adults in the continental U.S. (Pew Research Center 2008). Pew adjusted the results to represent the demographic makeup of the population.

3. Surveys by the New York Times, National Opinion Research Center, and Pew Research Center asked people in the U.S. whether they considered themselves middle class, as opposed to upper class, working class, or lower class.

4. A percentile refers to a value below which a corresponding percentage of all values fall. For example, 20 percent of household incomes in Utah are below the 20th percentile of household income in the state, which was about $32,000 in 2016. Quintiles, quartiles, and deciles are common percentile groupings. Quintiles, just illustrated, have five groups. Quartiles refer to four groups, each with 25 percent of the population starting at the lowest value, 25th percentile, median, and 75th percentile. Deciles have ten groups.

5. Section 5 provides more information about federal poverty guidelines, and Table 4 provides 2016 values by household size.

6. Pew's middle class population shares for Utah in 2014 should differ from our 2016 results for reasons besides the two-year time mismatch and the percentages below and above median income from their middle class definitions. First, Pew employed a regional income adjustment based on purchasing price parity, which we did not. Second, we used Utah median income, whereas Pew used adjusted U.S. median income. Third, we incorporated federal poverty guidelines, which Pew did not. Finally, Pew covered urban areas in Utah, and we covered all households statewide, including rural areas with lower average incomes.

7. In 2014, three Utah metro areas had the three highest outcomes for middle class share of all households (Reeves and Rodrigue 2016). The study included the largest 100 metro areas in U.S. The middle class definition was two-thirds to double median income, adjusted for household size but not for cost of living or income differences by metro area. The definition was applied to data from the 2014 American Community Survey. This supports Pew Research Center's 2016 study presented in Section 3, which included more than twice as many metro areas and featured a cost-of-living adjustment.

8. Before adjusting for inflation, 1980 values for annual household income for Utah's middle class were $10,450 to $25,280.

9. For more information about the long-form questionnaire and American Community Survey, visit the U.S. Census Bureau's website, for example, https://www.census.gov/history/www/programs/demographic/american_community_survey.html.

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