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Kane Area United Fund
Lycoming County United Way
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United Fund of Warren County
United Fund of the Corry Area
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Note: In addition to corporate sponsorships, this Report was made possible by the United Ways noted above in bold.

Learn more here: uwp.org/ALICE
ALICE: A GRASSROOTS MOVEMENT

This body of research provides a framework, language, and tools to measure and understand the struggles of a population called ALICE — an acronym for Asset Limited, Income Constrained, Employed. ALICE represents the growing number of households in our communities that do not earn enough to afford basic necessities. This research initiative partners with United Ways, foundations, academic institutions, corporations, and other state organizations to present data that can stimulate meaningful discussion, attract new partners, and ultimately inform strategies for positive change.

Based on the overwhelming success of this research in identifying and articulating the needs of this vulnerable population, this work has grown from a pilot in Morris County, New Jersey in 2009, to the entire state of New Jersey in 2012, and now to 20 states. United Ways in Pennsylvania are proud to join the more than 600 United Ways in these states, along with organizations across the country, that are working to better understand ALICE’s struggles.

Together, United Ways, government agencies, nonprofits, and corporations have the opportunity to evaluate current initiatives and discover innovative approaches that give ALICE a voice, and create changes that improve life for ALICE and the wider community.

To access reports from all states, visit UnitedForALICE.org

ALICE Reports in the United States

[Map showing states with reports]
ALICE Reports provide high-quality, research-based information to foster a better understanding of who is struggling in our communities. To produce the ALICE Report for Pennsylvania, a team of researchers collaborated with a Research Advisory Committee, composed of 12 representatives from across Pennsylvania, who advised and contributed to the report. This collaborative model, practiced in each state, ensures each report presents unbiased data that is replicable, easily updated on a regular basis, and sensitive to local context. Working closely with United Ways, this research initiative seeks to equip communities with information to create innovative solutions.

Lead Researcher

Stephanie Hoopes, Ph.D., is the lead researcher, director, and author of the ALICE Reports. Dr. Hoopes began this effort with a pilot study of a more accurate way to measure financial hardship in Morris County, New Jersey in 2009. Since then, she has overseen its expansion into a broad-based, state-by-state research initiative now spanning 20 states across the country. Her research on the ALICE population has garnered both state and national media attention.

Before joining United Way full time in 2015, Dr. Hoopes taught at Rutgers University and Columbia University. Dr. Hoopes has a doctorate from the London School of Economics, a master’s degree from the University of North Carolina at Chapel Hill, and a bachelor’s degree from Wellesley College.

Dr. Hoopes is on the board of directors of the McGraw-Hill Federal Credit Union, and she received a resolution from the New Jersey General Assembly for her work on ALICE in 2016.

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LETTER TO THE COMMUNITY

Dear Pennsylvanians:

Millions of us go to work every day, but struggle to afford basic necessities for ourselves and our families. Some of us are just getting by — one broken furnace or medical emergency away from catastrophic consequences, because we live day to day and can’t save up for life’s unexpected events. We are frustrated because the everyday financial tightrope we walk means we can’t achieve our goals of saving for retirement, furthering our education, moving closer to work, buying our first home, or replacing our used car with a more reliable vehicle.

The Pennsylvania network of United Ways has come together to raise awareness of the challenges faced by ALICE (Asset Limited, Income Constrained, Employed), and to mobilize organizations and individuals who want to support strategies and policies that move ALICE along their journey to financial stability.

We may be ALICE. We may know ALICE — the people who welcome our kids to child care every morning, or care for our elderly parents. ALICE helps drive our economy and the health of our communities. We all are impacted when ALICE can’t make ends meet.

The Pennsylvania United Way network wants the 2019 ALICE Report to enhance our understanding of the barriers that exist for those who work hard every day but aren’t achieving their American dream. We want to call all those who care about ALICE to action. Help United Way lay the bricks that will become the path to financial stability for more low-income, working Pennsylvanians.

We know there are workforce shortages on the horizon as Pennsylvania’s population ages, and there are ALICE workers in need of these jobs, many of which pay family-sustaining wages. But this issue goes further than skills, training, and education gaps. It’s about access to child care, reliable transportation, and health care. It’s about charitable investments, corporate social responsibility, and public policy decisions that help put ALICE families on a better path. As our state continues to consider how to thrive into the next decade and beyond, we want the ALICE data to be a resource that informs and shapes transformation.

Please join our effort. United, we can provide ALICE an opportunity to achieve financial stability and reach for their dreams.

Sincerely,

Kristen Rotz, President, United Way of Pennsylvania
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EXECUTIVE SUMMARY

In 2017, 1,856,785 households in Pennsylvania — 37 percent — could not afford basic needs such as housing, child care, food, transportation, health care, and technology.

This ALICE Report for Pennsylvania describes the population called ALICE, an acronym for Asset Limited, Income Constrained, Employed — families with income above the Federal Poverty Level (FPL), but not high enough to afford basic household necessities or save for the future. With the cost of living higher than what most people earn, ALICE households live in every county in Pennsylvania — urban, suburban, and rural — and they include women and men, young and old, of all races and ethnicities.

Despite recent reports of overall improvement in employment and gains in median incomes, the economic recovery in Pennsylvania since the end of the Great Recession in 2010 has been uneven. Many families continue to face challenges from low wages, depleted savings, and the increasing cost of basic household goods. The total number of Pennsylvania households that cannot afford basic needs increased 14 percent between 2007 and 2017.

This Report shows the cost of basic needs (housing, child care, food, transportation, health care, technology, and taxes) in the Household Survival Budget for each county in Pennsylvania, and the number of households earning below the ALICE Threshold — the amount needed to afford that bare-minimum budget. The Report delves into county and municipal data and looks at the demographics of ALICE and poverty-level households by race/ethnicity, age, and household type to reveal variations in hardship that are often masked by state averages. The Report asks where ALICE households work; how assets, credit, and assistance supplement their incomes; and how local conditions like affordable housing and community resources affect their financial stability and quality of life. Finally, the Report highlights emerging trends that will impact ALICE families in the future.

The data reveals an ongoing struggle for ALICE households in Pennsylvania, and a range of obstacles to achieving financial stability:

- **The extent of hardship:** Of Pennsylvania’s 5 million households, 13 percent lived in poverty in 2017 and nearly twice as many — another 24 percent — were ALICE households. Combined, 37 percent (1,856,785 households) had income below the ALICE Threshold, an increase of 14 percent since 2007.

- **The basic cost of living:** The cost of basic household expenses in Pennsylvania increased steadily to $59,340 for a family of four (two adults with one infant and one preschooler) and $20,760 for a single adult — significantly higher than the FPL of $24,600 for a family of four and $12,060 for a single adult. The cost of the family budget increased by 33 percent from 2007 to 2017.

- **Jobs:** Low-wage jobs continued to dominate the landscape in Pennsylvania, with 59 percent of all jobs paying less than $20 per hour. Although unemployment rates fell during this period, wages remained low for many occupations. With more contract work and on-demand jobs, job instability also increased, making it difficult for ALICE workers to meet regular monthly expenses or to save. In addition, gaps in wages varied based on the type of employer as well as the gender, education, race, and ethnicity of workers.

- **The role of public assistance:** Public and private assistance continued to provide support to many households living in poverty or earning slightly above the FPL, but it provided less support to ALICE households whose income is above eligibility levels. Despite this assistance, large gaps in assistance remained in almost all budget areas. Spending on health care and health insurance outpaced spending in other budget areas.
Emerging trends: Several trends are changing the economic landscape for ALICE families:

- **The Changing American Household** — Shifting demographics, including millennials reaching adulthood, the aging of the baby boomers, and domestic and foreign migration patterns, are having an impact on who is living together in households and where and how people work. These changes, in turn, influence the demand for goods and services, ranging from the location of housing to the provision of caregiving.

- **Increasing Vulnerability of Workers** — Within a global economy, economic disruptions, natural disasters, and technological advances in other parts of the world trigger rapid change in supply and demand for U.S. industries. Increasingly, this risk has been shifted from companies to workers. Combined with the often-disruptive effects of technology on jobs and the workplace, ALICE workers increasingly face income volatility in addition to low wages.

- **Growing Health Inequality** — As health costs rise, disparities in health increase, especially according to income. Expensive medical and technological advances that are out of reach of lower-income households will only further this divide. The societal costs of having large numbers of U.S. residents in poor health will also grow.

Using the best available information on those who are struggling, this Report offers an enhanced set of tools for stakeholders to measure the real challenges ALICE households face in trying to make ends meet. The FPL is an outdated calculation, and inaccurate information about the number of people struggling distorts the identification of problems related to poverty, misguides policy solutions, and raises questions of equity, transparency, and fairness in the allocation of resources. United for ALICE develops these resources in order to move beyond stereotypes and judgments of “the poor,” and instead encourages the use of data to inform programmatic and policy solutions for these households and their communities.

**GLOSSARY**

ALICE is an acronym that stands for Asset Limited, Income Constrained, Employed — households with income above the Federal Poverty Level but below the basic cost of living. A household consists of all the people who occupy a housing unit. In this Report, households do not include those living in group quarters such as a dorm, nursing home, or prison.

The **Household Survival Budget** is the bare-minimum cost to live and work in the modern economy. It calculates the actual costs of basic necessities (housing, child care, food, transportation, health care, and a basic smartphone plan) in Pennsylvania, adjusted for different counties and household types.

The **ALICE Threshold** is the average income that a household needs to afford the basic necessities defined by the Household Survival Budget for each county in Pennsylvania. Unless otherwise noted in this Report, households earning below the ALICE Threshold include both ALICE and poverty-level households.

The **Household Stability Budget** is greater than the basic Household Survival Budget and reflects the cost for household necessities at a modest but sustainable level. It adds a savings category and an expanded technology category (smartphone and basic home internet), and it is adjusted for different counties and household types.

The **ALICE Income Assessment** is the calculation of all sources of income, resources, and assistance for ALICE and poverty-level households. Even with assistance, the Assessment reveals a shortfall, or Unfilled Gap, between what these households bring in and what is needed for them to reach the ALICE Threshold.
AT-A-GLANCE: PENNSYLVANIA
2017 Point-in-Time Data

Population: 12,805,537 | Number of Counties: 67 | Number of Households: 5,029,219

How many households are struggling?
ALICE, an acronym for Asset Limited, Income Constrained, Employed, are households that earn more than the Federal Poverty Level, but less than the basic cost of living for the state (the ALICE Threshold). Of Pennsylvania’s 5,029,219 households, 640,339 earn below the Federal Poverty Level (13 percent) and another 1,216,446 (24 percent) are ALICE households.

How much does ALICE earn?
In Pennsylvania, 59 percent of jobs pay less than $20 per hour, with more than half of those paying less than $15 per hour. Another 33 percent of jobs pay between $20 and $40 per hour. Only 8.5 percent of jobs pay more than $40 per hour.

What does it cost to afford the basic necessities?
Despite low national inflation during the recovery from the Great Recession (22 percent from 2007 to 2017), the bare-minimum Household Survival Budget in Pennsylvania increased by 33 percent for a family and 26 percent for a single adult. Affording only a very modest living, this budget is still significantly more than the Federal Poverty Level of $24,600 for a family of four and $12,060 for a single adult.

<table>
<thead>
<tr>
<th>Household Survival Budget, Pennsylvania Average, 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SINGLE ADULT</strong></td>
</tr>
<tr>
<td><strong>Monthly Costs</strong></td>
</tr>
<tr>
<td>Housing</td>
</tr>
<tr>
<td>Child Care</td>
</tr>
<tr>
<td>Food</td>
</tr>
<tr>
<td>Transportation</td>
</tr>
<tr>
<td>Health Care</td>
</tr>
<tr>
<td>Technology</td>
</tr>
<tr>
<td>Miscellaneous</td>
</tr>
<tr>
<td>Taxes</td>
</tr>
<tr>
<td>Monthly Total</td>
</tr>
<tr>
<td><strong>ANNUAL TOTAL</strong></td>
</tr>
<tr>
<td><strong>Hourly Wage</strong>*</td>
</tr>
</tbody>
</table>

*Full-time wage required to support this budget
## Pennsylvania Counties, 2017

<table>
<thead>
<tr>
<th>COUNTY</th>
<th>TOTAL HOUSEHOLDS</th>
<th>PERCENT ALICE &amp; POVERTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adams</td>
<td>39,527</td>
<td>32%</td>
</tr>
<tr>
<td>Allegheny</td>
<td>537,381</td>
<td>27%</td>
</tr>
<tr>
<td>Armstrong</td>
<td>26,712</td>
<td>44%</td>
</tr>
<tr>
<td>Beaver</td>
<td>71,005</td>
<td>36%</td>
</tr>
<tr>
<td>Bedford</td>
<td>19,666</td>
<td>42%</td>
</tr>
<tr>
<td>Berks</td>
<td>155,154</td>
<td>35%</td>
</tr>
<tr>
<td>Blair</td>
<td>51,885</td>
<td>39%</td>
</tr>
<tr>
<td>Bradford</td>
<td>24,851</td>
<td>39%</td>
</tr>
<tr>
<td>Bucks</td>
<td>239,671</td>
<td>32%</td>
</tr>
<tr>
<td>Butler</td>
<td>75,513</td>
<td>28%</td>
</tr>
<tr>
<td>Cambria</td>
<td>56,023</td>
<td>39%</td>
</tr>
<tr>
<td>Cameron</td>
<td>2,196</td>
<td>40%</td>
</tr>
<tr>
<td>Carbon</td>
<td>26,213</td>
<td>43%</td>
</tr>
<tr>
<td>Centre</td>
<td>58,629</td>
<td>43%</td>
</tr>
<tr>
<td>Chester</td>
<td>189,506</td>
<td>27%</td>
</tr>
<tr>
<td>Clarion</td>
<td>15,925</td>
<td>41%</td>
</tr>
<tr>
<td>Clearfield</td>
<td>29,098</td>
<td>46%</td>
</tr>
<tr>
<td>Clinton</td>
<td>14,675</td>
<td>46%</td>
</tr>
<tr>
<td>Columbia</td>
<td>26,584</td>
<td>39%</td>
</tr>
<tr>
<td>Crawford</td>
<td>36,050</td>
<td>38%</td>
</tr>
<tr>
<td>Cumberland</td>
<td>98,242</td>
<td>31%</td>
</tr>
<tr>
<td>Dauphin</td>
<td>110,764</td>
<td>34%</td>
</tr>
<tr>
<td>Delaware</td>
<td>205,461</td>
<td>31%</td>
</tr>
<tr>
<td>Elk</td>
<td>13,447</td>
<td>34%</td>
</tr>
<tr>
<td>Erie</td>
<td>108,458</td>
<td>42%</td>
</tr>
<tr>
<td>Fayette</td>
<td>53,256</td>
<td>45%</td>
</tr>
<tr>
<td>Forest</td>
<td>1,473</td>
<td>49%</td>
</tr>
<tr>
<td>Franklin</td>
<td>60,979</td>
<td>30%</td>
</tr>
<tr>
<td>Fulton</td>
<td>5,947</td>
<td>37%</td>
</tr>
<tr>
<td>Greene</td>
<td>14,484</td>
<td>42%</td>
</tr>
<tr>
<td>Huntingdon</td>
<td>16,935</td>
<td>44%</td>
</tr>
<tr>
<td>Indiana</td>
<td>33,664</td>
<td>44%</td>
</tr>
<tr>
<td>Jefferson</td>
<td>18,452</td>
<td>39%</td>
</tr>
<tr>
<td>Juniata</td>
<td>9,361</td>
<td>40%</td>
</tr>
</tbody>
</table>

INTRODUCTION

As the birthplace of Independence and the U.S. Constitution, Pennsylvania is steeped in formative American history, and the Keystone State continues to be central to social, economic, and political development in the nation. Pennsylvania is the sixth biggest economy in the U.S. and is home to 44 of the 1,000 largest companies in the U.S., including Comcast, Rite Aid, and Kraft Heinz. The state boasts a wealth of natural resources and a diverse landscape, from the Appalachian and Alleghany mountain ranges to sprawling farmland, and is home to top-caliber public and private higher education.

Yet despite a key location on the East Coast, an educated workforce, and a low cost of living relative to other major metro areas in the Northeast, Pennsylvania also contains sharp disparities in wealth and income. What is often overlooked is the growing number of households that earn above the Federal Poverty Level (FPL), but are unable to afford the state’s cost of living.

Traditional measures hide the reality that 37 percent of households in Pennsylvania struggle to support themselves. Because income is distributed unequally in Pennsylvania, there is both great wealth and significant economic hardship. That inequality increased by 15 percent from 1979 to 2017; now, the top 20 percent of Pennsylvania’s population earns 51 percent of all income earned in the state, while the bottom quintile earns only 3 percent (American Community Survey, 2017; Guzman, 2017; U.S. Census Bureau, n.d.—Table S4).

In 2017, Pennsylvania’s poverty rate was 13 percent, above the 10 percent U.S. average, and the median annual household income was $59,195, just below the U.S. median of $60,336. Yet the state’s overall economic situation is more complex. While unemployment is low in Pennsylvania, workers increasingly face a changing landscape, where lower-paying, part-time, and non-salaried occupations account for the majority of jobs.

None of the economic measures traditionally used to calculate the financial status of Pennsylvania’s households, such as the FPL, consider the actual cost of living in each county in Pennsylvania or the wage rate of jobs in the state. For that reason, those indices do not fully capture the number of households facing economic hardship across Pennsylvania’s 67 counties.

The term ALICE describes a household that is Asset Limited, Income Constrained, Employed. ALICE is a household with income above the FPL but below a basic survival threshold, defined here as the ALICE Threshold. Defying many stereotypes, ALICE households are working households, composed of women and men, young and old, of all races and ethnicities, and they live in every county in Pennsylvania — urban, suburban, and rural.

This ALICE Report for Pennsylvania provides better measures and language to describe the sector of Pennsylvania’s population that struggles to afford basic household necessities. It presents a more accurate picture of the economic reality in the state, especially regarding the number of households that are severely economically challenged.

The Report asks whether conditions have improved since the Great Recession, and whether families have been able to work their way above the ALICE Threshold. It includes a toolbox of ALICE measures that provide greater understanding of how and why so many families are still struggling financially. Some of the challenges Pennsylvania faces are unique, while others are trends that have been unfolding nationally for at least three decades.
This Report is about far more than poverty: It reveals profound changes in the structure of Pennsylvania's communities and jobs. It documents the increase in the basic cost of living, the decrease in the availability of jobs that can support household necessities, and the shortage of housing that is affordable to workers in the majority of the state’s jobs. The findings are stark: The Great Recession was severe in Pennsylvania, and despite slow overall population growth, the number of households struggling financially has continued to grow through 2017. In 2007, 34 percent of Pennsylvania households had income below the ALICE Threshold; that share increased to 37 percent in 2010, rose slightly to 38 percent in 2014, where it remained until 2017, when it dipped slightly to 37 percent. In contrast, the official U.S. poverty rate in Pennsylvania reports that in 2017, only 13 percent were struggling. But the FPL was developed in 1965, and its methodology has remained largely unchanged despite fluctuations in the cost of living over time (U.S. Government Accountability Office, 2009).

The ALICE measures show how many households in the state are struggling, and they provide the new language needed to discuss this segment of our community and the economic challenges that so many residents face. In Pennsylvania, there are 1,216,446 ALICE households that have income above the FPL but below the ALICE Threshold. When combined with households below the poverty level, in total, 1,856,785 households in Pennsylvania — fully 37 percent — struggled to meet their basic needs in 2017.

ALICE households are working households. They hold jobs, pay taxes, and provide services that are vital to the Pennsylvania economy, in a variety of positions, such as retail salespeople, laborers and movers, customer service representatives, and office workers. The core issue is that these jobs do not pay enough to afford the basics of housing, child care, food, transportation, and health care. Moreover, the growth of low-skilled jobs is projected to outpace that of medium- and high-skilled jobs into the next decade. Yet the cost of basic household necessities continues to rise. Given these projections, ALICE households will continue to make up a significant percentage of households in the state.

REPORT OVERVIEW

Who is struggling in Pennsylvania?

Section I presents the ALICE Threshold: a realistic measure for income inadequacy in Pennsylvania that takes into account the current cost of basic necessities and geographic variation. In Pennsylvania, there are 1,856,785 households — 37 percent of the state’s total — with income below the ALICE Threshold. Of these households, 13 percent are living below the FPL and another 24 percent are ALICE. This section provides a statistical picture of ALICE household demographics, including geography, age, race/ethnicity, immigrant status, sex, and family type.

How costly is it to live in Pennsylvania?

Section II details the average minimum costs for households in Pennsylvania to simply survive — not to save or otherwise “get ahead.” The cost of living in Pennsylvania varies greatly across the state, but in all counties, it outpaces the wages of most jobs. The annual Household Survival Budget quantifies the costs of the basic essentials of housing, child care, food, transportation, health care, and a basic smartphone plan. Using the thriftiest official standards, including those used by the U.S. Department of Agriculture and the U.S. Department of Housing and Urban Development, the average annual Household Survival Budget in 2017 was $59,340 for a Pennsylvania family of four (two adults with one infant and one preschooler) and $20,760 for a single adult. These numbers vary by county, but all highlight the inadequacy of the 2017 adjusted U.S. poverty designation of $24,600 for a family and $12,060 for a single adult as an economic survival standard in Pennsylvania.
The Household Survival Budget is the basis for the ALICE Threshold, which redefines the basic economic survival standard for Pennsylvania households. Section II also details a Household Stability Budget, which reaches beyond survival to budget for savings and stability at a modest level. Even at this level, the Household Stability Budget is 67 percent higher than the Household Survival Budget for a family of four in Pennsylvania.

Where does ALICE work?

Section III examines the changing labor landscape in Pennsylvania, the rise of the gig economy, and the impact of these changes on wages and income volatility. With 59 percent of jobs in Pennsylvania paying less than $20 per hour, it is not surprising that so many households fall below the ALICE Threshold. The section details where ALICE works — the type of industries, geographic location, and size of firms. In addition, the section reviews the factors that keep ALICE workers’ wages low and the barriers that prevent ALICE from working, including gender, race/ethnicity, education, sexual identity and orientation, immigration status, military service, incarceration, and disability status. Finally, the section looks at what causes younger, older, and working-age Pennsylvanians to leave the workforce.

How much do ALICE households save and borrow?

Section IV explores the impact on ALICE households that have little to no savings. In 2017, 40 percent of Pennsylvania’s households did not have any savings for a rainy day. The section also reviews ALICE households’ access to credit as well as their ability to acquire assets, including vehicles, housing, and investments.

How much assistance is necessary to reach the ALICE Threshold?

Section V examines the amount of public and private assistance ALICE and poverty-level households receive. The ALICE Income Assessment estimates that ALICE and poverty-level households in Pennsylvania earned 48 percent of what was required to reach the ALICE Threshold in 2017. Resources from nonprofits and federal, state, and local governments provided $45.5 billion in goods and services, with an additional $33 billion in health care spending. However, this assistance left roughly a 50 percent gap to achieve the most basic financial need in most budget categories.

What are the housing and community conditions for ALICE households in Pennsylvania?

Section VI presents the conditions that Pennsylvania’s ALICE households face in terms of housing affordability and community resources (in the areas of education, health, and the social environment) across the state’s counties. ALICE households across Pennsylvania are challenged to find both affordable housing and high levels of community resources in the same county where they work.

Conclusion and Next Steps

The Report concludes by outlining the structural issues that pose the greatest challenges to ALICE households going forward. These include changes in the age of Pennsylvania’s population; racial and ethnic diversity and economic disparities; the evolving structure of households; migration into and out of the state; market instability resulting from economic disruptions, natural disasters, and technological advances within the global economy; and the effects of growing health inequality for ALICE workers. This section also presents some of the ideas currently being debated and piloted to improve life for households living below the ALICE Threshold — in Pennsylvania and across the country.
DATA & METHODOLOGY

This ALICE Report for Pennsylvania provides the most comprehensive look at the population called ALICE — an acronym for Asset Limited, Income Constrained, Employed. ALICE households have incomes above the Federal Poverty Level (FPL) but struggle to afford basic household necessities. The Report tracks data from before and after the Great Recession (2007 and 2010) and then during the recovery through 2017.

This Report remains focused on the county level because state averages can mask significant differences between counties. For example, the percentage of households below the ALICE Threshold in Pennsylvania ranges from 27 percent in Allegheny and Chester counties to 55 percent in Philadelphia County.

The Report examines issues surrounding ALICE households from different angles to draw the clearest picture with the range of data available. Sources include the American Community Survey, the U.S. Department of Housing and Urban Development, the U.S. Department of Agriculture, the Bureau of Labor Statistics at the U.S. Department of Labor, the Internal Revenue Service, and the Tax Foundation, as well as Pennsylvania’s state counterparts of these agencies and the Pennsylvania Office of Child Development and Early Learning. State, county, and municipal data is used to provide different lenses on ALICE households.

The data are estimates; some are geographic averages, others are one- or five-year averages depending on population size. The uwp.org/ALICE website contains more ALICE data at the local or sub-county level, including place, county subdivision, zip code, Public Use Microdata Area (PUMA), and congressional district. For a breakdown of the data by county and municipality, see the County Pages and Data File on the website (under “Downloads” at uwp.org/ALICE).

In this Report, many percentages are rounded to whole numbers for ease of reading. In some cases, this may result in percentages totaling 99 or 101 percent instead of 100 percent.

The data and methodology have two external checks. For each Report, the ALICE research team engages an independent Research Advisory Committee of local experts. In addition, every two years, the Research Advisory Committee scrutinizes the ALICE methodology and sources to ensure that the best local data is presented. This rigorous process results in enhancements to the methodology and new ideas for more accurately measuring and presenting data on financial hardship. For a more detailed description of the methodology and sources, see the Methodology Overview on our website, UnitedForALICE.org/methodology.
AT-A-GLANCE: SECTION I

- **ALICE** — Asset Limited, Income Constrained, Employed — defined: Despite being employed, many households earning more than the Federal Poverty Level (FPL) still cannot afford housing, child care, food, transportation, health care, and a basic smartphone plan.

- In Pennsylvania, there are over 1.2 million ALICE households, while another 640,339 households live below the poverty level. In total, 37 percent of Pennsylvania households earn below the ALICE Threshold.

- Households with income below the ALICE Threshold make up between 27 and 55 percent of households in every county in Pennsylvania.

- One-third of senior households in Pennsylvania qualify as ALICE, well more than the 10 percent of senior households living in poverty.

- There are ALICE households in each of Pennsylvania’s primary racial/ethnic groups. The largest number of ALICE households are White, mirroring the state’s majority-White population. But while there are fewer Black and Hispanic households in Pennsylvania overall, they are disproportionately likely to be ALICE.

- Reflecting the changing household composition across the country, “other” households — single or cohabiting households younger than 65 with no children under 18 — account for 46 percent of the state’s households with income below the ALICE Threshold.

- There are 1,257,829 families with children under the age of 18 in Pennsylvania, and 32 percent of them have income below the ALICE Threshold.

- Several demographic groups in Pennsylvania have lower incomes and are therefore more likely to live in ALICE households, including people of color; women; lesbian, gay, bisexual, transgender, and queer (LGBTQ+) people; those with lower levels of education; those with a disability; recent, undocumented, unskilled, or limited English-speaking immigrants; younger veterans; and formerly incarcerated people.
How many households are struggling across Pennsylvania? The Federal Poverty Level (FPL) provides one metric. According to the U.S. Census, the federal poverty rate in Pennsylvania increased slightly through the Great Recession, from 12 percent in 2007 to 13 percent in 2010. It remained at 13 percent, making up 640,339 of the state’s 5,029,219 households in 2017 (American Community Survey, 2017). However, the continued demand for public and private assistance over the seven years following the end of the Recession tells a very different story, suggesting that many times that number of households struggle to support themselves.

The FPL is no longer a realistic measure of financial hardship in households across each county in the U.S. Developed in 1965, the FPL no longer reflects the actual current cost of basic household necessities. Adjustments for Alaska and Hawai‘i were incorporated in 1970, but the overall methodology has not been updated since 1974 to accommodate changes over time in the cost of living or budget composition (e.g., food now takes up less of the family budget, and housing takes up more).

There have been extensive critiques of the FPL and arguments for better poverty measures (O’Brien & Pedulla, 2010; Uchitelle, 2001). The official poverty level is such a low estimate that many government and nonprofit agencies use multiples of the FPL to determine eligibility for assistance programs. For example, Pennsylvania’s Weatherization Assistance Program and the state’s Child Care Works Subsidized Child Care Program use 200 percent of the FPL to determine program eligibility. Even Medicaid and the Children’s Health Insurance Program (CHIP) use multiples of the FPL to determine eligibility across the country (Kaiser Family Foundation, 2019—Where Are States; National Conference of State Legislatures, 2014; Pennsylvania Department of Community & Economic Development, n.d.; Pennsylvania Department of Human Services, 2018—Child Care Works; Roberts, Povich, & Mather, 2012–2013).

Recognizing the shortcomings of the FPL, the U.S. Census developed an alternative metric, the Supplemental Poverty Measure (SPM), which is based on expenditures reported in the Bureau of Labor Statistics’ (BLS) Consumer Expenditure Survey (CES) and adjusted for geographic differences in the cost of housing. The SPM was meant to capture more struggling households, yet in Pennsylvania it is virtually the same as the official FPL: The Pennsylvania SPM three-year average for 2015-2017 was 11.8 percent, while the FPL three-year poverty estimate during that time period was 11.6 percent (Fox, 2018). And because the SPM is not based on the actual cost of basic goods, it still does not come close to capturing the percentage of households in Pennsylvania that are struggling.

Despite its shortcomings, the FPL has provided a standard measure over time to determine how many people in the U.S. are living in deep poverty. The needs and challenges that these people face are severe, and they require substantial community assistance. The definition of “poverty,” however, is vague, often has moral connotations, and can be inappropriately — and inaccurately — associated only with the unemployed.

“'The Federal Poverty Level, developed in 1965, is no longer a realistic measure of financial hardship in households across each county in the United States.'
To clarify the economic challenges that working households face, this Report measures what it actually costs to live in each county in Pennsylvania; it calculates how many households have income below that level; and it offers an enhanced set of tools to describe the impact of financial hardship on them and on their communities.

This is not merely an academic issue, but a practical one. The lack of accurate information about the number of people who are “poor” distorts the identification of problems related to poverty, misguides policy solutions, and raises questions of equality, transparency, and fairness. Using the FPL may also over-report the number of households facing financial hardship in areas with a low cost of living and under-report the number in areas with a high cost of living. For example, the majority of persistent-poverty counties are located in the South, a region of the country with a lower cost of living (U.S. Department of Agriculture, 2017—County Topology Codes). By the same token, there may be just as many households struggling in other regions where the cost of living is higher, but they are often not counted in the official numbers. The ALICE Threshold, which takes into account the relative cost of living at the local level, enables more meaningful comparisons across the country.

INTRODUCING ALICE

Many individuals and families in Pennsylvania do not earn enough to afford the basic household necessities of housing, child care, food, transportation, health care, and a basic smartphone plan. Even though many are working, their income does not cover the cost of living in the state, and they often require assistance to survive. Until recently, this group of people was loosely referred to as the working poor, or technically defined as the population in the lowest two income quintiles. The term “ALICE” — Asset Limited, Income Constrained, Employed — more clearly defines this population as households with income above the official FPL but below a newly defined basic survival income level. ALICE households are as diverse as the general population, composed of women and men, young and old, of all races and ethnicities, and living in rural, urban, and suburban areas.

THE ALICE THRESHOLD

In Pennsylvania, where the cost of living varies by region, it is especially important to have a current and realistic standard that reflects the true cost of economic survival and compares it to household incomes across each county. The ALICE Threshold is a realistic standard developed from the Household Survival Budget, a measure that estimates the minimal cost of the six basic household necessities — housing, child care, food, transportation, health care, and a basic smartphone plan. Based on calculations from the American Community Survey and the ALICE Threshold, 1,856,785 households in Pennsylvania — 37 percent — are either in poverty or are ALICE households (Figure 1).
ALICE OVER TIME

Pennsylvania is a diverse state, experiencing population growth in the southeast portion yet facing a decline in population in many other parts of the state. The total number of households in Pennsylvania rose from 4,845,417 in 2007 to 4,956,435 in 2010, and then to 5,029,219 in 2017, a 4 percent total increase since 2007. The number of those households earning below the ALICE Threshold grew much faster, increasing by 14 percent from 2007 to 2017 (American Community Survey, 2017; Center for Economic and Community Development, 2017).

In 2017, seven years after the end of the Great Recession, many households in Pennsylvania were still struggling to find jobs with high enough wages and enough hours to cover their basic monthly household expenses.

During the Recession, from 2007 to 2010, the number of Pennsylvania households with income below the ALICE Threshold increased even while there was a decrease in the overall population. Households below the ALICE Threshold rose from 34 percent in 2007 to 38 percent in 2010. While the overall economic climate has improved since 2010, ALICE and poverty-level households have not seen improvements in their financial status. The first dip in the percentage of households below the ALICE Threshold occurred between 2016 and 2017, when it decreased from 38 to 37 percent (Figure 2).

- **Poverty:** The number of households in poverty — defined through the FPL as those earning at or below $12,060 for a single adult and $24,600 for a family of four in 2017 — rose from 558,163 households in 2007 to 648,261 in 2010 and then fell slightly to 640,339 in 2017. The share of all households that were in poverty was 12 percent in 2007, rising to 13 percent in 2010 through 2017.
• **ALICE:** The number of ALICE households rose from 1.08 million in 2007 to 1.12 million in 2010 to 1.22 million in 2017. As a percentage of total households, the share that were ALICE households increased from 22 percent in 2007 to 25 percent in 2010, where it remained flat until 2017, when it decreased slightly to 24 percent.

### Figure 2.
**Household Income, Pennsylvania, 2007 to 2017**

These statistics don’t capture fluidity; beneath the static numbers, households are moving above and below the ALICE Threshold over time as economic and personal circumstances change. Nationally, the U.S. Census reports that from January 2009 to December 2011, 31.6 percent of the U.S. population was in poverty for at least two months. By comparison, the national poverty rate for 2010 was 15 percent (Edwards, 2014). Household income is fluid, and ALICE households may be alternately in poverty or more financially secure at different points during the year.

### WHERE DOES ALICE LIVE?

ALICE lives across Pennsylvania, in every county and every town. The importance of where we live — particularly while growing up — in determining the directions that our lives take has been well demonstrated by the Harvard Equality of Opportunity Project (Chetty & Hendren, 2015). The ALICE data is developed at the county level, so it captures important differences within states and even within regions of a state.
ALICE by County

Counties are small enough to reveal regional variation and large enough to provide reliable, consistent data. Behind the Pennsylvania state average, there is enormous variation among counties. But contrary to some stereotypes that suggest financial hardship only exists in inner cities, ALICE families live in every county in Pennsylvania — across rural, urban, and suburban areas (Figure 3).

The total number of households and the number of households living below the ALICE Threshold vary widely across Pennsylvania counties. The smallest county is Forest County with 1,473 households in 2017, and the largest is Philadelphia County (Philadelphia County and the City of Philadelphia are the same) with 606,142 households. Figure 3 shows that households living below the ALICE Threshold constitute a significant percentage of households in all Pennsylvania counties. However, there is variation between counties in terms of both numbers and shares of ALICE and poverty-level households:

- **Below the ALICE Threshold (including households in poverty):** Percentages range from 27 percent in Allegheny and Chester counties to 55 percent in Philadelphia County.

- **Poverty:** Percentages range from 6 percent in Montgomery County to 28 percent in Philadelphia County.

- **ALICE:** Percentages range from 15 percent in Allegheny County to 39 percent in Forest County.

Figure 3.
Percent of Households Below the ALICE Threshold by County, Pennsylvania, 2017

Sources: American Community Survey, 2017; ALICE Threshold, 2017
Another measure of economic conditions in a county is the persistence of economic hardship over time. According to the U.S. Department of Agriculture, only one of Pennsylvania’s counties — Philadelphia County — is a persistent-poverty county, where 20 percent or more of the population has lived in poverty over the last 30 years (U.S. Department of Agriculture, 2017—County Topology Codes).

**ALICE Breakdown Within Counties**

ALICE and poverty-level households live in every area across the state. Because Pennsylvania has many geographic areas, with very sparsely populated towns and cities where it can be difficult to get accurate data, the distribution of households below the ALICE Threshold in the state’s towns and cities is shown instead on a map of county subdivisions (Figure 4). To provide a more complete view of local variation in household income, county subdivisions include towns and cities as well as their surrounding areas.

County subdivisions with the lowest percentage of households below the ALICE Threshold are shaded lightest blue on the map; those with the highest percentage are shaded darkest blue. Glen Osborne Borough, in Allegheny County, has the lowest percentage of households below the ALICE Threshold at 3 percent, whereas Reading (Berks County), Briar Creek Borough (Columbia County), Shenandoah Borough (Schuylkill County), Renovo Borough (Clinton County), Weissport Borough (Carbon County), Shippensburg Borough and Shippensburg Township (Cumberland County), and Shinglehouse Borough and Shippensburg Township (Cumberland County), and Shinglehouse Borough (Potter County) have the highest — greater than 70 percent. Full data for cities and towns is available at uwp.org/ALICE, as is the percentage of households below the ALICE Threshold in each municipality (included in the municipal list on each County Page).

Most (75 percent) of Pennsylvania’s 2,408 county subdivisions have more than 30 percent of households living on an income below the ALICE Threshold. Only 136 county subdivisions have fewer than 20 percent of households with income below the ALICE Threshold, and most have more than 40 percent.

**Figure 4.**

Percent of Households Below the ALICE Threshold by County Subdivision, Pennsylvania, 2017

Sources: American Community Survey, 2017; ALICE Threshold, 2017
ALICE by Towns and Cities

Another way to break down the ALICE population is by looking at cities; 20 percent of Pennsylvania’s population lives in 13 densely populated urban areas. Pennsylvania’s largest cities — those with more than 15,000 households — also have large concentrations of households with income below the ALICE Threshold. All but three — Altoona, Levittown, and Pittsburgh — have more than half of households with income below the ALICE Threshold. Reading and York have more than 65 percent (Figure 5) (American Community Survey, 2017).

Figure 5.
Households Below the ALICE Threshold, Largest Cities and Towns in Pennsylvania, 2017

<table>
<thead>
<tr>
<th>Largest Cities and Towns (Above 15,000 Households)</th>
<th>Number of Households 2017</th>
<th>Percent of Households Below ALICE Threshold 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philadelphia</td>
<td>606,142</td>
<td>55%</td>
</tr>
<tr>
<td>Pittsburgh</td>
<td>137,442</td>
<td>38%</td>
</tr>
<tr>
<td>Allentown</td>
<td>43,480</td>
<td>56%</td>
</tr>
<tr>
<td>Erie</td>
<td>38,522</td>
<td>53%</td>
</tr>
<tr>
<td>Scranton</td>
<td>31,486</td>
<td>54%</td>
</tr>
<tr>
<td>Reading</td>
<td>28,765</td>
<td>67%</td>
</tr>
<tr>
<td>Bethlehem</td>
<td>27,995</td>
<td>50%</td>
</tr>
<tr>
<td>Lancaster</td>
<td>21,886</td>
<td>57%</td>
</tr>
<tr>
<td>Harrisburg</td>
<td>20,188</td>
<td>63%</td>
</tr>
<tr>
<td>Altoona</td>
<td>18,835</td>
<td>49%</td>
</tr>
<tr>
<td>Levittown</td>
<td>17,935</td>
<td>35%</td>
</tr>
<tr>
<td>York</td>
<td>16,510</td>
<td>67%</td>
</tr>
<tr>
<td>Wilkes-Barre</td>
<td>15,514</td>
<td>58%</td>
</tr>
</tbody>
</table>

Sources: American Community Survey, 2017; ALICE Threshold, 2017. For additional data, visit uwp.org/ALICE

ALICE DEMOGRAPHICS

ALICE households vary in size and makeup; there is no typical configuration. Contrary to some stereotypes, ALICE households are young and old, comprised of all race/ethnicities and educational levels, may or may not have children, and live in cities, suburbs, and rural areas.

These households move above and below the ALICE Threshold over time. For instance, a young ALICE household may capitalize on their education and move above the ALICE Threshold. An older ALICE household may experience a health emergency, lose a job, or suffer a disaster and slip into poverty.
Households by Age

There are ALICE households in every age bracket in Pennsylvania (Figure 6). Within each age bracket, the number of ALICE households and households in poverty generally reflect their proportion of the overall population. Where they differ, the youngest are over-represented in both poverty and the ALICE population. (Note: Households do not include people living in group quarters such as dorms or nursing homes.)

Figure 6.
Household Income by Age of Head of Household, Pennsylvania, 2017

<table>
<thead>
<tr>
<th>Percent of Total Age Group</th>
<th>Under-25</th>
<th>25-44</th>
<th>45-64</th>
<th>65+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poverty</td>
<td>43%</td>
<td>20%</td>
<td>11%</td>
<td>10%</td>
</tr>
<tr>
<td>ALICE</td>
<td>28%</td>
<td>29%</td>
<td>21%</td>
<td>33%</td>
</tr>
<tr>
<td>Above ALICE Threshold</td>
<td>153</td>
<td>1,473</td>
<td>1,991</td>
<td>1,413</td>
</tr>
<tr>
<td>Total Households</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
</tr>
</tbody>
</table>

Sources: American Community Survey, 2017; ALICE Threshold, 2017

The youngest Pennsylvania age group (under age 25) has the largest percentage of households below the ALICE Threshold: 43 percent are in poverty, while an additional 29 percent are ALICE households. As households get older, a smaller percentage are living in poverty. Middle-aged households (25 to 44 years and 45 to 64 years) also have the lowest percentage of ALICE households, at 20 and 21 percent respectively. But it is surprising to see even these numbers of households in their prime earning years with income below the ALICE Threshold. And while seniors are less likely to be in poverty (10 percent), they have the highest share of ALICE households (33 percent).

Two age groups are changing the overall demographics in Pennsylvania: the baby boomers and the millennials. The baby boomers (born between 1946 and 1964) are the largest generation in the U.S., and as they age, their needs and preferences change. The second-largest group is the millennials (born between 1981 and 1996, according to the Pew Research Center), who are making different lifestyle and working choices than previous generations. To analyze general trends, the ALICE data on age is presented by household in more precise Census breaks: under–25, 25–44, 45–64, and 65+. Millennials are covered by the youngest two brackets and baby boomers by the oldest two (Dimock, 2019).
Millennials: As a large state, Pennsylvania has the sixth highest number of millennials of any state, 2.9 million; but when looking at millennials as a percentage of the total population, the state ranks much lower because the populations of older generations are much larger.

In many ways, millennials differ from previous generations. First, they are more racially and ethnically diverse: Nationally, compared to previous generations, a much smaller percentage of millennials are White (56 percent), and a larger percentage (nearly 30 percent) are Hispanic, Asian, or people identifying as two or more races. The share of Black millennials resembles that of previous generations. In Pennsylvania, Asian, Black, and Hispanic millennials make up more than half of the millennial population (W. H. Frey, 2018).

Second, millennials, especially millennials of color, tend to prefer to live in urban centers. In Pennsylvania, millennials are concentrated in towns as well as major cities. For example, more than 30 percent of residents in the Lehigh Valley towns of Bethlehem, Easton, Hanover Township, Allentown, Macungie, and Alburtis are millennials (W. H. Frey, 2018; Satullo, 2018).

Third, many millennials cannot afford to live on their own. Instead, they are more likely than previous generations to live with their parents or with roommates. Nationally, for the first time in more than a century, they are less likely to be living with a romantic partner (Cilluffo & Cohn, 2017; Cohn & Caumont, 2016; W. H. Frey, 2018).

Aging Population: The comparatively low rate of senior households in poverty (10 percent) provides evidence that government benefits, including Social Security, are effective at reducing poverty among seniors (Haskin, 2011; Institute for New Economic Thinking, 2017). But with 33 percent of senior households qualifying as ALICE, it is clear that these same benefits do not often enable financial stability. This is reinforced by the fact that many senior households continue to work, and although some work by choice, others are forced to do so in order to stay out of poverty. In Pennsylvania’s 65- to 74-year-old age group, 27 percent are in the labor force, as are 7 percent of those 75 years and over (American Community Survey, 2017).

Households by Race/Ethnicity

ALICE and poverty-level households exist in every racial and ethnic group in Pennsylvania. The ALICE Reports follow U.S. Census classifications for the largest non-White populations — Black, Asian, Hispanic, and American Indian/Alaska Native, as well as people identifying as being of “Some Other Race” or “Two or More Races.” Because people of any race, including Whites, can also be of Hispanic ethnicity, the ALICE data looks at White, Black, Asian, and American Indian/Alaska Native categories “alone” (i.e., not also Hispanic), as well as at Hispanic populations.

Pennsylvania lags behind the country in its ethnic and racial diversity. In 2017, White households were the largest racial group in Pennsylvania, with more than 4 million households, compared to 495,222 Black
households, 250,450 Hispanic households, and 132,937 Asian households (Figure 7). Some racial and ethnic groups in Pennsylvania are extremely small and the U.S. Census does not report their income, so ALICE data is not available for them. Less than 1 percent of households in Pennsylvania identify themselves as American Indian/Alaska Native (9,396 households); another 1.3 percent identify as being of “Two or More Races”; and 1.4 percent identify as “Some Other Race” (American Community Survey, 2017).

Philadelphia County is an exception, being the only “majority-minority” county in the state, with 65 percent of its population claiming Hispanic ethnicity or non-White race. There also are a number of cities in Pennsylvania where more than 50 percent of the population is non-White. The largest are Allentown, Altoona, Bethel Park, Bethlehem, Chester, Erie, Harrisburg, Lancaster, Levittown, Norristown, Pittsburgh, Reading, Scranton, State College, Wilkes-Barre, and York (American Community Survey, 2017).

Figure 7.
Households by Race/Ethnicity and Income, Pennsylvania, 2017

![Households by Race/Ethnicity and Income, Pennsylvania, 2017](image)

Sources: American Community Survey, 2017; ALICE Threshold, 2017

Note: Data in all categories except Two or More Races is for one race alone. Because race and ethnicity are overlapping categories, the totals for each income category do not add to 100 percent exactly. This data is for households; because household size varies for different racial/ethnic groups, population percentages may differ from household percentages. Because household poverty data is not available for the American Community Survey’s Race/Ethnicity categories, annual income below $15,000 is used as a proxy.

Households below the ALICE Threshold in Pennsylvania are composed of all different races/ethnicities. Only 33 percent of White households are below the ALICE Threshold, while Black and Hispanic households are more likely to be below the ALICE Threshold, at 57 percent and 62 percent respectively. However, because White households are the largest group in the state, they still account for 74 percent of all households below the ALICE Threshold; Black households account for 15 percent, Hispanic households for 8 percent, and Asian households for 3 percent. Within each of Pennsylvania’s racial/ethnic groups, there is additional diversity in age, income status, and national origin, as well as date of entry into the U.S. for immigrant households:
White (non-Hispanic) households are the largest racial group in Pennsylvania; yet because their numbers are not growing compared to other groups, their percentage of total households has declined over the past decade, falling from 84 percent in 2007 to 81 percent in 2017. The differences appear along age lines; White households account for a larger percentage of households over 55 years, yet in younger age groups, their percentage is declining, while the number of Asian, Black, and Hispanic households is increasing. As the largest racial/ethnic group, White households also account for the largest portion of those below the ALICE Threshold — 74 percent (Figure 8). And they make up the largest share of Pennsylvania’s foreign-born residents by race at 41 percent, including a sizable number of immigrants from Eastern Europe (American Community Survey, 2007–2017; Migration Policy Institute, 2017; Pennsylvania State Data Center, 2018).

Black households make up 10 percent of all Pennsylvania households and 15 percent of those below the ALICE Threshold. In addition to Black families who have lived in Pennsylvania for generations or who migrated from other parts of the U.S., there is an increasing number of recent African immigrants. Immigrants from Africa account for 8 percent of the foreign-born population in Pennsylvania. Nationally, African immigrants are the most recent immigrants, with almost two-thirds having arrived in the U.S. in 2000 or later (Anderson, 2015; Migration Policy Institute, 2017).

Hispanic households (an ethnicity, which can include people of any race) now account for 5 percent of Pennsylvania’s households and are the fastest growing racial/ethnic group in the state. Hispanic households account for 8 percent of those below the ALICE Threshold. The Hispanic population in Pennsylvania and the U.S. is increasingly diverse due to waves of immigration over the last seven decades. Almost one-third (32 percent) of foreign-born residents in Pennsylvania in 2017 were born in Latin America. And date of entry impacts income: Hispanic immigrants who have lived in the U.S. the longest earn higher incomes than those who immigrated more recently (American Community Survey, 2007–2017; A. Flores, 2017; Gutiérrez, 2013; Migration Policy Institute, 2017; The Pew Charitable Trusts, 2014).

Asian households in Pennsylvania account for 3 percent of households and 3 percent of those below the ALICE Threshold. They are the second fastest growing racial/ethnic group in the state and account for almost 40 percent of the foreign-born population. Nationally, 15 percent of the Asian population identifies as two or more races — much higher than the comparable mixed-race share of Whites (3 percent), Hispanics (6 percent), or Blacks (7 percent) (Migration Policy Institute, 2017; Pew Research Center, 2017).

Unlike most immigrant groups, Asian households vary less in income status by year of entry to the U.S. and more by country of origin. For example, nationally, immigrants from India are more likely than other groups to have a college degree, followed by those from the Philippines and Japan. Immigrants from Vietnam are more likely to have higher rates of poverty than the overall U.S. population. And there is a wide range of immigrants from Korea and China, including some of the best educated but also some with the lowest incomes (American Community Survey, 2017; Pew Research Center, 2017; Zong & Batalova, 2016).

Refugees: A subset of the foreign-born population in Pennsylvania are refugees, escaping war, persecution, or natural disaster — approximately 2,700 people in 2016–2017. The largest numbers came from the Democratic Republic of Congo, Syria, and Bhutan, with over 400 people from each country (Mathema, 2018; New American Economy Research Fund, 2017; Pennsylvania Refugee Resettlement Program, 2018).
Figure 8.
Households Below ALICE Threshold by Race/Ethnicity, Pennsylvania, 2017

Below ALICE Threshold = 1.86 Million Households

- White: 74%
- Black: 15%
- Hispanic: 8%
- Asian: 3%

Sources: American Community Survey, 2017; ALICE Threshold, 2017

THE AMERICAN HOUSEHOLD IS CHANGING

There are longstanding preconceptions about what types of families tend to be low-income — homes headed by single mothers, for example. Yet ALICE and poverty-level families exist in all configurations. There have been such dramatic changes in demographics, lifestyle choices, and living arrangements of Americans that it is important to re-evaluate old stereotypes.

With millennials delaying marriage and having children, as well as decades of declining marriage rates and rising levels of divorce, remarriage, and cohabitation, the household made up of a married couple with two children is no longer typical. Since the 1970s, there has been a trend toward smaller households, fewer households with children, and fewer married-parent households. People are increasingly living in a wider variety of arrangements, including singles living alone or with roommates, and grown children living with parents. The share of American adults who have never been married is at a historic high. In addition, more grandparents are caring for grandchildren, partly because of a rise in parents who struggle with substance abuse or are incapacitated by mental illness. In Pennsylvania, more than 76,000 grandparents (2 percent of people over the age of 60) are responsible for the basic needs of grandchildren under the age of 18 (American Community Survey, 2017; Pennsylvania House of Representatives, 2017; Wiltz, 2016).

Single or Cohabiting Adults

Single or cohabiting adults under age 65 with no children under age 18 make up the largest household type in Pennsylvania, accounting for 47 percent of households. This group also had the largest share of households below the ALICE Threshold in 2017: 855,493 households, or 46 percent. More than a third (36 percent) of Pennsylvania’s single or cohabiting households earned below the ALICE Threshold in 2017 (Figure 9).

This household type includes families with at least two members related by birth, marriage, or adoption but with no children under the age of 18, single adults younger than 65, or people who share a housing unit with non-relatives such as boarders or roommates. Nationally from 1970 to 2012, the proportion of single-adult households increased from 17 to 27 percent, while the share of households comprised of married couples with children under 18 decreased by half, from 40 to 20 percent (Cohn & Caumont, 2016; Vespa, Lewis, & Kreider, 2013).
Families With Children

With the rising cost of supporting a family, the increasing divorce rate, and millennials delaying marriage and children, the number of families with children is decreasing across the country. From 2007 to 2017, the number of Pennsylvania families with children fell by 7 percent. Yet at the same time, the number below the ALICE Threshold increased by 10 percent.

The structure of families with children is changing, with mothers doing more paid work outside the home as the cost of living continues to rise. Nationally, 42 percent of mothers were sole or primary breadwinners in 2015, bringing in 50 percent or more of family earnings, and another 22 percent were co-breadwinners, bringing home 25 to 49 percent of earnings. Traditional gender roles are changing as well, with fathers doing more housework and child care. Over the last 30 years, the number of stay-at-home fathers has doubled to 2.2 million, and the amount of housework fathers report doing has also doubled to an average of nine hours a week (Cohn & Caumont, 2016; Glynn, 2016; Livingston, 2014; Parker & Livingston, 2018; Vespa, et al., 2013).

The composition of families with children is also changing. There is increasing variety in the structure of families, including those with several cohabiting generations and those with lesbian, gay, bisexual, transgender, and queer (LGBTQ+) parents. The fluidity of the family has increased, with more children growing up amid changes including non-marital cohabitation, divorce, and remarriage. Households with combined children from parents’ prior relationships are also on the rise. Almost one in six children under the age of 18 now lives in a family with parents and their children from previous relationships (Cohn & Caumont, 2016; Gates & Brown, 2015; Pew Research Center, 2015).

With these changes, the household composition of a “single-parent family” as defined by the U.S. Census often has more than one adult. The Census’ category of single-parent households includes one parent as the sole adult, a parent with a cohabiting partner, or a parent with another adult age 18 or older who lives in the home.
such as a grown child or grandparent. In 2017, more than half (53 percent) of children living in a Census-defined single-parent family had two adults in the household (Livingston, 2018; U.S. Census Bureau, 2017—America’s Families and Living Arrangements; Vespa, et al., 2013).

Of Pennsylvania’s 1,257,829 families with children, 398,762 (32 percent) had income below the ALICE Threshold in 2017 (Figure 9). In most (68 percent) of the state’s families with children under 18, the parents in the family are married. However, children in families with income below the ALICE Threshold are more likely to live in single-parent families (Figure 10).

Figure 10. Families With Children, by Income, Pennsylvania, 2017

Not surprisingly, the most expensive household budget is for a household with young children, due not only to these households’ larger size but also to the cost of child care, preschool, and after-school care (discussed further in Section II). The biggest factors determining the economic stability of a household with children are the number of wage earners, the gender of the wage earners, the number of children, and the costs of child care for children of different ages.

Married-Parent Families
With two income-earners, married couples with children have greater means to provide a higher household income than households with one adult. For this reason, only 14 percent of married-parent families with children in Pennsylvania had income below the ALICE Threshold in 2017 (Figure 10). However, because they are such a large demographic group, married-parent families with children still accounted for 31 percent of Pennsylvania families with children below the ALICE Threshold.

Single-Female-Headed Families
Families headed by single women with children are the second most common family type. With one income-earner, they are much more likely to struggle financially; in Pennsylvania, 74 percent of these families had income below the ALICE Threshold in 2017. This is compounded by the fact that in Pennsylvania, as in all states, women still earn significantly less than men.
Single-Male-Headed Families

The number of households headed by single men with children is growing in Pennsylvania and across the country. While most single-parent families are still headed by mothers, single-father families accounted for 8 percent of all Pennsylvania families with children in 2017. Although they are less common than single-female-headed families, single-male-headed families face similar challenges. In fact, 52 percent of all single-male-headed families with children in Pennsylvania have income below the ALICE Threshold.

In summary, households below the ALICE Threshold in Pennsylvania have many different household structures. Single or cohabiting adults under age 65 with no children under age 18 made up the largest portion of households below the ALICE Threshold in 2017 (46 percent), followed by seniors (32 percent), and then married and single-headed families with children (22 percent combined) (Figure 11). While single-parent households are more likely to have income below the ALICE Threshold, they represented only 15 percent of all households below the ALICE Threshold in Pennsylvania in 2017 because they are a small portion of the total population.

Figure 11.
Households Below ALICE Threshold by Type of Household, Pennsylvania, 2017

Sources: American Community Survey, 2017; ALICE Threshold, 2017

Additional Risk Factors for Being ALICE

Demographic groups that are especially vulnerable to underemployment, unemployment, and lower earning power are more likely than other groups to live in poverty or to be ALICE. In addition to the challenges faced by people of color discussed earlier in this section, a number of other groups are more likely to fall into the ALICE population: women; people with a low level of education; recent, unskilled, undocumented, or limited-English-speaking immigrants; LGBTQ+ individuals; people living with a disability; younger combat veterans; and formerly incarcerated people. The employment barriers that these households face are discussed in more detail in Section III.
II. HOW COSTLY IS IT TO LIVE IN PENNSYLVANIA?

Measure 2 – The Household Budget: Survival vs. Stability

AT A GLANCE: SECTION II

The Household Survival Budget

- The Household Survival Budget estimates what it costs to afford the six basic household necessities: housing, child care, food, transportation, health care, and a basic smartphone plan.

- The average annual Household Survival Budget for a four-person family living in Pennsylvania is $59,340, more than double the Federal Poverty Level (FPL) of $24,600 per year for a family of that size.

- The Household Survival Budget for a family is $59,340, which translates to an hourly wage of $29.67 for one parent (or $14.84 per hour each, if two parents work).

- The average annual Household Survival Budget for a single-adult in Pennsylvania is $20,760, which translates to an hourly wage of $10.38.

- Child care represents a Pennsylvania family’s greatest expense: an average of $1,229 per month for two children in licensed registered home-based care; or $1,469 per month for an accredited child care center.

The Household Stability Budget

- The Household Stability Budget measures how much income is needed to support and sustain an economically viable household, including both a 10 percent savings plan and the cost of employer-sponsored health insurance.

- The average annual Household Stability Budget is $99,360 per year for a family of four — 67 percent higher than the Household Survival Budget.

- To afford the Household Stability Budget for a two-parent family, each parent must earn $24.84 per hour or one parent must earn $49.68 per hour.

The cost of basic household necessities increased by more than 26 percent in Pennsylvania from 2007 to 2017 despite low inflation during the Great Recession. As a result, 37 percent of households in Pennsylvania are challenged to afford the basic necessities. This section presents the Household Survival Budget, a realistic measure estimating what it costs to afford the basic household necessities of housing, child care, food, transportation, health care, technology, and taxes. It also presents the Household Stability Budget, which reaches beyond survival to estimate the cost of maintaining a viable household in the modern economy, with a degree of future financial security.
The Household Survival Budget

The Household Survival Budget follows the original intent of the FPL as a standard for temporary sustainability (Blank, 2008). This budget identifies the minimum cost option for each of the basic household items needed to live and work in today’s economy. Figure 12 shows a statewide average Household Survival Budget for Pennsylvania in two variations: one for a single adult and the other for a family with two adults, a preschoooler, and an infant.

In 2017, the average Household Survival Budget in Pennsylvania was $59,340 for a four-person family and $20,760 for a single adult (Figure 12). These costs continue to outpace the national rate of inflation. The hourly wage necessary to support a family budget is $29.67 for one parent working 40 hours per week, 50 weeks per year (or $14.84 per hour each, if two parents work), and $10.38 per hour, full time, for a single adult. To see a Household Survival Budget for each county in Pennsylvania, visit uwp.org/ALICE.

As a frame of reference, it is worth noting that the Household Survival Budget is lower than both the MIT Living Wage Budget and the Economic Policy Institute’s Family Budget Calculator. These budgets are compared with both the Survival and Stability budgets later in this section (Figure 16).

Figure 12.
Household Survival Budget, Pennsylvania Average, 2017

<table>
<thead>
<tr>
<th>Monthly Costs</th>
<th>SINGLE ADULT</th>
<th>2 ADULTS, 1 INFANT, 1 PRESCHOOLER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing</td>
<td>$592</td>
<td>$827</td>
</tr>
<tr>
<td>Child Care</td>
<td>$-</td>
<td>$1,229</td>
</tr>
<tr>
<td>Food</td>
<td>$199</td>
<td>$604</td>
</tr>
<tr>
<td>Transportation</td>
<td>$309</td>
<td>$617</td>
</tr>
<tr>
<td>Health Care</td>
<td>$158</td>
<td>$617</td>
</tr>
<tr>
<td>Technology</td>
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<td>$75</td>
</tr>
<tr>
<td>Miscellaneous</td>
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<td>$450</td>
</tr>
<tr>
<td>Taxes</td>
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<td>$526</td>
</tr>
<tr>
<td>Monthly Total</td>
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<td>$4,945</td>
</tr>
<tr>
<td>ANNUAL TOTAL</td>
<td>$20,760</td>
<td>$59,340</td>
</tr>
<tr>
<td>Hourly Wage*</td>
<td>$10.38</td>
<td>$29.67</td>
</tr>
</tbody>
</table>

*Full-time wage needed to support this budget


In comparison to the annual Household Survival Budget, the FPL was $24,600 per year for a family of four and $12,060 per year for a single adult in 2017. In that same year, the Pennsylvania median family income was $75,949 per year and the median household income was $59,195 (American Community Survey, 2017).

Overall, the cost of household basics in the Household Survival Budget — housing, child care, food, transportation, health care, technology, and taxes — increased by 26 percent for a single adult and 33 percent for a family of four in Pennsylvania from 2007 to 2017. These increases were driven primarily by increases in the cost of housing and child care, and by the addition of a basic smartphone plan to the budget in 2016. During the same 10-year period, median earnings increased by only 20 percent in Pennsylvania, putting greater strain on households. And the national inflation rate, which covers a larger number of budget items than the Household Survival Budget, was 22 percent between 2007-2017 (American Community Survey, 2017; BLS, 2019—CPI Inflation Calculator).
SURVIVAL BUDGET COMPONENTS

Housing

The housing budget uses the U.S. Department of Housing and Urban Development’s Fair Market Rent for an efficiency apartment for a single adult and a two-bedroom apartment for a family. The cost includes utilities but not telephone service, and it does not include a security deposit.

Child Care

The child care budget represents the cost of registered home-based child care for an infant and a 4-year-old. In Pennsylvania, home-based child care sites are defined as having between four and six children unrelated to the caregiver; these homes are required to be registered and are regulated by the state. Licensed child care centers are also regulated, and are more likely to participate in Keystone STARS, a quality-rating program that aims to raise the quality of care; higher-rated licensed child care centers are significantly more expensive (Pennsylvania Department of Education, 2008).

Food

The food budget is based on the U.S. Department of Agriculture’s (USDA) Thrifty Food Plan, which is also the basis for benefits provided by the Supplemental Nutrition Assistance Program (SNAP) and Special Supplemental Nutrition Program for Women, Infants, and Children (WIC).

Like the USDA’s original Economy Food Plan, the Thrifty Food Plan was designed to meet the nutritional requirements of a healthy diet, but it includes foods that need a lot of home preparation time with little waste, plus skill in both buying and preparing food. The cost of the Thrifty Food Plan takes into account broad regional variation across the country but not localized variation, which can be even greater, especially for fruits and vegetables (Hanson, 2008; Leibtag & Kumcu, 2011).

Transportation

The transportation budget is calculated using average annual expenditures for transportation by car and by public transportation from the Bureau of Labor Statistics’ Consumer Expenditure Survey (CES). Since the CES is reported by metropolitan statistical areas and regions, counties are matched with the most local level possible.
Health Care

The health care budget includes out-of-pocket health care spending for insurance, medical services, prescription drugs, and medical supplies using the average annual health expenditure reported by income and region in the CES. Because most ALICE households do not qualify for Medicaid, the budget includes the amount a low-income family spends on insurance (but not what an employer pays or what they receive in government subsidies) (Healthcare.gov, 2018).

Technology

Because cell phones have become essential for workers, the cost of a basic smartphone plan is added to the Household Survival Budget for each adult in the household. The cost is based on the cheapest available as reported by Consumer Reports (2017—Best Low-Cost Cell-Phone). While there are government subsidies for low-income residents, the income eligibility threshold (135 percent of the Federal Poverty Level) is significantly less than the ALICE Threshold, so these subsidies are excluded.

Taxes

The tax budget includes both federal and state income taxes where applicable, as well as Social Security and Medicare taxes. These rates include standard federal and state deductions and exemptions, as well as the federal Child Tax Credit and the Child and Dependent Care Credit as defined in the Internal Revenue Service’s Form 1040: Individual Income Tax, Forms and Instructions. They also include state tax deductions and exemptions such as the Personal Tax Credit and renter’s credit as defined in each state Department of Revenue’s Form 1040: Individual Income Tax, Forms and Instructions. In most cases, ALICE households do not qualify for the Earned Income Tax Credit eligibility limit.

Miscellaneous

The miscellaneous category includes 10 percent of the budget total (including taxes) to cover cost overruns. This category can also cover additional essentials such as toiletries, diapers, cleaning supplies, or work clothes.
Across the country, the cost of basic necessities, including rental housing, prescription drugs and medical equipment, and vehicle maintenance and repair, has risen faster over the last 30 years than the cost of the wider range of goods included in the Consumer Price Index. While steady increases are difficult for ALICE families, volatility presents another set of challenges, especially for budgeting. Of all expenses, food and energy costs fluctuate the most (Church, 2015; Federal Reserve Bank of St. Louis, 2019—Economic Research).

The Household Survival Budget varies across Pennsylvania’s counties. In 2017, the basic essentials were least expensive for a Pennsylvania family in McKean County at $49,836 per year, and for a single adult in Allegheny County at $16,440 per year. Essentials were most expensive for a family in Chester County at $78,720 per year, and for a single adult in Bucks, Chester, and Montgomery counties at $26,016 per year (Figure 13). A Household Survival Budget for each county in Pennsylvania is presented in the County Pages available at uwp.org/ALICE.

Figure 13.
Household Survival Budget, Family of Four, Pennsylvania Counties, 2017

Housing costs vary by county in Pennsylvania. Rental housing is least expensive for a two-bedroom apartment in many rural counties in the north central area of the state at $681 per month and for an efficiency apartment in McKean County at $439 per month. Rental housing is most expensive for a two-bedroom apartment in Bucks, Chester, Delaware, Montgomery, and Philadelphia counties at $1,211 per month and for an efficiency apartment at $845 per month (HUD, 2017—Fair Market Rents). To put these costs in national context, the National Low Income Housing Coalition reports that Pennsylvania was the 20th most expensive state in the country for housing in 2017 (National Low Income Housing Coalition, 2017).

In the Household Survival Budget, housing for a family accounts for 17 percent of the budget, which is well below the U.S. Department of Housing and Urban Development’s affordability guidelines of 30 percent (HUD, n.d.—Defining Housing Affordability). For a single adult, an efficiency apartment accounts for 34 percent of the Household Survival Budget, slightly above the threshold at which the renter would be considered “housing burdened.” (The availability of affordable housing units is addressed in Section VI.)
Child Care

In Pennsylvania, income inadequacy rates are higher for households with children at least in part because of the cost of child care. The Household Survival Budget includes the cost of registered home-based child care, the least expensive paid child care option. The average rate in Pennsylvania is $1,229 per month ($639 per month for an infant and $590 for a 4-year-old) (Office of Child Development and Early Learning, 2018).

Family Child Care Homes provide care in a caregiver’s home for four to six children unrelated to the caregiver. These homes are required to be registered with the state and have to follow educational, health, and safety regulations. The quality of care that they provide may vary between locations. Licensed child care centers are also regulated, and are more likely to participate in Keystone STARS and meet a more detailed standard of quality care. Accordingly, licensed child care centers are significantly more expensive, with an average cost of $1,468 per month ($791 per month for an infant and $677 for a 4-year-old) (Office of Child Development and Early Learning, 2018; Pennsylvania Department of Education, 2008).

Costs vary across counties: The least expensive home-based child care for two children — an infant and a preschooler — is found in McKean County at $833 per month, and the most expensive home-based child care is in Chester County at $1,820 per month.

Child care for two children accounts for 25 percent of the household budget, the family’s greatest expense. The cost of child care in Pennsylvania increased by 27 percent from 2007 to 2017. These increases have made child care costs prohibitive for many ALICE families, not just in Pennsylvania but nationwide. A recent study from the Oregon Child Care Research Partnership found that, nationally, it was 24 percent harder (measured by increase in prices combined with decrease in income) for a two-parent family to purchase care in 2012 than in 2004, and 33 percent harder for single parents (Weber, 2015).

Food

The original U.S. poverty level was based in part on the 1962 Economy Food Plan, which recognized food as a most basic element of economic well-being. The food budget for the Household Survival Budget is instead based on the USDA’s Thrifty Food Plan, showing the minimal budget amount possible for food. Within the Household Survival Budget, the cost of food in Pennsylvania is $604 per month for a family of two adults and two young children and $199 per month for a single adult (USDA, 2017—Official USDA Food Plans).

The cost of food increased in Pennsylvania by 18 percent from 2007 to 2017. The original FPL was based on the premise that food accounts for one-third of a household budget, so that a total household budget was the cost of food multiplied by three. Yet with the large increases in the cost of other parts of the household budget, food now accounts for only 12 percent of the Household Survival Budget for a family or a single adult in Pennsylvania. Because the methodology of the FPL has not evolved in tandem with changing lifestyles and work demands, the FPL significantly underestimates the cost of even the most minimal household budget today.
Transportation

The fourth item in the Household Survival Budget is transportation, a prerequisite for most employment in Pennsylvania. The average cost of transportation by car is several times greater than by public transportation, but public transportation is only reliably available in Delaware, Philadelphia, and Allegheny counties in Pennsylvania. According to the Consumer Expenditure Survey, a Pennsylvania family pays an average of $636 per month for gasoline, motor oil, and other vehicle expenses, which increases to $707 per month in the counties surrounding Philadelphia. By comparison, the average cost for public transportation is only $111 per month in Delaware and Philadelphia counties and $134 in Allegheny County. Because most workers in Pennsylvania must have a car to get to their jobs, the Household Survival Budget generally reflects the higher cost of using a car (BLS, 2017—Consumer Expenditure Survey).

Transportation costs represent 12 percent of the average Household Survival Budget for a family and 18 percent for a single adult. These costs are lower than in other budgets for households with incomes similar to those of ALICE households. The Housing and Transportation Affordability Index finds that for low-income Pennsylvania households, transportation costs take up to 25 percent of the household budget in metro areas, and up to 36 percent in more rural parts of western Pennsylvania (Center for Neighborhood Technology, 2018).

Health Care

The fifth item in the Household Survival Budget is health care costs. From 2007 to 2017, the average health care costs in Pennsylvania increased more than 65 percent, more than any other budget item, averaging $158 per month for a single adult (9 percent of the budget) and $617 per month for a family (12 percent of the budget) in 2017 (BLS, 2017—Consumer Expenditure Survey). These are out-of-pocket costs for insurance, medical services, prescription drugs, and medical supplies for a low-income family. A low health care allotment makes a family vulnerable to financial crisis if a household member should undergo a serious illness or medical emergency.

Most ALICE households do not qualify for Medicaid because the eligibility threshold is 138 percent of the FPL, well below the Household Survival Budget. Yet many ALICE families cannot afford monthly insurance premiums on top of copays and large deductibles. For example, the deductible for the Affordable Care Act (ACA) Marketplace Silver Plan with no subsidies is just over $11,000, and is slightly less for the lowest cost Bronze Plan. Households that can’t afford these costs are forced to forgo insurance and pay the ACA penalty for not having coverage. The penalty for 2017 was the higher of the following: 2.5 percent of household income, the yearly premium for the national average price of a Bronze Plan sold through the Marketplace, or the cost of the penalty, which was $695 annually for a single adult and $2,085 for a family of four. These are both less than what the Household Survival Budget allots for health care, but provide no actual health care coverage (Healthcare.gov, 2018; Kaiser Family Foundation, 2017—Health Insurance Marketplace).

Technology

A smartphone has become an essential part of life, especially to workers, who often have to check emails and work schedules online, or use it to apply for jobs. Therefore, the cost of a basic smartphone plan for each adult in the household was added to the Household Survival Budget beginning in 2016. The average minimal monthly cost of a smartphone plan in Pennsylvania in 2017 was $75 for a family and $55 for a single adult (Consumer Reports, 2017—Best Low-Cost Cell-Phone; Pew Research Center, 2018; Smith, 2017).
Ninety-five percent of Americans own a cell phone of some kind, and 77 percent own a smartphone, according to a 2018 Pew Research Center survey. This data does not vary greatly by gender, race/ethnicity, age, education, income, or geography. There are few exceptions where usage is lower: seniors, people without a high school degree, those earning income less than $30,000, or those living in rural areas (Smith, 2017).

**Taxes**

Taxes are a legal requirement of earning income in Pennsylvania, even for low-income households. Taxes represent 15 percent of the average Household Survival Budget for a single adult, and with credits and exemptions, 11 percent for a family. In 2017, a single adult in Pennsylvania earning $20,000 per year paid on average about $3,100 in federal and state taxes, and a family earning around $60,000 per year, benefiting from the federal Child Tax Credit and the Child and Dependent Care Credit, paid approximately $6,300. These rates include federal and state income taxes, calculating standard federal and state deductions and exemptions; and the largest portion of the tax bill is for payroll deduction taxes for Social Security and Medicare (IRS, 2017—EITC Income Limits; IRS, 2017—EITC Participation Rate; IRS, 2017—Statistics for 2017; Tax Foundation, 2017).

The Earned Income Tax Credit (EITC), a benefit for working individuals with low to moderate incomes, is not included in the tax calculation because, for a family with two children, Pennsylvania’s 2017 gross-income threshold for EITC was the federal limit of $50,597 — below the Household Survival Budget, meaning ALICE families with income above $50,597 would not qualify for the EITC. However, many ALICE households at the lower end of the income scale are eligible for EITC (IRS, 2017—EITC Income Limits; IRS, 2017—EITC Participation Rate; IRS, 2017—Statistics for 2017). The IRS estimates that the federal EITC helped more than 911,000 families in Pennsylvania in 2017, with an average EITC amount of $2,262. More than 82 percent of those eligible received the credit in 2015 (latest available data year). In addition, between 2011 and 2013, the federal EITC and the Child Tax Credit lifted 223,000 Pennsylvania taxpayers and their households out of poverty, including 116,000 children. There is no additional state EITC in Pennsylvania (Center on Budget and Policy Priorities, 2018—The Earned Income and Child Tax Credits; IRS, 2017—EITC Income Limits; IRS, 2017—EITC Participation Rate; IRS, 2017—Statistics for 2017; National Conference of State Legislatures, 2018).

In every state in the U.S., at least some low- or middle-income groups pay a higher share of their income in state and local taxes than wealthy families. Although Pennsylvania provides non-refundable “tax forgiveness” credit to low-income taxpayers, and the sales tax excludes groceries, there are many regressive features — including a flat income tax rate, so low- and middle-income residents pay proportionally more than the wealthiest residents. According to the Institute on Taxation and Economic Policy’s Tax Inequality Index, Pennsylvania has the 7th most inequitable state and local tax system in the country (Institute on Taxation and Economic Policy, 2018).

**What is Missing From the Household Survival Budget?**

The Household Survival Budget is a bare-minimum budget, not a “get-ahead” budget. The small Miscellaneous category, 10 percent of all costs, covers overflow from the six basic categories.

The Miscellaneous category is not enough to purchase cable service or cover automotive or appliance repairs. It does not allow for dinner at a restaurant, tickets to the movies, or travel. There is no room in the Household Survival Budget for a financial indulgence such as holiday gifts, or a new television — something that many financially secure households take for granted. This budget also does not allow for any savings, leaving a family vulnerable to any unexpected expense, such as a costly car repair, natural disaster, or health issue. For this reason, those living on a Household Survival Budget are just surviving.
COST OF LIVING FOR SENIORS

The Household Survival Budget does not take into account different spending patterns for some seniors based on their health care needs. The budget’s costs for housing, food, and transportation are on target for seniors who are healthy and working. However, many seniors face additional health care related expenses, including in-home health care, residential assisted living care, and residential nursing care. These expenses are compared in Figure 14.

Because seniors are the largest population by age in the U.S., it is particularly important to understand the financial challenges that they face. As people age, health issues increase along with associated costs of care. Health care expenses rise considerably for seniors; 80 percent of adults 65 and older have at least one chronic condition, and 68 percent have at least two conditions and account for three-fourths of U.S. health care spending. Costs rise sharply for seniors who need residential health care, which can become essential for those with debilitating illnesses such as diabetes, cancer, or heart disease. The most expensive conditions, however, are Alzheimer’s disease and other dementias, costing more than cancer and heart disease combined. The average Medicare spending for seniors with Alzheimer’s is almost three times higher than average per-person spending for all other seniors. Today, there are about 5.2 million individuals treated for this disease in the U.S., and by 2050, that number is expected to triple (Alzheimer’s Association, 2017; Bradley, 2017; Centers for Disease Control and Prevention, 2017; National Council on Aging, 2017).

Even with Social Security and Medicare, many seniors struggle financially. As Figure 14 illustrates, Social Security provides, on average, sufficient funds for seniors to live above the FPL. Without Social Security benefits, 39 percent of seniors nationally would have incomes below the FPL, a figure over four times higher than the current senior poverty rate of 11 percent. Yet Social Security is not enough to cover a basic household budget, and the gap between benefits and expenses is getting wider. The purchasing power of Social Security payments dropped by 30 percent from 2000 to 2015, according to a study by the nonpartisan Senior Citizens League (Johnson, 2017; Romig, 2018).

While Medicare provides crucial health care coverage and many seniors would be far worse off without it, the benefit does not cover all health care. It notably omits most dental and foot care, eye exams and glasses, home health aides, and most health care equipment. Nor does it cover short-term custodial care or long-term care (Centers for Medicare & Medicaid Services, 2016—Monthly Medicaid & CHIP; Centers for Medicare & Medicaid Services, 2018—Medicare Enrollment Dashboard; Foster, 2016).

The Elder Economic Security Standard™ Index (the Elder Index), a budget tool from the Gerontology Institute at the University of Massachusetts Boston and the National Council on Aging, includes additional expenses that older people often incur, primarily in health care. The Elder Index is a measure of how much money seniors require in order to meet basic needs and age in place with dignity. As a basic budget, it does not include the cost of auto or home repairs, homemaker services such as cooking or cleaning, home health aide services for personal care (such as bathing and dressing), or adult day health care. Yet, according to the Elder Index, the budget needed for a Pennsylvania senior renter in 2016 (the latest data available) was 11 percent higher than the Household Survival Budget (Genworth, 2017—Cost of Care; Mutchler, Li, & Xu, 2016; National Council on Aging, 2017).

As more health care is required, basic budget costs for seniors increase:

- **Adult day care**: Adding the median cost of adult day care to the Elder Index budget totals $39,204, which is 89 percent higher than the Household Survival Budget — an additional expense almost as large as a mortgage. If a senior is injured, Medicare covers skilled nursing care necessary for recovery — 100 percent of the cost for the first 20 days and 80 percent for up to the 100-day mark — but it does not cover care for longer-term conditions (Genworth, 2017—Cost of Care).
• **Assisted living**: The cost of assisted living arrangements adds even more expense — and the number of seniors needing these arrangements is increasing rapidly, in part due to higher rates of debilitating chronic conditions such as diabetes, cancer, high cholesterol, and high blood pressure. The median monthly rate for a semi-private room in an assisted living facility with personal care and health services in Pennsylvania was $41,400 annually in 2017 — nearly double the Household Survival Budget (Genworth, 2017—Assisted Living).

• **Nursing home care**: A nursing home with 24-hour on-site nursing care is even more expensive, at $111,324 annually for a semi-private room — more than five times greater than the Household Survival Budget. These costs have risen steadily. Nationally, the cost of nursing home care increased by 20 percent from 2008 to 2017 (Federal Reserve Bank of St. Louis, 2019—Producer Price Index by Commodity; Genworth, 2017—Most and Least Expensive States). Medicare covers the cost of medically necessary care during short-term stays in a nursing facility, but it does not cover custodial care (such as help with bathing and dressing) or long-term care. Medicaid pays for an estimated half of total nursing home costs in the U.S. annually and is the largest payer of nursing home care. Yet it has strict eligibility guidelines: 100 percent of costs are covered only for those who make less than $27,000 annually and have financial resources of less than $2,000 (though requirements vary, depending on age, marital status, veteran status, and state of residence) (American Elder Care Research Organization, 2018; Genworth, 2017—Most and Least Expensive States).

Figure 14.
Comparison of Senior Budgets for a Single Adult, Pennsylvania, 2017

Sources: ALICE Household Survival Budget, 2017; Genworth, 2017—Assisted Living; Genworth, 2017—Most and Least Expensive States; Mutchler, Li, & Xu, 2016; Social Security Administration, 2017; U.S. Department of Health and Human Services, 2017—Poverty Guidelines
THE HOUSEHOLD STABILITY BUDGET

Extending beyond the Household Survival Budget, the **Household Stability Budget** is a measure of how much income is needed to support and sustain an economically viable household. The Stability Budget represents the basic household items necessary for a household to participate in the modern economy in a sustainable manner over time, with a reasonable quality of life and a measure of future financial security. In Pennsylvania, the Household Stability Budget is moderate in what it includes, yet it still totals $99,360 per year for a family of four — 67 percent higher than the Household Survival Budget of $59,340, and 31 percent more than the Pennsylvania median family income of $75,949 per year. To afford the Household Stability Budget for a two-parent family, each parent must earn $24.84 per hour, or one parent must earn $49.68 per hour (Figure 15).

The statewide average Household Stability Budget for a single adult totals $34,968 per year — 68 percent more than the Household Survival Budget of $20,760, and above the Pennsylvania median earnings for a single adult of $31,337. To afford the Household Stability Budget, a single adult must earn $17.48 per hour. The Stability Budget for various household types is available at [uwp.org/ALICE](http://uwp.org/ALICE).

**Figure 15.**
**Average Household Stability Budget, Pennsylvania, 2017**

<table>
<thead>
<tr>
<th></th>
<th>SINGLE ADULT</th>
<th>2 ADULTS, 1 INFANT, 1 PRESCHOOLER</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Monthly Costs</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housing</td>
<td>$813</td>
<td>$1,044</td>
</tr>
<tr>
<td>Child Care</td>
<td>$-</td>
<td>$1,468</td>
</tr>
<tr>
<td>Food</td>
<td>$379</td>
<td>$1,175</td>
</tr>
<tr>
<td>Transportation</td>
<td>$509</td>
<td>$1,042</td>
</tr>
<tr>
<td>Health Care</td>
<td>$158</td>
<td>$774</td>
</tr>
<tr>
<td>Technology</td>
<td>$109</td>
<td>$129</td>
</tr>
<tr>
<td>Savings</td>
<td>$197</td>
<td>$563</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>$197</td>
<td>$563</td>
</tr>
<tr>
<td>Taxes</td>
<td>$552</td>
<td>$1,522</td>
</tr>
<tr>
<td><strong>Monthly Total</strong></td>
<td>$2,914</td>
<td>$8,280</td>
</tr>
<tr>
<td><strong>ANNUAL TOTAL</strong></td>
<td><strong>$34,968</strong></td>
<td><strong>$99,360</strong></td>
</tr>
<tr>
<td><strong>Hourly Wage</strong></td>
<td>$17.48</td>
<td>$49.68</td>
</tr>
</tbody>
</table>

*Full-time wage needed to support this budget

The spending amounts in the Household Stability Budget are those that can be maintained over time and are upgraded from the Survival Budget in the following ways:

- **Housing** covers higher-quality housing that is safer and needs fewer repairs, and is represented in the median rent for single adults and single parents, and in a moderate house with a mortgage for a family of four.

- **Child care** represents a licensed center, which is more likely to participate in the Keystone STARS program, ensuring a higher standard of care.

- **Food** is elevated to the USDA's Moderate Food Plan, which provides more variety than the Thrifty Food Plan and requires less skill and time for shopping and cooking, plus one meal out per month, which is realistic for a working family.

- **Transportation** includes leasing a car, which allows drivers to more easily maintain a basic level of safety and reliability.

- **Health Care** covers the same categories of spending — insurance, medical services, prescription drugs, and medical supplies — but is the amount that higher-income families spend. Interestingly, spending on health care does not increase as income increases from $20,000 to $30,000 (the difference between the single adult Survival and Stability Budgets) but does increase when income is above $70,000 (the family Stability Budget).

- **Technology** includes the cost of basic internet access at home and a low-cost smartphone plan for each adult in the household. Most jobs now require access to the internet and a smartphone, which are necessary for accessing work schedules, changes in start time or location, work support services, and customer follow-up. The least expensive option has been selected from the Consumer Reports plan comparison and Telogical’s annual survey of broadband costs (Consumer Reports, 2017—Best Low-Cost Cell-Phone; Telogical Systems, 2016).

- **Savings** has been added as a budget line. Because savings are a crucial component of self-sufficiency, the Household Stability Budget also includes a 10 percent savings category. Savings of $563 per month for a family is probably enough to invest in education and retirement, while $197 per month for a single adult might be enough to cover the monthly payments on a student loan or build toward a down payment on a house. However, in many cases, the reality is that savings are used for an emergency and never accumulated for further investment.

- **Miscellaneous** represents 10 percent of the basic necessities, a small reserve for cost overruns in other categories.

- **Taxes** have increased to reflect the increased income necessary to support the Stability Budget.

**HOW DOES THE SURVIVAL BUDGET COMPARE?**

The Household Survival Budget measures the bare-minimum costs for a household to live and work in the modern economy, calculated for actual household expenditures. Here it is compared to less modest budgets created by other organizations, which use different sets of measures. The Massachusetts Institute of Technology’s (MIT) Living Wage Calculator measures the minimum employment earnings necessary to meet a family’s basic needs while also maintaining self-sufficiency. The Economic Policy Institute’s (EPI) Family Budget Calculator measures the cost to provide a reasonably secure yet modest standard of living.
Comparing these budgets and the FPL for Adams County, Pennsylvania, helps put these different tools in perspective (Figure 16). Using the example of Adams County, the FPL provides the lowest measure — $24,600 per year for a family of four (U.S. Department of Health and Human Services, 2017—Poverty Guidelines). After the FPL, the Household Survival Budget has the lowest costs. The MIT budget is 13 percent higher than the Household Survival Budget (using 2016 prices, the latest provided); the EPI budget is 74 percent higher (in 2017 prices). The Household Stability Budget is the most expensive, at 80 percent higher than the Survival Budget (Economic Policy Institute, 2018—Family Budget Calculator; MIT, 2018).

**Figure 16.**
Comparison of Household Budgets, Family of Four, Adams County, Pennsylvania, 2017

<table>
<thead>
<tr>
<th>Monthly Costs</th>
<th>ALICE Stability</th>
<th>MIT</th>
<th>EPI</th>
<th>ALICE Survival</th>
<th>FPL</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0</td>
<td>1,204</td>
<td>940</td>
<td>940</td>
<td>874</td>
<td>1,050</td>
</tr>
<tr>
<td>$2,000</td>
<td>1,458</td>
<td>1,103</td>
<td>1,506</td>
<td>1,067</td>
<td>1,050</td>
</tr>
<tr>
<td>$4,000</td>
<td>1,174</td>
<td>854</td>
<td>875</td>
<td>636</td>
<td>596</td>
</tr>
<tr>
<td>$6,000</td>
<td>1,046</td>
<td>804</td>
<td>1,281</td>
<td>581</td>
<td>596</td>
</tr>
<tr>
<td>$8,000</td>
<td>801</td>
<td>536</td>
<td>1,763</td>
<td>854</td>
<td>596</td>
</tr>
<tr>
<td>$10,000</td>
<td>581</td>
<td>659</td>
<td>732</td>
<td>874</td>
<td>596</td>
</tr>
</tbody>
</table>

Sources: ALICE Household Survival and Stability Budget, 2017; Economic Policy Institute, 2018—Family Budget Calculator; MIT, 2018

A detailed comparison of the budgets is outlined below (Figure 17). The budgets all use similar calculations for taxes, but as each total budget increases, the income needed to cover the expenses also increases, and higher income results in a larger tax bill (Glasmeier & Nadeau, 2017; Gould, Mokhiber, & Bryant, 2018).
Figure 17.
Comparison of Household Budgets by Category, Pennsylvania, 2017

<table>
<thead>
<tr>
<th>Budget Category</th>
<th>Household Survival Budget</th>
<th>MIT Living Wage Calculator</th>
<th>EPI Family Budget Calculator</th>
<th>Household Stability Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>OBJECTIVE</td>
<td>Calculate the bare minimum needed to live and work in the modern economy</td>
<td>Meet a family’s basic needs while also maintaining self-sufficiency</td>
<td>Provide a reasonably secure yet modest standard of living</td>
<td>Support and sustain a secure and economically viable household</td>
</tr>
<tr>
<td>Year</td>
<td>2017</td>
<td>2016</td>
<td>2017</td>
<td>2017</td>
</tr>
<tr>
<td>Housing</td>
<td>U.S. Dept. of Housing and Urban Development (HUD)’s 40th rent percentile for a two-bedroom apartment (which includes all utilities whether paid by landlord/owner or by renter)</td>
<td>HUD’s 40th rent percentile for a two-bedroom apartment</td>
<td>HUD’s 40th rent percentile for a two-bedroom apartment</td>
<td>Median rent for single adults and single parents, and a moderate house with a mortgage for a two-parent family</td>
</tr>
<tr>
<td>Child Care</td>
<td>Home-based child care for an infant and a preschooler</td>
<td>Lowest-cost child-care option available (family child care or child care center) for a 4-year-old and a school-age child, whose care is generally less costly than infant care</td>
<td>Lowest-cost child care option available (center care in metro area or family care in non-metro area) for a 4-year-old; after-school and summer care for an 8-year-old; all generally less costly than infant care</td>
<td>Licensed and accredited center for an infant and a preschooler</td>
</tr>
<tr>
<td>Food</td>
<td>USDA’s Thrifty Food Plan for a family of four with a “regional adjustment factor” for east, midwest, south, west</td>
<td>USDA’s Low-Cost Food Plan for a family of four with a “regional adjustment factor” for east, midwest, south, west</td>
<td>USDA’s Low-Cost Food Plan national average for a family of four, adjusted for county-level variation</td>
<td>USDA’s Moderate Food Plan plus one meal out per month</td>
</tr>
<tr>
<td>Transportation</td>
<td>Operating costs for a car, or public transportation where available</td>
<td>Operating costs for a car, vehicle expenses and financing, and public transportation</td>
<td>Cost of auto ownership, auto use, and transit use based on county-level data</td>
<td>Operating costs for a car, plus cost for leasing one car</td>
</tr>
<tr>
<td>Health Care</td>
<td>Out-of-pocket expenses for health insurance, medical services and supplies, and prescription drugs</td>
<td>Employer-sponsored health insurance, medical services and supplies, and prescription drugs</td>
<td>ACA’s least expensive plan, plus out-of-pocket health care costs</td>
<td>Employer-sponsored health insurance plus out-of-pocket health care costs</td>
</tr>
<tr>
<td>Technology</td>
<td>Lowest-cost smartphone plan for each adult in household</td>
<td>None</td>
<td>Included in Miscellaneous</td>
<td>Cost of smartphone for each adult in family and basic home internet service</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>Cost overruns, estimated at 10 percent of budget</td>
<td>Includes essential clothing and personal and household expenses</td>
<td>“Other Necessities” includes apparel, personal care expenses, household supplies, telephone services, and school supplies</td>
<td>Cost overruns contingency as well as savings; each is 10 percent of budget</td>
</tr>
<tr>
<td>Savings</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>To ensure stability over time, monthly savings set at 10 percent of budget</td>
</tr>
</tbody>
</table>

Sources: ALICE Methodology Overview, 2018 (available at UnitedForALICE.org/methodology); Economic Policy Institute, 2018—Family Budget Calculator; Glasmeier & Nadeau, 2017; Gould, Mokhiber, & Bryant, 2018
III. ALICE IN THE WORKFORCE

AT A GLANCE: SECTION III

- In 2017, the unemployment rate in Pennsylvania was near record low, at 5.3 percent of those in the labor force according to the American Community Survey, and 4.9 percent according to the Bureau of Labor Statistics (BLS).

- In Pennsylvania, 59 percent of adults are working, yet only 40 percent are working full-time; 70 percent of households have at least one worker in the household.

- More than half of all workers (56 percent) in Pennsylvania are hourly paid workers; only 44 percent of workers earn a regular salary.

- The proliferation of part-time jobs and contract, or gig-economy, jobs has led to gaps in employment and other employment-related drawbacks, such as a lack of health insurance benefits.

- There are more than 10 million jobs in Pennsylvania; 59 percent of jobs pay less than $20 per hour, with more than half of those paying between $10 and $15 per hour ($15 per hour grosses $30,000 per year, which is just about half of the Household Survival Budget for a family of four).

- There are barriers to job and wage opportunities in Pennsylvania by employer type, geographic location, and limited transportation. These barriers are especially prohibitive for those groups of workers more vulnerable to employment discrimination: women; people of color; people with low levels of education; lesbian, gay, bisexual, transgender, and queer (LGBTQ+) people; some immigrant groups; people with disabilities; veterans; and formerly incarcerated individuals.

- Of the 39 percent of Pennsylvania adults out of the labor force, almost half were retired. After retirement, the most common reasons for being out of the labor force were health problems, business conditions, caregiving or child care responsibilities, and lack of transportation or education.

The Pennsylvania economy has improved steadily since the end of the Great Recession in 2010 — unemployment is low, gross domestic product (GDP) is growing, and productivity is increasing across a range of industries. Most households in Pennsylvania (70 percent) have at least one worker in the household, with 35 percent of households having more than one worker (American Community Survey, 2017). Yet despite these signs of improvement, it has become more difficult for ALICE workers to afford the cost of basic necessities.

ALICE workers in Pennsylvania and across the country are facing major shifts in the employment landscape. These trends include:

- An increase in the number of jobs that are paid by the hour, project, or contract, along with a decrease in full-time salaried jobs;

- The economy’s growing dependence on low-wage jobs across locations, industries and types of companies; and

- Barriers to opportunity that keep wages low for specific groups of workers and prevent others from working.

This section examines how these trends have affected the ability of workers throughout Pennsylvania to afford their basic household expenses (Center for Workforce Information & Analysis, 2018; Federal Reserve Bank of Philadelphia Research Department, 2018; Karpman, Zuckerman, & Gonzalez, 2019).
THE EMPLOYMENT LANDSCAPE IN PENNSYLVANIA

Based on the unemployment rate alone, it appears that economic conditions are improving in Pennsylvania, but this measure only tells part of the story. Pennsylvania’s unemployment rate is at a near all-time low — 5.3 percent of those in the labor force, according to the American Community Survey, and 4.9 percent, according to the BLS. Although these rates suggest that more adults are working, an increasing number of adults are considered outside the labor force (they have stopped looking for work for various reasons) — reaching 21 percent of all adults in 2017. When including adults out of the workforce, the unemployment rate drops to 3 percent, as shown in Figure 18 (American Community Survey, 2017; BLS, 2017—States: Employment Status).

What’s more, over the last decade, there has been a shift away from traditional salaried, full-benefit jobs. A breakout of the 10 million civilian working-age adults — defined by the BLS as 16 years and older — in Pennsylvania in 2017 shows that while 60 percent of adults were working, only 47 percent were working full-time (more than 35 hours per week, 50 weeks per year) (Figure 18).

**Figure 18.**
Labor Status, Population 16 and Over, Pennsylvania, 2017

![Labor Status Chart](chart.png)

<table>
<thead>
<tr>
<th>Employment Status</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-Time Salary</td>
<td>24%</td>
</tr>
<tr>
<td>Full-Time Hourly</td>
<td>23%</td>
</tr>
<tr>
<td>Part-Time Hourly</td>
<td>10%</td>
</tr>
<tr>
<td>Not in Labor Force</td>
<td>20%</td>
</tr>
<tr>
<td>Part-Time Salary</td>
<td>3%</td>
</tr>
<tr>
<td>Unemployed</td>
<td>3%</td>
</tr>
<tr>
<td>Retired</td>
<td>17%</td>
</tr>
</tbody>
</table>

Sources: American Community Survey, 2017; Federal Reserve Bank of St. Louis, 2017—Total Wage and Salary Workers

Note: Data for full- and part-time jobs is only available at the national level; these national rates (51 percent of full-time workers paid hourly and 75 percent of part-time workers paid hourly) have been applied to the total Pennsylvania workforce to calculate the breakdown shown in this figure.

Even more striking is the number of workers who are paid by the hour, rather than having a regular salary. In Pennsylvania, more than half of all adults in the labor force (56 percent) were hourly-wage workers in 2017; only 44 percent of workers earned a salary (BLS, 2017—Labor Force Statistics; Federal Reserve Bank of St. Louis, 2017—Total Wage and Salary Workers).

Hourly-wage workers are paid only for hours worked, which can shift up or down depending on current demand. They usually do not have a contract, and if they work fewer than 30 hours per week, they are not required to receive health insurance, paid time off, retirement, or other benefits. Nationally, employers spend 30 percent of compensation on benefits for salaried workers; by hiring hourly workers instead, employers can reap significant savings (BLS, 2018—Employer Costs for Employee Compensation; U.S. Department of Labor, n.d.).
These statistics help explain why having a job, even full time, does not guarantee sufficient income to support a household. A recent workforce survey reported that more than three-quarters of U.S. workers live paycheck-to-paycheck at least some of the time, and nearly that many are in debt. Most notably, in 60 percent of families living below the Federal Poverty Level (FPL) in Pennsylvania, there is at least one family member working (American Community Survey, 2017; Braga, Brown, & McKernan, 2019; CareerBuilder, 2017).

Because employers can reduce hours of non-salaried workers during economic downturns, hourly-wage workers bear the brunt of these slumps. Figure 19 shows that an increase in hourly-wage workers (blue line) occurs when there is a drop in salaried workers (gold line) in Pennsylvania, suggesting that reduced employment of salaried workers drives a shift to hourly-wage work. Over the last 10 years, the number of hourly-wage workers increased at the same time that the number of salaried workers waned, especially in 2011 and 2013. The converse has also been true: When the number of hourly-wage workers decreased, the number of salaried workers increased, especially in 2009, 2014, and 2017 (BLS, 2017—Labor Force Statistics; Federal Reserve Bank of St. Louis, 2017—Total Wage and Salary Workers).

Figure 19. Workers Paid Hourly and Salary Wages, Pennsylvania, 2007 to 2017

A growing number of hourly-wage workers are working as a consultant or contingent worker, temp, freelancer, or contractor, creating what is now referred to as the gig economy. Because of the fluidity of the gig economy and the plethora of definitions, it has been difficult to measure. Traditional statistics from the BLS show gig-economy workers make up only a small portion of the workforce — 3.8 percent of workers work in contingent and alternative employment and another 6.9 percent are independent contractors, consultants, or freelance workers (BLS, 2018—Contingent and Alternative Employment Arrangements). However, the last two Freelancers Union surveys found that nationally, more than one-third of the workforce (37 percent) work as a consultant or contingent worker, temp, freelancer, or contractor (Freelancers Union & Upwork, 2017). As much as 94 percent of U.S. net employment growth in the last decade has come from alternative or contingent labor, according to a National Bureau of Economic Research report (Katz & Krueger, 2016).
Gig-economy workers are susceptible to gaps in wages and less regular schedules, making it difficult to pay ongoing monthly expenses or to qualify for loans or other financial products that require regular income. They also forgo employer-sponsored retirement plans, health insurance, and worker safety protections, and are significantly more likely to report economic anxiety than regular full-time workers (Abraham, Haltiwanger, Sandusky, & Spletzer, 2016; Eden & Gaggl, 2015; Edison Research, 2018; Freelancers Union & Upwork, 2017; Katz & Krueger, 2016; U.S. Government Accountability Office, 2015—Contingent Workforce; Wald, 2014).

There are additional measures that together provide insight about the changing structure of the workforce:

- **Underemployment**: Underemployed individuals represent a large swath of workers who want and need more work but are not captured by unemployment figures. In 2017, 9.4 percent of adults in Pennsylvania were employed part time for economic reasons or had stopped looking for work yet still wanted to work (BLS, 2017—Alternative Measures of Labor).

- **Self-employment**: A traditional proxy for the gig economy are self-employed workers, but their numbers have barely changed over time. There were 468,935 households that had self-employment income in Pennsylvania in 2017, or 9 percent of all households, a decrease from 10 percent in 2007 (American Community Survey, 2007–2017).

- **Non-employer firms**: These are small firms operated by self-employed individuals with no paid employees. Since they are unincorporated, they are not captured in traditional business statistics. The significant increase in the number of non-employer firms has made them another popular proxy for the new gig economy. In Pennsylvania, non-employer firms grew 8 percent from 2007 to 2017, but their revenue as a percentage of GDP declined from 6 to 5 percent (American Community Survey, 2007–2017; Federal Reserve Bank of St. Louis, 2018; Mishel & Wolfe, 2018).

- **Two jobs**: Many workers need to work two or more jobs to fill out their work days and to make ends meet. National statistics range from 5 percent of workers holding more than one job at the same time in 2017 (from the BLS) to 15.5 percent of workers having another full- or part-time job in addition to their primary job (from the Federal Reserve) (BLS, 2017—Multiple Jobholders; Board of Governors of the Federal Reserve System, 2017—Economic Well-Being).

**WHERE DOES ALICE WORK?**

ALICE workers primarily hold jobs in occupations that build and repair our infrastructure and educate and care for the workforce. This range of jobs is broader than the service sector, and these occupations ensure that the economy runs smoothly. These workers were aptly described as “maintainers” by technology scholars Lee Vinsel and Andrew Russel in 2016. Yet despite ALICE workers’ importance to the economy, many of these jobs are low-wage jobs and do not enable ALICE workers to afford a basic household budget (Frey & Osborne, 2013; Vinsel & Russell, 2016).

Pennsylvania faces an economy dominated by low-paying jobs: **59 percent of jobs in the state pay less than $20 per hour, with more than half of those paying between $10 and $15 per hour** (Figure 20). A full-time job that pays $15 per hour grosses $30,000 per year, which is just about half of the Household Survival Budget for a family of four in Pennsylvania, $59,340. Another 33 percent of jobs pay between $20 and $40 per hour, with two-thirds of those paying between $20 and $30 per hour. Only 7 percent of jobs pay between $40 and $60 per hour, and less than 2 percent pay above $60 per hour (BLS, 2017—Occupational Employment Statistics).
Despite record low unemployment in Pennsylvania, wages have not increased significantly, especially at the low end. Downward pressure continues to come from the large pool of adults out of the workforce, as well as from compositional changes, such as millennials replacing long-time earners in the workforce. In addition, employers are increasingly competing for employees through non-wage benefits, such as seasonal bonuses, increased paid leave, or additional training. The Center for Economic and Policy Research estimates that, relative to 1979, the national economy has lost about one-third of its capacity to generate good jobs — defined as jobs that paid more than the national median wage of $37,690 in 2017 and offered employer-provided health insurance and an employer-sponsored retirement plan (Fee, Wardrip, & Nelson, 2019; King, 2018; Price & Herzenberg, 2018).

Service sector jobs have become an essential and dominant component of Pennsylvania’s economy, with occupations employing the largest number of workers now concentrated in this sector. Two hallmarks of the service sector economy are that these jobs pay low wages and workers must be physically on-site; cashiers, nurses’ aides, and security guards cannot telecommute or be outsourced. That means they may need to pay more for housing located near their jobs or have very long commutes — both of which add to the stressors ALICE workers face. Of the top-20 largest occupations in terms of number of jobs (Figure 21), all require the worker to be there in person, yet only 13 percent of the jobs — stemming from just three of the 20 occupations (Registered Nurses, General and Operations Managers, and Elementary School Teachers) — pay enough to support the average Pennsylvania family’s Household Survival Budget at more than $29.67 per hour.
Figure 21.
Occupations by Employment and Wage, Pennsylvania, 2017

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Number of Jobs</th>
<th>Median Hourly Wage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail Salespersons</td>
<td>167,480</td>
<td>$10.89</td>
</tr>
<tr>
<td>Office Clerks</td>
<td>154,400</td>
<td>$15.48</td>
</tr>
<tr>
<td>Food Prep, Including Fast Food</td>
<td>148,680</td>
<td>$9.06</td>
</tr>
<tr>
<td>Cashiers</td>
<td>147,200</td>
<td>$9.15</td>
</tr>
<tr>
<td>Registered Nurses</td>
<td>143,130</td>
<td>$32.80</td>
</tr>
<tr>
<td>Laborers and Movers, Hand</td>
<td>141,760</td>
<td>$13.93</td>
</tr>
<tr>
<td>Customer Service Representatives</td>
<td>120,360</td>
<td>$16.34</td>
</tr>
<tr>
<td>Personal Care Aides</td>
<td>109,980</td>
<td>$11.26</td>
</tr>
<tr>
<td>Secretaries and Administrative Assistants</td>
<td>99,300</td>
<td>$16.64</td>
</tr>
<tr>
<td>Waiters and Waitresses</td>
<td>98,000</td>
<td>$10.24</td>
</tr>
<tr>
<td>Stock Clerks and Order Fillers</td>
<td>90,710</td>
<td>$11.19</td>
</tr>
<tr>
<td>Janitors and Cleaners</td>
<td>89,920</td>
<td>$12.46</td>
</tr>
<tr>
<td>Heavy and Tractor-Trailer Truck Drivers</td>
<td>80,810</td>
<td>$21.54</td>
</tr>
<tr>
<td>General and Operations Managers</td>
<td>75,540</td>
<td>$53.85</td>
</tr>
<tr>
<td>Nursing Assistants</td>
<td>75,020</td>
<td>$14.13</td>
</tr>
<tr>
<td>First-Line Supervisors of Office Workers</td>
<td>66,920</td>
<td>$27.38</td>
</tr>
<tr>
<td>Sales Representatives</td>
<td>60,570</td>
<td>$28.94</td>
</tr>
<tr>
<td>Maintenance and Repair Workers</td>
<td>58,330</td>
<td>$18.14</td>
</tr>
<tr>
<td>Bookkeeping and Auditing Clerks</td>
<td>57,760</td>
<td>$18.32</td>
</tr>
<tr>
<td>Elementary School Teachers</td>
<td>54,140</td>
<td>$31.17</td>
</tr>
</tbody>
</table>


Comparing these jobs with the Household Survival Budget, the most common jobs do not offer an income that can support the budget (Figure 22). While 17 occupations could support a single-adult household, only 11 could support a family budget with two full-time year-round income-earners, and only three could do so with one worker. The most common occupation in Pennsylvania, retail sales, with 167,480 jobs, pays on average $10.89 per hour, or $21,780 if full time, year-round. These jobs fall short of meeting the family Household Survival Budget by more than $37,000 per year.
This next section reviews different ways of assessing the economy’s growing dependence on low-wage jobs. ALICE increasingly is working in low-wage jobs across geographic locations, across a range of industries and sectors, and in many different types and sizes of companies.

### Job Location

Location often determines the availability of jobs and wages. Across Pennsylvania, there is wide variation in both unemployment rates and wages (Figure 23). Unemployment rates range from 3 percent in Cumberland County to 10 percent in Clearfield County, compared to the state average of 5.3 percent (American Community Survey, 2017). The average monthly wage for a newly hired employee ranges from $1,617 in Cameron County to $4,010 in Chester County. Wages and employment rates are often inversely correlated: Workers in the areas where unemployment rates are low tend to earn more, while those in areas with higher rates of unemployment tend to earn less.
Range of Industries

ALICE works in a wide range of industries in Pennsylvania. The largest industry in terms of employment is educational services and health care, employing 21 percent of the civilian population 16 years and older, with the majority of this sector employed in health care (81 percent) and the rest in education (19 percent). This sector has many low-wage jobs: For example, the median hourly wage in 2017 was $14.32 for a nursing assistant, and $12.58 for a teaching assistant (American Community Survey, 2017; BLS, 2017—Occupational Employment Statistics; Center for Workforce Information & Analysis, 2018).

The next largest industry is trade, transportation, and utilities, employing 20 percent of the labor force. While often thought of as a sector with high-wage jobs, the industry also has many occupations that do not pay enough to support even the Household Survival Budget. Traditionally, Pennsylvania was a strong manufacturing state, but the sector took a big downturn in 2007, and despite some recent gains, has not fully recovered (Allegheny Institute for Public Policy, 2018; BLS, 2017—Economy at a Glance; Bureau of Economic Analysis, 2017).

Public-sector employment in Pennsylvania has fallen over time, as it has across the country. While public-sector jobs were once a guarantee of financial stability, many now offer low wages and fewer benefits. Other jobs that were once in the public sector, such as road repair, emergency services, or corrections, are now often contracted to private companies (Cohen & Gebeloff, 2018; Federal Reserve Bank of St. Louis, 2019—All Employees: Government in Pennsylvania; Governing, 2018).
Size of Business

One of the key determinants of an ALICE worker’s wages, benefits, and job stability is the size of their employer. Large companies have greater resources to offer career growth opportunities, continuous employment, and better benefits. Small businesses, defined by the BLS as firms with fewer than 500 workers nationally, have been an important engine for growth in the U.S. economy — driving job creation, innovation, and wealth — and traditionally have grown to become medium or large employers. However, small businesses are more vulnerable to changes in demand, price of materials, and transportation costs, as well as to cyberattacks and natural disasters. As a result, their employees face more instability, reduced wages, and a greater risk of job loss. For example, 7,298 small businesses started up in Pennsylvania in the second quarter of 2016, creating 25,856 new jobs, but about the same number of companies exited (7,301 closed, moved to another state, or merged with another company), causing 20,837 job losses. The wages of those starting and losing their jobs are often 50 percent lower than workers with stable employment (U.S. Small Business Administration, 2018).

Small firms employed almost half of the private-sector workforce in Pennsylvania in 2017 (49 percent) (Figure 24). The very smallest firms — those with fewer than 20 people — accounted for the largest share of small-business employment (Ewing Marion Kauffman Foundation, 2017; Haltiwanger, Jarmin, Kulick, & Miranda, 2017; U.S. Small Business Administration, 2018).

Figure 24.
Private-Sector Employment by Firm Size With Average Annual Wage, Pennsylvania, 2017

Source: U.S. Census Bureau, 2017—Quarterly Workforce Indicators
Firm size in Pennsylvania varies widely by location and by sector. Small businesses provide the majority of jobs in many rural counties, while large companies are more concentrated in southeastern Pennsylvania and around Pittsburgh (U.S. Census Bureau, 2017—Quarterly Workforce Indicators; U.S. Small Business Administration, 2018).

By sector, small businesses in Pennsylvania were most concentrated in agriculture and forestry (99 percent are small businesses), other services (89 percent), and construction (82 percent) in 2015 (Figure 25). In addition, Pennsylvania’s largest sector, health care and social assistance, had 40 percent of its employees working in small businesses. Some of the largest small-business sectors — services industries, accommodation and food service, and construction — tend to have less stability in daily and weekly schedules, less job security, and a large share of low-wage jobs (U.S. Small Business Administration, 2018).

For many small businesses, there is a dual challenge when ALICE workers are both the employee and the customer. This is true in child care centers, where more than 90 percent of operators are sole proprietors. On the one hand, child care workers are ALICE; according to the BLS, there were 23,420 child care workers in Pennsylvania in 2017, earning an average wage of $9.71 per hour ($19,420 annually if full-time). Home-based care providers earn even less, with most relying on another source of income to support their family. On the other hand, ALICE families use child care so that parents can work, and it is often the most expensive item in an ALICE family budget, even more expensive than housing. The conundrum is that if these small businesses increase the wages of their employees (who are ALICE workers), those expenses are passed on to customers (who are also ALICE workers). Certain ALICE workers will earn more money, but child care will become more expensive for ALICE families overall (BLS, 2017—Occupational Employment Statistics; Committee for Economic Development, 2019; U.S. Small Business Administration, 2018).

Figure 25.

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Small Business Employment Share of Sector</th>
<th>Median Hourly Wage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, Forestry, and Fishing</td>
<td>99%</td>
<td>2,498</td>
</tr>
<tr>
<td>Other Services (except Public Administration)</td>
<td>89%</td>
<td>242,714</td>
</tr>
<tr>
<td>Construction</td>
<td>82%</td>
<td>230,019</td>
</tr>
<tr>
<td>Real Estate and Rental and Leasing</td>
<td>69%</td>
<td>65,244</td>
</tr>
<tr>
<td>Accommodation and Food Services</td>
<td>63%</td>
<td>457,860</td>
</tr>
<tr>
<td>Professional, Scientific, and Technical Services</td>
<td>61%</td>
<td>323,826</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>56%</td>
<td>249,011</td>
</tr>
<tr>
<td>Arts, Entertainment, and Recreation</td>
<td>54%</td>
<td>105,267</td>
</tr>
</tbody>
</table>

Source: U.S. Small Business Administration, 2018
WHAT OTHER FACTORS KEEP ALICE’S WAGES LOW?

Systemic discrimination continues to play a role in keeping many workers in part-time or low-wage work. Awareness of these challenges has increased; however, these systemic trends persist in Pennsylvania, as they do across the country (Bui, 2016). This section outlines discrimination faced by women, people of color, people with low levels of education, LGBTQ+ individuals, certain immigrant populations, those with a disability, recent veterans, and formerly incarcerated people (Schmitt, Shierholz, & Mishel, 2013).

Gender

Although women make up nearly half of the U.S. workforce, receive more college and graduate degrees than men, and are the equal or primary breadwinner in four out of 10 families, they continue to earn significantly less than men in comparable jobs. Men earn 24 percent more in full-time jobs and 43 percent more in part-time jobs (Figure 26). Nationally, according to the BLS Current Population Survey, women’s median earnings are lower than men’s in nearly all occupations, and male-dominated occupations tend to pay more than female-dominated occupations at similar skill levels. In addition, women are less likely to have full-time employment or to work at all, further reducing their immediate income but also future earning potential. However, there appears to be some slow but consistent closing of the gender wage gap for all but the highest earners. Nationally, median women’s wages were 80 percent that of men’s in 2017, improving from 75 percent in 2000. Unfortunately, the primary reason for this narrowing has been falling men’s wages. For the bottom 70 percent of male workers, wages have stagnated or declined since 2007 (Fontenot, Semega, & Kollar, 2018; Gould, 2016; Hegewisch, 2018; Hegewisch & Ellis, 2015).

Figure 26.
Full-Time and Part-Time Employment by Gender With Median Earnings, Pennsylvania, 2017

![Figure 26. Full-Time and Part-Time Employment by Gender With Median Earnings, Pennsylvania, 2017](image-url)

Source: American Community Survey, 2017
Lack of opportunity can be an even more stubborn barrier than lack of equal pay for equal work. According to the research website PayScale.com, men and women tend to work at similar job levels, most starting in similar entry-level positions. Over the course of their careers, both men and women move into manager- or supervisor-level roles, and eventually to director- and executive-level roles. But men tend to move into these roles more often and more quickly than women (PayScale, 2016).

In addition, older women are more likely to be less affluent than older men, as women are more likely to live longer than men but have less earning potential. In Pennsylvania, a slightly higher percentage of these women were in poverty — 10 percent of women compared to 7 percent of men (American Community Survey, 2017).

Within Pennsylvania and across all states, there is also a striking difference in earnings between men and women at all educational levels (Figure 27). **Men in Pennsylvania earn at least 21 percent more than women across all educational levels and as much as 75 percent more for those with less than a high school diploma** (American Community Survey, 2017). This, in part, helps explain why so many of Pennsylvania’s single-female-headed households have incomes below the ALICE Threshold.

**Figure 27. Median Annual Earnings by Education and Gender, Pennsylvania, 2017**

Source: American Community Survey, 2017
Race and Ethnicity

In both earnings and employment, the differences between racial and ethnic groups in Pennsylvania are stark (Figure 28). Asian and White workers had the highest median earnings in 2017: $37,205 for Asian workers and $36,836 for White workers. Earnings were much lower for Black workers at $27,529; and lowest for Hispanic workers at $24,450. Compounding these gaps, Black and Hispanic workers — both men and women — are also more likely to be unemployed than Asian and White workers. Black and Hispanic workers had an 11 and 9 percent unemployment rate, respectively, compared to White and Asian workers, who had a 4 and 5 percent rate, respectively. In addition, business ownership by people of color is still low in Pennsylvania, accounting for only 131,462 of the state’s 1 million small businesses (American Community Survey, 2017; Hipple & Hammond, 2016; U.S. Small Business Administration, 2018).

Figure 28.
Median Earnings and Unemployment for Asian, White, Black, and Hispanic Workers, Pennsylvania, 2017

In addition to differences between racial and ethnic groups, there is significant and growing income variation within these groups. Income inequality in the U.S. is greatest among Asian households, recently surpassing that of Black households. This is primarily because the gains in income for lower-income Asian and Black households were small. At the same time, there was strong growth at the top of the income distribution for many Asian workers. For Hispanic workers, wages have increased slightly across all earners, so the gap between higher and lower earners has not widened (Gould, 2016; Kochhar & Cilluffo, 2018).

Source: American Community Survey, 2007–2017
Education

Income continues to be highly correlated with education. In Pennsylvania in 2017, 13 percent of the population age 25 years and older had less than a high school diploma and 34 percent had only a high school diploma, while 24 percent had some college education or an associate degree. Only 19 percent had a bachelor’s degree and 12 percent had a graduate or professional degree. These numbers have significant implications for Pennsylvanians because median earnings increase significantly for those with higher levels of education (Figure 29).

**Figure 29.**
Education Attainment and Median Annual Earnings, Pennsylvania, 2017

![Education Attainment and Median Annual Earnings, Pennsylvania, 2017](image)

Source: American Community Survey, 2017

Generally, as the complexity of a job rises, along with the knowledge and skills required, average hourly pay also rises. In Pennsylvania, those with a higher level of education earn more: Those with less than a high school diploma earned an average of $24,849 in 2017, while those with an associate degree earned $36,835, and those with a bachelor’s degree earned $51,950. Nationally, the difference in lifetime earnings between high school graduates and those who hold a bachelor’s degree is estimated to be $830,800. The difference in lifetime earnings between high school graduates and those with an associate degree is estimated at $259,000 (BLS, 2017—Occupational Employment Statistics; Carnevale, Rose, & Cheah, 2011; Center for Labor Market Studies, 2009; Daly & Benaglio, 2014; Gould, 2016; Klor de Alva & Schneider, 2013; Monaco, 2017; U.S. Census Bureau, 2016).
A number of factors can impact a person’s ability to attain higher levels of education: age, citizenship and immigration status, race/ethnicity, income level; family responsibilities, English-speaking ability, health challenges (including mental health and substance abuse issues), and trauma among those who have experienced military combat or incarceration (Gee, Gardner, Hill, & Wiehe, 2017; MacLean & Kleykamp, 2016; National Academies of Sciences, Engineering, and Medicine, 2017; Pew Research Center, 2012, 2017).

**Sexual Orientation and Gender Identity**

The number of workers who openly identify as LGBTQ+ is increasing, reaching more than 4.5 percent of U.S. adults in 2017. But there are few laws that prohibit workplace discrimination against them: In Pennsylvania, state law only protects public employees, and there are no federal anti-discrimination laws, meaning employees can be fired for being LGBTQ+. Despite having more education than the general population, U.S. workers who identify as LGBTQ+ often earn less, experience greater unemployment, are more likely to live in extreme poverty (earning $10,000 annually or less), and experience more food insecurity than their non-LGBTQ+ counterparts (Brown, Romero, & Gates, 2016; Newport, 2018).

Financial hardship among LGBTQ+ households presents additional issues as an increasing number of these households are having children, which increases the family budget. The number of same-sex marriages more than doubled nationally — from just before the Supreme Court ruling in 2013, which required the federal government to recognize state-sanctioned same-sex marriages, to the 2015 ruling that enabled same-sex marriage nationwide — and more than a quarter of married LGBTQ+ couples are now raising children (Badgett, Durso, & Schneebaum, 2013; Catalyst, 2018; Flores, Herman, Gates, & Brown, 2016; Harris, 2015; Movement Advancement Project, 2018; Pew Research Center, 2015; The Williams Institute, 2015).

**Disability**

A total of 1.7 million Pennsylvanians 16 years and older have a disability, and approximately 20 percent live in poverty, compared with 10 percent of all residents. Furthermore, 4.2 percent of adults in Pennsylvania have a lasting physical, mental, or emotional disability that impedes them from being independent or able to work. Pennsylvania workers with a disability earn less than those without a disability. The median annual earnings for a Pennsylvania resident with a disability are $22,088, compared to $35,909 for a worker without a disability (American Community Survey, 2015, 2017; Cornell Disability Statistics, 2018).

The Integrated Benefits Institute estimates that each year, 5.6 percent of working Americans will experience a short-term disability, and the Social Security Administration finds that over one in four current 20-year-olds can expect to miss at least a year of work due to a disabling condition before they reach typical retirement age. The economic consequences of disability are profound: 61 percent of Americans with a disability experience a decline in earnings, 46 percent have lower after-tax income, and 25 percent have a lower housing value. In addition, those with a disability are more likely to live in severely substandard conditions and pay more than one-half of their household income for rent (Council for Disability Awareness, 2018; Meyer & Mok, 2018; U.S. Department of Housing and Urban Development, 2011).
Groups Facing a Combination of Factors

Some groups face challenges from a combination of factors that limit wages. These workers are even more likely to fall below the ALICE Threshold:

Recent, Unskilled, Undocumented, or Limited-English-Speaking Immigrants

Immigrant groups vary widely in language, education, age, and skills. Nationally, immigrants are only slightly more likely to be in ALICE or poverty-level households than non-immigrants. However, some subsets of immigrant groups have difficulty finding higher-wage jobs:

Recent immigrants: The longer immigrants remain in the U.S., the more opportunities open up for them. Recent immigrants earn less than longer-term immigrants; the median annual income for foreign-born Pennsylvania residents who entered the state since 2010 is $48,596, while the median income for foreign-born residents who came to Pennsylvania before 2000 is $63,097. The advantage for longer residency in the country is even greater for those with advanced education; and immigrants are more likely to have a graduate degree in Pennsylvania (21 percent) than are residents born in-state (10 percent) (American Community Survey, 2017; Mathema, 2018; New American Economy Research Fund, 2017; Pennsylvania Refugee Resettlement Program, 2018; Singer, Suro, & Wilson, 2011).

Unskilled immigrants: Foreign-born residents living in Pennsylvania are less likely than residents born in-state not to graduate from high school: 20 percent of foreign-born residents do not have a high school diploma, compared to 8 percent of residents born in-state. The high rate may be due to limited English proficiency, few educational opportunities in their home country, or the need to start working rather than finishing high school. For most recent immigrants, it’s a combination of all three (American Community Survey, 2017; Mathema, 2018; Singer, Suro, & Wilson, 2011).

Undocumented immigrants: There were 170,000 undocumented immigrants living in Pennsylvania in 2016, up from 150,000 in 2007, with the largest numbers coming from Mexico, the Dominican Republic, and India. Undocumented immigrants accounted for 1.7 percent of the state workforce, well below the national average of 4.8 percent. Among occupations, nationally, undocumented immigrants make up a larger share of the workforce in low-skilled jobs such as farming (about 25 percent in 2016) and construction (15 percent) and service jobs (8 percent). The most significant barriers to work faced by undocumented workers include discrimination, below-minimum wages, and health and safety issues. Even though they are technically protected in each of these areas under federal law, they often lack the means to seek redress if those protections are violated (Legal Aid at Work, 2019; Passel & Cohn, 2018).

“Nationally, immigrants are only slightly more likely to be in ALICE or poverty-level households than non-immigrants.”
Limited English-speaking immigrants: Research by the U.S. Census has found that English-speaking ability among immigrants influences their employment status, ability to find full-time employment, and earning levels, regardless of the particular language spoken at home. Those with the highest level of spoken English have the highest earnings, which approach the earnings of English-only speakers (Day & Shin, 2005). The American Community Survey reports more than 100 different foreign languages spoken in Pennsylvania; Spanish is the most common, spoken by 43 percent of foreign-language speakers. Of Pennsylvania households, 4.4 percent are limited-English-speaking households (where no one in the household age 14 or older speaks only English or speaks English “very well”) (American Community Survey, 2017).

Younger Combat Veterans
Veterans from recent deployments often have survived physical or psychological trauma and have significant, ongoing health issues or long-term disabilities that impede their ability to work. In addition, new veterans are typically younger and less educated than average workers, and deployed veterans receive combat-specific training that is often not transferable to the civilian labor market. There were 819,185 veterans in Pennsylvania, and 11 percent (99,693) were younger than 40 in 2015 (Faberman & Foster, 2013; MacLean & Kleykamp, 2016; U.S. Department of Veterans Affairs, 2017).

Formerly Incarcerated People
People with past convictions in Pennsylvania and across the country are more likely to be unemployed or to work in low-wage jobs. Research has documented that formerly incarcerated people are confronted by an array of barriers that significantly impede their ability to find work and otherwise reintegrate into their communities, including low levels of education, lack of skills and experience due to time out of the labor force, employer reluctance to hire formerly incarcerated applicants, questions about past convictions on initial job applications, problems obtaining subsidized housing, and substance use disorders. When they do find employment, it tends to be in industries including construction, food service, hotel/hospitality, landscaping/lawn care, manufacturing, telemarketing, temporary employment, and warehousing. These barriers have accounted for a loss of between $78 and $87 billion in annual GDP (ACLU, 2017; Bucknor & Barber, 2016; Executive Office of the President of the United States, 2016; National Employment Law Project, 2016).

According to the Bureau of Justice Statistics, almost 50,000 people were incarcerated in Pennsylvania in 2016 — an imprisonment rate of 484 per 100,000 adults, below the national rate of 582 per 100,000 adults. Though the Black population is small in Pennsylvania, Black Pennsylvanians face incarceration rates that are disproportionately higher than their percentage in the overall state population, making up only 10 percent of the state population but 38 percent of the jail population (ACLU, 2017; Bucknor & Barber, 2016; Carson, 2018; Carson & Anderson, 2016; Kaeble & Glaze, 2016; National Employment Law Project, 2016; Nellis, 2016; The Sentencing Project, 2016a, 2016b; Vera Institute of Justice, 2015).
WHAT KEEPS ALICE OUT OF THE LABOR FORCE IN PENNSYLVANIA?

Low unemployment rates do not necessarily mean all adults are working. Of the 10 million people 16 years and older in Pennsylvania, 4 million were out of the labor force in 2017. These working-age people were predominately in either the youngest or the oldest groups, as shown by their low participation rates in the labor force (Figure 30). While the labor participation rate was almost 80 percent for those aged 25 to 55, it was far lower for those younger (more likely to be in school) and older (more likely to retire).

The relationship of labor force participation to the unemployment rate suggests that as the unemployment rate goes down, young residents enter the labor force, and by the time they are in their late twenties, they find a job. For older residents, the unemployment rate is kept low because older workers who can’t find a job leave the labor force (American Community Survey, 2017).

Figure 30.
Labor Force Participation vs. Unemployment, Pennsylvania, 2017

Of those outside the labor force, almost half (46 percent) were retired, defined as those 65 years and older and out of the labor force, according to the American Community Survey. This statistic does not capture those 60 to 64 years old who retire early.
There is a range of factors that keep working-age people out of the labor force, including health problems, child care or caregiving responsibilities, and lack of education. Other than retirement, the most common reasons to be out of the labor force are being a homemaker, a disabled person, or a student. Younger adults are more likely to be in school or have child care responsibilities, while older adults may encounter health problems and may have caregiving responsibilities. Since women are still disproportionately responsible for both child care and caregiving, it is not surprising that Pennsylvania’s labor force participation rate also varies by sex, with 25 percent of women compared to 19 percent of men out of the labor force in 2017 (American Community Survey, 2017).

Some surveys include additional reasons for not working that rank highly, such as not being able to find work, an employer’s schedule, or restrictions on workers’ hours. These are also often related to the three other common issues: child care, transportation, and caregiving (BLS, 2017—Labor Force Statistics; Board of Governors of the Federal Reserve System, 2017—Economic Well-Being; Board of Governors of the Federal Reserve System, 2018—Economic Well-Being; Hipple, 2015).

**Health problems**

An illness or a disability — mental or physical — can make it harder to get the education and training necessary to work, to physically get to work, to perform some job functions, and to work long hours. Only 24 percent of Pennsylvania residents 18–64 years old with a disability are employed, compared to 67 percent of those with no disability. Similarly, mental health issues are the largest diagnosis category among working-age adults who receive disability benefits. Since disability is disproportionately associated with age, it is often a reason people retire, often with insufficient savings to support their basic needs and growing health care costs. In Pennsylvania, 24 percent of residents 65 to 74 years old and 48 percent of those 75 years old and older are living with a disability, more than double the average for younger age groups (American Community Survey, 2016 and 2017; BLS, 2017—Employment Situation of Veterans; McAlpine & Warner, 2004; National Alliance on Mental Illness, 2014).

Health issues play a critical role in high rates of unemployment among veterans from recent deployments; both physical and psychological trauma can negatively affect the ability of new veterans to work. The 46,318 Pennsylvania veterans who are aged 18 to 34 years are the most likely to be unemployed or in struggling ALICE households. While state-level data on unemployed veterans is not available, at the national level, veterans 18 to 34 years old are more than twice as likely as their older counterparts to be unemployed, with 7 percent unemployed in 2017 (American Community Survey, 2017; BLS, 2017—Employment Situation of Veterans; Faberman & Foster, 2013; MacLean & Kleykamp, 2016).

**Business conditions**

Common obstacles to work arise from low pay, restrictions on workers’ hours, or the constraints of an employer’s schedule. Most strikingly, 68 percent of respondents to a 2018 Harris survey reported that they do not apply for minimum wage jobs because the income would not cover their bills. An employer’s schedule can also create obstacles, for example, when work hours do not match public transportation or child care schedules. Many workers in these situations are unable to get to work on time or don’t earn enough to cover the additional expense that would be needed to get them there on time.

These issues are exacerbated when jobs have variable work hours. And because some employer or government benefits — including paid and unpaid time off, health insurance, unemployment insurance, public assistance, and work supports — are tied to number of hours worked, unpredictable scheduling can put those benefits in jeopardy. For example, low-wage workers are two and a half times more likely to be out of work than other workers, but only half as likely to receive unemployment insurance (Express Employment Professionals, 2018; Garfield, Damico, Stephens, & Rouhani, 2015; Watson, Frohlich, & Johnston, 2014).
Caregiving

As the population of Pennsylvania ages, more families require caregiving to improve the well-being and recovery of aging parents, and siblings and children with severe illnesses or disability. For women 25 to 54 years old, the most common reason for not working in 2017 was in-home responsibilities. According to a 2016 survey by the Brookings Institution and The Hamilton Project, the primary reason for women not working was caregiving for a relative or friend (36 percent of respondents). Men were far less likely to be caregivers (only 3 percent of respondents) (Board of Governors of the Federal Reserve System, 2017—Economic Well-Being; Hipple, 2015; McCarthy, 2017).

Child Care

With more than 68 percent of families (with children under six years old) having all available parents in the workforce in Pennsylvania, high-quality child care is a necessity. Yet the cost, availability, and scheduling of child care are often barriers to employment. In fact, nearly 89,000 parents of children age 5 and younger in Pennsylvania had to quit a job, not take a job, or greatly change their job because of problems with child care, according to a 2016 National Survey of Children’s Health. In addition, mothers who live in child care deserts (areas with an undersupply of child care) have lower rates of workforce participation than mothers in non-desert areas, according to a study by the Center for American Progress (Malik & Hamm, 2017; Schochet & Malik, 2017). The sharp increase in the number of women entering the workforce since the 1970s has been the main driver of increased household income. But the rate of women in the labor force peaked in 2000 and has been declining since, weakening economic growth (Shambaugh, Nunn, & Portman, 2017).

Transportation

For many workers — especially low-income workers and those with a disability — transportation can be an impediment to work. The cost of purchasing and maintaining a car can be beyond the wages of many jobs, and the time to travel to work may add prohibitive burdens on child care and school pick-ups, caregiving, and health care (da Costa, 2018; Econsult Solutions, 2018; Rall, 2015; Tyndall, 2015).

College

More college students are struggling financially today than students did in the past. This is due to a number of factors, including an increasing number of students attending college, rising tuition costs, families facing greater financial strain, and changing demographics. Among college students today:

- **More undergraduates are working:** More students from low-income households are attending college. In 2016, 39 percent of U.S. undergraduates had a household income at or below 130 percent of the FPL, an increase from 28 percent in 1996. In addition, more than half of undergraduates are financially independent from their parents. As a result, more students are working outside of their studies: Nationally, two-thirds of undergraduates are holding down a job, and more than half of those are working full-time (Carnevale, Smith, Melton, & Price, 2015; U.S. Government Accountability Office, 2018—Food Insecurity).

- **Pennsylvania students are taking on significant debt:** More than two-thirds (68 percent) of Pennsylvania’s Class of 2017 graduated with an average of $35,759 in student debt (one of the highest rates of student debt in the country). This high level of debt occurred despite Pennsylvania colleges and universities receiving more than $843 million in Federal Pell Grants for students applying for financial aid. In the state’s college towns with the largest numbers of off-campus students, more than half of students received financial aid in 2017 (Figure 31) (Project on Student Debt, 2018; U.S. Department of Education, 2018).
• **Students experience food and housing insecurity:** According to a recent national survey, more than 40 percent of college students experienced food insecurity in the previous month, and one-quarter experienced housing insecurity, even though the majority of these students were employed. Low-income college students are eligible for the Supplemental Nutrition Assistance Program (SNAP), but the eligibility requirements are difficult to navigate, and as a result, more than half (57 percent) of eligible students do not receive SNAP benefits. Another strong indicator of need is the emergence of at least 217 campus food pantries currently operating in 40 states (Goldrick-Rab, Baker-Smith, Coca, Looker, & Williams, 2019; Goldrick-Rab, Cady, & Coca, 2018; U.S. Government Accountability Office, 2018—Food Insecurity).

• **Graduating students face the challenge of future hardship:** Despite improvements in the economy, 47 percent of recent female college graduates and 37 percent of recent male graduates are initially underemployed, working in jobs that don’t require a college degree and earning, on average, $10,000 less annually than graduates working in traditional jobs requiring a college degree. Facing student debt and lack of savings as well, many recent college graduates remain or become ALICE and find it difficult to get ahead even with a college degree (Burning Glass Technologies and Strada Institute for the Future of Work, 2018).

Because Pennsylvania has a large number of colleges and universities, student financial hardship is a significant challenge. The towns with the largest numbers of off-campus students are listed in Figure 31. (The ALICE data does not include Pennsylvanians living in group quarters, such as college dorms.) In all of these towns, the share of under-25-year-old households that have income below the ALICE Threshold is at least 56 percent, and in most it is above 80 percent.

Under-25-year-old households are generally a small portion of the population, but there are a few towns where this age group makes up a large share, and accounts for more than 40 percent of all households below the ALICE Threshold: the four small towns of Edinboro, Indiana, Loretto, and Slippery Rock, and the larger city of University Park/State College.

Penn State stands out due to its enrollment of 47,119 students, which impacts not only University Park/State College, but also all of Centre County, in multiple ways. More than 90 percent of under-25-year-old households in Centre County have income below the ALICE Threshold and they accounted for more than half of the county’s households below the ALICE Threshold in 2017.
## Figure 31.
Off-Campus College Students, by Municipality, Pennsylvania, 2017

<table>
<thead>
<tr>
<th>City</th>
<th>Fall 2017 Enrollment</th>
<th>Percent Living Off-Campus</th>
<th>Percent of City Population</th>
<th>Percent Financial Aid</th>
<th>Percent Under-25 Households Below ALICE Threshold (BAT)</th>
<th>Percent of Total BAT Households Under 25 Years Old</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allentown (7)</td>
<td>5,136</td>
<td>4%</td>
<td>0.2%</td>
<td>66%</td>
<td>76%</td>
<td>7%</td>
</tr>
<tr>
<td>Bloomsburg</td>
<td>9,260</td>
<td>59%</td>
<td>35%</td>
<td>71%</td>
<td>88%</td>
<td>35%</td>
</tr>
<tr>
<td>California</td>
<td>7,788</td>
<td>67%</td>
<td>57%</td>
<td>74%</td>
<td>97%</td>
<td>22%</td>
</tr>
<tr>
<td>Clarion</td>
<td>5,225</td>
<td>58%</td>
<td>49%</td>
<td>70%</td>
<td>93%</td>
<td>38%</td>
</tr>
<tr>
<td>Dallas</td>
<td>2,708</td>
<td>55%</td>
<td>42%</td>
<td>71%</td>
<td>92%</td>
<td>16%</td>
</tr>
<tr>
<td>Doylestown</td>
<td>2,422</td>
<td>49%</td>
<td>12%</td>
<td>72%</td>
<td>56%</td>
<td>6%</td>
</tr>
<tr>
<td>East Stroudsburg</td>
<td>6,742</td>
<td>57%</td>
<td>34%</td>
<td>66%</td>
<td>89%</td>
<td>13%</td>
</tr>
<tr>
<td>Edinboro</td>
<td>5,574</td>
<td>61%</td>
<td>42%</td>
<td>73%</td>
<td>92%</td>
<td>47%</td>
</tr>
<tr>
<td>Erie (7)</td>
<td>11,016</td>
<td>47%</td>
<td>5%</td>
<td>60%</td>
<td>81%</td>
<td>11%</td>
</tr>
<tr>
<td>Glenside</td>
<td>3,811</td>
<td>51%</td>
<td>16%</td>
<td>57%</td>
<td>87%</td>
<td>5%</td>
</tr>
<tr>
<td>Indiana</td>
<td>12,431</td>
<td>68%</td>
<td>51%</td>
<td>71%</td>
<td>98%</td>
<td>58%</td>
</tr>
<tr>
<td>Kutztown</td>
<td>8,329</td>
<td>55%</td>
<td>82%</td>
<td>73%</td>
<td>90%</td>
<td>39%</td>
</tr>
<tr>
<td>Lock Haven</td>
<td>3,827</td>
<td>66%</td>
<td>24%</td>
<td>76%</td>
<td>89%</td>
<td>22%</td>
</tr>
<tr>
<td>Loretto</td>
<td>2,680</td>
<td>24%</td>
<td>42%</td>
<td>52%</td>
<td>100%</td>
<td>66%</td>
</tr>
<tr>
<td>Media</td>
<td>1,438</td>
<td>85%</td>
<td>23%</td>
<td>56%</td>
<td>81%</td>
<td>8%</td>
</tr>
<tr>
<td>Middletown</td>
<td>5,077</td>
<td>90%</td>
<td>42%</td>
<td>55%</td>
<td>89%</td>
<td>18%</td>
</tr>
<tr>
<td>Millersville</td>
<td>7,720</td>
<td>68%</td>
<td>55%</td>
<td>64%</td>
<td>92%</td>
<td>33%</td>
</tr>
<tr>
<td>Philadelphia (35)</td>
<td>99,620</td>
<td>55%</td>
<td>3%</td>
<td>53%</td>
<td>80%</td>
<td>6%</td>
</tr>
<tr>
<td>Pittsburgh (29)</td>
<td>61,946</td>
<td>34%</td>
<td>7%</td>
<td>48%</td>
<td>63%</td>
<td>12%</td>
</tr>
<tr>
<td>Reading (6)</td>
<td>11,599</td>
<td>18%</td>
<td>2%</td>
<td>66%</td>
<td>85%</td>
<td>6%</td>
</tr>
<tr>
<td>Shippensburg</td>
<td>6,570</td>
<td>70%</td>
<td>70%</td>
<td>70%</td>
<td>97%</td>
<td>13%</td>
</tr>
<tr>
<td>Slippery Rock</td>
<td>8,866</td>
<td>64%</td>
<td>N/A</td>
<td>70%</td>
<td>80%</td>
<td>52%</td>
</tr>
<tr>
<td>University Park/ State College</td>
<td>47,119</td>
<td>65%</td>
<td>63%</td>
<td>45%</td>
<td>92%</td>
<td>56%</td>
</tr>
<tr>
<td>West Chester</td>
<td>17,306</td>
<td>64%</td>
<td>47%</td>
<td>61%</td>
<td>85%</td>
<td>39%</td>
</tr>
<tr>
<td>Williamsport</td>
<td>5,457</td>
<td>73%</td>
<td>14%</td>
<td>67%</td>
<td>88%</td>
<td>10%</td>
</tr>
</tbody>
</table>

Sources: American Community Survey, 2018; National Center for Education Statistics, 2018; The College Board, 2019; U.S. News & World Report, 2019

Note: When there is more than one college in a town, the number of colleges is in parentheses.
IV. BEYOND INCOME: SAVINGS, ASSETS, AND ACCESS TO CREDIT

AT A GLANCE: SECTION IV

• In 2017, 40 percent of Pennsylvania’s households did not have any savings for a rainy day.

• Eighty-nine percent of Pennsylvanians own a vehicle because owning a car is essential for work, but many ALICE households need to borrow money in order to buy a vehicle. From 2003 to 2017, per capita auto debt in Pennsylvania nearly doubled, to $4,000.

• In 2017, more than two thirds of all Pennsylvania households owned their homes (41 percent with a mortgage), while 49 percent of the state’s households with income below the ALICE Threshold owned their homes.

• Only 23 percent of Pennsylvania households had investments that produced income, such as stocks or rental properties in 2017.

• The most common reason residents in the Northeast (state data is not available) had for being unbanked in 2017 was that the households did not have enough money to keep in their accounts.

• Payday loans are prohibited in Pennsylvania (though customers can still access them online from out-of-state lenders). As a result, by one estimate, Pennsylvania borrowers save more than $200 million annually that would otherwise go to payday loan fees.

More than any demographic feature, ALICE households are defined by their jobs and their savings accounts. As discussed in Section III, the ability to afford household needs is a function of income, but ALICE workers have low-paying jobs. Similarly, the ability to be financially stable is a function of savings, but ALICE households have few or no assets and little opportunity to amass liquid assets. This section looks at savings trends, assets, and access to credit for ALICE households in Pennsylvania.

When families do not have enough income to cover current expenses, they cannot save, and without savings, they cannot generate returns that improve their household’s well-being and economic stability over time. The lack of savings limits an ALICE family’s ability to make a down payment on a house, for example, even if the monthly mortgage payments would be cheaper than renting. It limits their ability to invest in the future, such as in higher education or retirement savings. The lack of savings also leaves ALICE households vulnerable to unexpected economic events and emergencies. Savings and other assets are at least as powerful as income in reducing material hardship after an involuntary job loss or other negative event. Without them, many families with income below the ALICE Threshold find themselves in a vicious cycle of financial instability that often includes high-cost, high-interest financing or credit options (Barr & Blank, 2008; Hendey, McKernan, & Woo, 2012; Karlan, Ratan, & Zinman, 2014; The Pew Charitable Trusts, 2015).

While savings and assets are a crucial aspect of an ALICE family’s financial status, little information on household savings, assets, income, and wealth is collected at the state or local level. For this reason, this
Report relies largely on national data for overall trends but includes state-level data points when available. The national information available suggests that Pennsylvania fits within national trends of a decline in wealth for low-income households over the last three decades.

Overall, American household wealth has not fully recovered from the Great Recession. The median net worth (assets minus liabilities) of all U.S. households was $97,300 in 2016, well below median wealth levels from before the Recession began in late 2007 — $139,700 in 2016 dollars. Wealth is much more concentrated than income, and as a result, disparities in wealth are even greater than those in income. The recovery has been uneven for different income groups, and despite gains in wealth in recent years for lower- and middle-income families, differences in wealth have actually grown. Nationally, the average wealth of the lower-income half of American households was $10,800 in 2016, 42 percent lower than in 2007. The wealth of middle-income families was $110,100 in 2016, 33 percent lower than in 2007. But the wealth of upper-income families was $810,800 in 2016, 10 percent higher than in 2007 (Kochhar & Cilluffo, 2017; Yun, 2017).

The racial wealth gap is even larger, explaining why some racial and ethnic groups are more likely to be part of the ALICE population. Black and Hispanic households have substantially less wealth than White households, a gap that exists across all income levels. According to the Pew Research Center, the median net worth of low-income households was $5,000 for Black households; $7,900 for Hispanic households, and $22,900 for White households in 2016. The gap widened in higher income groups: The median net worth for middle-income households was $38,300 for Black households, $46,000 for Hispanic households, and $154,400 for White households (Asante-Muhammed, Collins, Hoxie, & Nieves, 2017; Kochhar & Cilluffo, 2017; McKernan, Ratcliffe, Steuerle, & Zhang, 2013; Pfeffer, Danziger, & Schoeni, 2013; Thompson & Suarez, 2015).

"The median net worth of all U.S. households was $97,300 in 2016, well below median wealth levels from before the Recession began in late 2007."

**ASSETS**

Given the mismatch between the cost of living and the preponderance of low-wage jobs, accumulating assets is difficult in Pennsylvania. Having savings can help families buy a home, start a business, or work toward a secure retirement, as well as sustain a household during times of unemployment, pay unexpected bills, or cope with other financial setbacks. In 2016, the most common financial hardships individuals reported having faced in the last year were caused by:

- A family member with a significant health problem (13 percent)
- Their own health problem (12 percent)
- Reduced work hours or pay (8 percent)
- Job loss (7 percent)
- Spouse/partner had reduced work hours or pay (5 percent) (Board of Governors of the Federal Reserve System, 2018)
Yet according to a 2017 FDIC survey, 40 percent of Pennsylvania adults had not set aside any money in the past 12 months that could be used for unexpected expenses or emergencies such as illness or the loss of a job, a rate just below the national rate of 42 percent. Nationally, according to the Federal Reserve’s 2017 Economic Well-Being survey, 41 percent of respondents could not easily cover an emergency expense costing $400; 24 percent of those respondents would have to sell something or use a payday loan, deposit advance, or overdraft (Board of Governors of the Federal Reserve System, 2018; FDIC, 2018—National Survey; FDIC, 2018—National Survey Appendix).

**Types of Assets**

Almost by definition, those with lower incomes have fewer assets, but they also have different types of assets. Households in the lowest income quintile are less likely than households in the highest income quintile to have assets of any kind, to have a regular checking account, or to own a vehicle. They are only half as likely to have interest-earning assets at financial institutions or to own a business or a home, and they are far less likely to own stocks or mutual funds, or to have an IRA or a 401(k) retirement savings plan. Households with income in the bottom half have seen their small amount of wealth drop, while higher income groups have seen small increases in wealth (Buchholz, Larrimore, & Thompson, 2016; Urban Institute, 2017; U.S. Census Bureau, 2014—Wealth, Asset Ownership).

After a bank account, the most common assets are vehicles, homes, and investments (Figure 32). Data on wealth and assets at the state level is limited, but the American Community Survey provides some basic figures.

**Figure 32. Household Assets, Pennsylvania, 2017**

<table>
<thead>
<tr>
<th>Vehicle Ownership</th>
</tr>
</thead>
<tbody>
<tr>
<td>3+ Vehicles</td>
</tr>
<tr>
<td>2 Vehicles</td>
</tr>
<tr>
<td>1 Vehicle</td>
</tr>
<tr>
<td>No Mortgage</td>
</tr>
<tr>
<td>With Mortgage</td>
</tr>
<tr>
<td>23%</td>
</tr>
<tr>
<td>21%</td>
</tr>
</tbody>
</table>

Source: American Community Survey, 2017

**Vehicle Ownership**

In 2017, 89 percent of households in Pennsylvania owned a vehicle, just below the national average of 91 percent; most owned two or three vehicles (Figure 32). “Vehicle” is a very broad category in the American Community Survey that includes cars, vans, sport utility vehicles, and trucks below one-ton capacity that are kept at home and used for non-business purposes; dismantled or immobile vehicles
are not included. Nationally, the most commonly held type of non-financial asset in 2016 was a vehicle (Bricker, et al., 2017). While cars offer benefits beyond their cash value, they are not an effective means of accumulating wealth because the value of a car normally decreases over time.

Most households in Pennsylvania own a vehicle because owning a car is essential for work, but many ALICE households need to borrow money in order to buy a vehicle. From 2003 to 2017, the auto debt per capita in Pennsylvania nearly doubled to $4,000, though this is less than the national per capita auto debt of $4,520. At the same time, the delinquency rate on auto loans in Pennsylvania rose from 1.71 percent to 3.73 percent. Nationally, the number of auto loans has also increased; in 2017, there were 110 million auto loan accounts, which is approximately equivalent to 44 percent of individuals 18 years and older. With more people borrowing, the number with subprime credit increased as well. The squeeze on ALICE families is evident from the nationwide increase in delinquencies (of more than 60 days) among those with subprime auto loans, growing steadily since 2011 to more than 5 percent by 2018 — a rate higher than during the Great Recession and the highest since 1996 (Bricker, et al., 2017; Federal Reserve Bank of New York, 2018; Hoffman, 2018; Richter, 2018).

Nationally, low-income families are twice as likely to have a vehicle loan compared to the average for all families. For these families who are more often renters, a vehicle loan is usually their largest debt obligation. Since many low-wage workers do not have strong credit ratings and cannot qualify for traditional low-cost loans, they are forced to use non-traditional, high-cost financing such as “Buy Here, Pay Here” loans. As a result, buyers with fair or poor credit spend many times more to finance a vehicle than someone with excellent credit (Kiernan, 2018; National Consumer Law Center, 2016).

The use of auto loan products for those with subprime credit is growing. The subprime market is dominated by auto finance companies that persistently have higher delinquency rates compared to banks and credit unions, even after controlling for borrowers’ credit scores. In 2017, 26 percent of new car loans and 28 percent of used car loans were subprime. In the current low-interest banking market, the average rate for a prime new car loan in 2017 was 3.8 percent, while the average subprime rate was much higher, at 11 percent (and for used cars, the average rate was 5.3 percent for prime loans and 16.5 percent for subprime loans). That difference means that customers with fair credit spend about six times more to finance a vehicle than those with excellent credit, which equates to more than $4,000 in additional interest payments over the life of a $20,000, five-year loan. In addition, “Buy Here, Pay Here” loans are proliferating among used car dealerships and account for 14 percent of the used car loan market nationally. Yet a quarter of these customers default on their payments, largely due to high interest rates and predatory practices (Cross, Dutzik, Mierzwinski, & Casale, 2019; Haughwout, Lee, Scally, & van der Klaauw, 2019; Schmall & Wolkowitz, 2016; Zabritski, 2018).

In addition to bearing the cost of purchasing a car, low-income households are more likely to have higher vehicle running costs. Older cars require more maintenance and are less likely to be covered by warranty. Low-income households also face higher insurance costs based on their neighborhood, their credit score, and their race. Recent findings from Consumer Reports showed that on average, premiums were 30 percent higher in zip codes where most residents were people of color than in predominantly White neighborhoods with similar insurance losses (Angwin, Larson, Kirchner, & Mattu, 2017; Consumer Reports, 2017—The Cost of Car Ownership).

Cash-strapped car owners can resort to car title loans, a secured loan with the vehicle title as collateral. These are high-cost loans that are difficult for borrowers to pay off, and borrowers often resort to rolling over their loan again and again. About half of title loans are in sequences of ten loans or more for the same vehicle (Center for Responsible Lending, 2015; CFPB, 2016—Single-Payment Vehicle).
Homeownership
The next most common asset in Pennsylvania is a home, an asset that has traditionally provided financial stability and the primary means for low-income families to accumulate wealth. Homeownership can increase both financial and social stability for families. For example, children whose parents own their home tend to have higher educational attainment and lower rates of teen pregnancy. In 2017, more than two thirds of all Pennsylvania households owned their homes, 41 percent with a mortgage. Since homeownership is highly correlated with income, it is not surprising that the rate of homeownership for households earning $75,000 or more was 86 percent (compared to 80 percent nationally), while the rate for those earning less than $20,000 was 41 percent (above the national average of 39 percent). Similarly, 49 percent of the state’s households with income below the ALICE Threshold owned their homes in 2017 (American Community Survey, 2017; Federal Reserve Bank of St. Louis, 2017—Homeownership Rate; National Association of Realtors, 2012).

Overall, the homeownership rate in Pennsylvania has fallen over the last decade, from 73 percent in 2007 to 69 percent in 2017. Many who sold their homes lost money, with some owing more than the sale price. The mortgage delinquency rate reached 4.33 percent in 2011, before falling to 1.59 percent in 2017 (Federal Reserve Bank of New York, 2018; U.S. Census Bureau, 2018—New Current Population Survey).

Nationally, 2017 marked the smallest number of foreclosure filings since 2005: 0.51 percent of all U.S. housing units, down from the peak of 2.23 percent in 2010. However, though this number has been falling, Pennsylvania had among the highest foreclosure rates in the nation in 2017, with nearly 31,000 properties foreclosed across the commonwealth. Among large metro areas, Philadelphia ranked 4th highest in the nation at 1.26 percent (ATTOM Data Solutions, 2018, 2019; Federal Reserve Bank of St. Louis, 2016—All-Transactions).

Homeownership is often the most important means for families to accumulate wealth, but it is highly correlated to both race/ethnicity and income. Systemic barriers including discrimination have hindered people of color from buying homes at the same rate as White families, and those barriers have been remarkably persistent over time: Homeownership rates of Black families have been flat since the 1960s, while rates for all other groups have improved. In 2015, 48 percent of Black Pennsylvania households and 45 percent of Hispanic households owned their home, according to the U.S. Census, while 78 percent of White households were homeowners. Some of this can be explained by age: Black and Hispanic households tend to be younger, and homeownership increases with age. But even when controlling for other demographic factors, the imbalance persists (American Community Survey, 2015; Goodman, McCargo, & Zhu, 2018).

In many locations, it would be more economical for ALICE households to buy a home rather than rent, but they often cannot save enough for a down payment and cannot qualify for a traditional low-rate mortgage. Many ALICE families have chosen non-traditional, high-risk and high-cost mortgage products, as the availability and outreach of such products has expanded. But the higher borrowing costs of these products reduce the borrower’s overall investment opportunity and increase financial risks (Acolin, Bostic, An, & Wachter, 2016; FINRA Investor Education Foundation, 2016; Goodman, Kaul, & Zhu, 2017).
Investment and Retirement Assets
Investments that produce income, such as stocks or rental properties, provide families with an effective resource to weather an emergency. Yet they are a less common asset than vehicles or homes. In 2017, only 23 percent of Pennsylvania households had this type of investment, which can range from a checking account to a rental property to a stock or bond. In addition, there is likely large overlap between households receiving investment income and those receiving retirement income. In 2017, 21 percent of Pennsylvania households received retirement, survivor, or disability income from a former employer, a labor union, the government, or the U.S. military, or regular income from IRA and Keogh plans (American Community Survey, 2017; FINRA Investor Education Foundation, 2016).

![Figure 33. Retirement and Investment Income, Pennsylvania, 2007 to 2017](image)

Source: American Community Survey, 2017

Investment assets also provide the means to accumulate more assets. For example, by investing money in a small business or by owning a home, families can increase their resources over time. Assets also enable families to improve their social and economic situation through education and new technology, and they can allow families to finance a secure retirement (McKernan, Ratcliffe, & Shanks, 2011).

While the American Community Survey does not report the value of investments, nationally, the bottom 60 percent of households by wealth owned only 1.8 percent of the country’s stocks in 2016. The number of Pennsylvania households receiving interest, dividend income, or net rental income decreased by 10 percent through the Great Recession, 2007 to 2010, as the assets lost value in the stock market crash or were used to cover emergencies and periods of unemployment and underemployment (Figure 33). These events led many households to become part of the ALICE population and made things harder for those who were already struggling. This large reduction fits with the national trend of reduced assets for households of all income types (Wolff, 2017).
The recovery has not helped investment income: In the seven years following the end of the Recession, the number of households in Pennsylvania receiving interest, dividend income, or net rental decreased by 6 percent, 16 percent lower than in 2007. When taking population growth into account, the percentage of the state’s households with investment income decreased from 25 percent in 2010 to 23 percent in 2017. Nationally, during that time period, the percentage of households with retirement, survivor, or disability income increased from 20 to 21 percent (though a recent U.S. Census report suggests that retirement income is underreported) (American Community Survey, 2007–2017; Bee & Mitchell, 2017; Board of Governors of the Federal Reserve System, 2014; Bricker, et al., 2014; Yellen, 2014).

Several indicators show that Americans are not financially prepared to maintain their standard of living in retirement:

- According to the 2016 National Retirement Risk Index, 50 percent of American households are at risk of being unable to maintain their standard of living in retirement, even if households work to age 65 and annuitize all their financial assets, including the receipts from reverse mortgages on their homes (Board of Governors of the Federal Reserve System, 2017; Munnell, Hou, & Sanzenbacher, 2018).

- The National Institute on Retirement Security has found that the median retirement account balance for all working-age individuals is $0, and for the subgroup of those with a retirement account, the average balance is a modest $40,000 (Brown, Saad-Lessler, & Oakley, 2018).

The makeup of retirement plans has shifted since the 1970s, from defined benefit plans — traditional pensions that provide benefits for the lifespan of the participant — to defined contribution plans, such as a 401(k). By 2000, defined contribution plans accounted for more than 90 percent of retirement plans nationally. In 2016, 34 percent of private-sector workers had no employer-sponsored plan, 44 percent had employee-managed defined contribution plans, and 15 percent had employer-funded defined benefit plans (U.S. Government Accountability Office, 2017).

The most common source of income for retirement, however, is Social Security. The aging of the U.S. population is evident in the 16 percent increase in the number of Pennsylvania households receiving Social Security between 2007 and 2017 — larger than the 7 percent increase in the number of Pennsylvania households receiving retirement income (Figure 33). In contrast, the number receiving investment income fell by 16 percent (American Community Survey, 2010 and 2017).

The assets of an ALICE household are especially vulnerable when workers lose their jobs. A common strategy during unemployment is to draw down retirement accounts. Penalties are charged for early withdrawals, and retirement savings are diminished, putting future financial stability at risk (Boguslaw, et al., 2013). This will have an impact on those who retire before their assets can be replenished, as discussed in the conclusion of this Report.

A drop in wealth is also the reason many households fall below the ALICE Threshold. Drawing on financial assets that can be liquidated or leveraged, such as savings accounts, retirement accounts, home equity, and stocks, is often the first step households take to cope with unemployment. When these reserves are used up, financial instability increases (Asante-Muhammad, et al., 2017; Boguslaw, et al., 2013).
**ACCESS TO CREDIT**

Once assets have been depleted, the cost of staying financially afloat increases for ALICE households. Generally, access to credit can provide a valuable source of financial stability, and in some cases does as much to reduce hardship as tripling family income (Barr & Blank, 2008; Mayer & Jencks, 1989). The ability to borrow varies greatly by income and assets: The higher the income and greater the assets, the more borrowing options a family has, and at better rates. Families with low incomes and no assets are often unable to borrow. As a result, in the face of an emergency, they buy less, and household hardship increases.

For those who are able to borrow, they typically pay higher rates, incur fees, and are more likely to be delinquent or default on their loans. The problem has been increasing nationally: Delinquency rates among subprime borrowers rose from 12 percent in 2015 to 16 percent in 2018. Over the same period, the average delinquency rates of prime borrowers, who account for the bulk of outstanding auto debt, were essentially unchanged, fluctuating between 0.3 and 0.4 percent (Board of Governors of the Federal Reserve System, 2018; Braga, McKernan, & Hassani, 2019).

The fact that families borrow at high interest rates and at an increased risk of predatory lending practices shows that in some cases, the need for these loans outweighs the risks they pose. It may cost more to forgo heat or necessary medical care, for example, than to pay the higher rates of predatory loans. The continued use of high-risk lending, despite these higher costs, underlines the degree of hardship that these families are experiencing. Predatory loans, such as payday loans and auto title loans, offer quick loan options to vulnerable families that mostly face chronic financial troubles. Many states, including Pennsylvania, have prohibited or limited such practices (Abrams, 2017; CFPB, n.d.—PayDay Loan; Valenti & Schultz, 2016).

The most common way to access credit is by borrowing from a bank. Just having a bank account lowers financial delinquency and increases credit scores. But many Pennsylvania households do not use basic banking services, often because access to banks is limited in many low-income neighborhoods. Because the banking needs of low- to moderate-income individuals and small businesses are often not filled by community banks and credit unions, they frequently use local networks and establishments that offer Alternative Financial Products (AFP), also referred to as Alternative Financial Services (AFS) — non-traditional financial products such as payday, auto title, and other loans that charge higher interest rates (Abello, 2017; FDIC, 2017—Custom Data Table; FDIC, 2018—National Survey of Unbanked Appendix; Servon & Castro-Cosio, 2015; Shtauber, 2013).

According to the Federal Deposit Insurance Corporation (FDIC), 5 percent of households in Pennsylvania were unbanked in 2017 — the 32nd highest rate in the country — meaning they did not have a checking, savings, or money market account. An additional 19 percent were under-banked (i.e., households that have a mainstream account but use alternative and often costly financial services for basic transaction and credit needs). The most common reason households in the Northeast (state data is not available) had for being unbanked in 2017 was not having enough money to keep in their accounts (Figure 34). In addition, with the rise of financial technology products, more customers — especially younger workers — have access to non-bank products such as the peer-to-peer payment service Venmo, reducing the need for bank intermediaries (FDIC, 2018—National Survey of Unbanked; Hetrick, 2018).
Because the banking needs of low- to moderate-income individuals and small businesses are often not filled by community banks and credit unions, they frequently borrow from local networks. Nationally, more than 1 in 3 people (38 percent) borrowed from friends and family in 2017 — most commonly to pay utilities and bills (46 percent), followed by rent (23 percent) and medical emergencies (17 percent). Informal lending groups range from loans from friends and family to rotating savings and credit associations to loan sharks (Braverman, Holkar, & Evans, 2018; Chow, 2017; Morduch, Ogden, & Schneider, 2014; Servon & Castro-Cosio, 2015).

Low-income families (including many Black and Hispanic families, who are disproportionately low-income) are also more likely to use high-interest AFPs. The impact is cumulative, with high rates leading to greater need of more high-risk borrowing and a vicious cycle of debt. Conversely, access to lower rates leads to greater savings and a better chance to pay off a loan. Such savings make an enormous difference in a family’s budget and can also help them build equity and wealth (Board of Governors of the Federal Reserve System, 2017; Hendey, et al., 2012; Lerman & Hendey, 2011).
In Pennsylvania, 22 percent of households used some form of AFP in 2017. The largest share of Pennsylvania households, 18.8 percent, used a transaction service, which includes “nonbank products and services such as money orders, check cashing, and international remittances.” A smaller proportion, 4.5 percent, used a credit service, which includes “nonbank products and services that may be used in lieu of bank credit: payday loans, refund anticipation loans, rent-to-own services, pawn shop loans, and auto title loans” (FDIC, 2018—National Survey of Unbanked Appendix).

The most commonly used AFPs are check cashing and money orders; other products include “Buy Here, Pay Here” auto loans, payday loans, prepaid cards, refund anticipation loans, and Rent-to-Own products. Payday loans are prohibited in Pennsylvania (though customers can still access them online from out-of-state lenders). As a result, by one estimate, Pennsylvania borrowers save more than $200 million annually that would otherwise go to payday loan fees (Dancy, 2016).

Tax-related AFPs have evolved over time as regulation has increased. Refund Anticipation Loans, for example, were popular until 2012, when banks were either forced by federal regulators to shut down these high-cost loans or voluntarily nixed them. The loans have been largely replaced by Refund Anticipation Checks (RACs), which charge fees for advancing funds against tax returns and tax preparation. According to IRS data, about 21.4 million taxpayers obtained RACs in 2016, and 80 percent of them had adjusted gross incomes under $50,000 (Wu & Best, 2018).

A newly emerging AFP is the payroll card, a debit card used to pay wages to an estimated 5.9 million workers in 2017 (with $42 billion in value) and expected to reach 8.4 million workers nationally (with $60 billion in value) by 2022. Payroll cards deliver wages electronically with cost savings for employers and, in some cases, convenience and lower expenses for workers. However, virtually all payroll card programs charge fees. In many cases these have been excessive, reducing take-home pay for the lowest-paid workers and those without internet access — who, for example, can be charged a fee just for calling to learn their account balance. In 2016, the Pennsylvania Banking Code was amended to allow employers to pay using payroll debit cards only under the permission of the employee, along with other requirements including one fee-free withdrawal per pay period and a free and accessible way for the employee to learn the balance on their card (Asrow & Dunn, 2018; Morrison & Baker, 2017; Pennsylvania General Assembly, 2016; Saunders, 2015; Voltmer, 2016; Young, 2016).

Another common way to access credit, especially in the short term, is with a credit card. Nationally, there is wide variation in credit card usage by income level. For example, the share of families with at least one credit card was 60 percent for families with income below $40,000 in 2017 but more than 90 percent for families with income above that level. And location matters: Families living in low-income neighborhoods often find only high-cost lending options are available to them. In these neighborhoods, there is less saving and borrowing (Barr, 2012; Board of Governors of the Federal Reserve System, 2017).

The repeated use of payday loans and credit cards greatly increases fees and interest charges, decreases the chance that the debts can be repaid, and is linked to a higher rate of moving out of one’s home, delaying medical care or prescription drug purchases, and even filing for Chapter 13 bankruptcy (CFPB, 2016—What Are My Rights; Montezemolo, 2013; Peterson, 2018).

When families do not have savings or access to affordable credit, they are forced to make trade-offs and difficult decisions. These consequences are thoroughly detailed on our website: UnitedForALICE.org/consequences.
V. THE IMPACT OF PUBLIC AND PRIVATE ASSISTANCE

Measure 3 – The ALICE Income Assessment

AT A GLANCE: SECTION V

- In Pennsylvania in 2017, the total needed to ensure that all ALICE and poverty-level households had income at the ALICE Threshold was $82 billion.

- The income of all Pennsylvania households below the ALICE Threshold was $39 billion — just 48 percent of total needed to reach the ALICE Threshold.

- In 2017, public and private spending — excluding health care — on Pennsylvania households below the ALICE Threshold, which includes families in poverty, provided an additional $45.5 billion. This assistance left roughly a 50 percent gap to achieve the most basic financial need in most budget categories.

- For households living below the ALICE Threshold in Pennsylvania, the average benefit from federal, state, and local government and nonprofit sources in 2017 was $6,739 per household, plus another $17,941 in health care spending.

- Working households in Pennsylvania received an aggregate $2.1 billion in refunds and credits through the federal Earned Income Tax Credit (EITC) in 2017, for an average of $2,262 per eligible household.

- Without the support of public and nonprofit spending, ALICE households in Pennsylvania would face greater hardship, with many more living below the Federal Poverty Level (FPL).

When 37 percent of Pennsylvania households do not have enough income to reach the ALICE Threshold for financial security, it is clear that even those who are working face financial challenges. ALICE households receive income from a range of sources — most from earnings but also from federal, state, and local government and nonprofit sources. But how much does this additional income enable families to reach financial stability? Recent national studies have found that more than half of government spending on assistance for low-income households goes to working families. But even with this assistance added to their income, many working families cannot cobble enough together to make ends meet (Anderson & Butcher, 2016; Brown & Braga, 2019; Floyd, Burnside, & Schott, 2018; Jacobs, Perry, & MacGillvary, 2015; Nchako & Cai, 2018). This section looks at how much government and nonprofit assistance contributes to the economic well-being of ALICE and poverty-level households.

While the number of households below the ALICE Threshold in Pennsylvania grew by 14 percent in the 10 years between 2007 and 2017, Figure 35 suggests a lack of responsiveness from much of the U.S. social safety net. For example, although enrollment in the Supplemental Nutrition Assistance Program (SNAP, formerly food stamps) increased during the Great Recession from 2007 to 2010, enrollment in Supplemental Security Income (SSI), Temporary Assistance to Needy Families (TANF), and General Assistance (GA) programs either remained constant or barely budged, and none have responded to increases in economic insecurity from 2010 to 2017.
**THE ALICE INCOME ASSESSMENT**

The ALICE Income Assessment measures the extent to which government and nonprofit assistance — including and beyond the programs listed above — help to keep struggling families afloat. The Income Assessment quantifies the total need of all households below the ALICE Threshold and then compares it to their income and to the amount of public and nonprofit assistance directed toward low-income households. Even though assistance makes a significant contribution to financial stability for many families, there has not been enough assistance to fill the need for all families with income below the ALICE Threshold in any state where the Income Assessment has been applied.

In Pennsylvania, the total income of ALICE and poverty-level households in 2017 was $39 billion, which included wages and Social Security. This was only 48 percent of the amount needed just to reach the ALICE Threshold of $82 billion statewide. Government and nonprofit assistance to Pennsylvania households below the ALICE Threshold, which includes households in poverty, provided $45.5 billion, or 6 percent of the state’s GDP. This assistance left roughly a 50 percent gap in most budget categories (see Figure 38) (Federal Reserve Bank of St. Louis, 2018). The consequences of these gaps are discussed on the UnitedforALICE.org/consequences website.

In 2017, annual public and private spending on Pennsylvania households below the ALICE Threshold included several types of assistance (Figure 36):

- Cash Public Assistance delivered $4 billion, or 5 percent of the total required for ALICE and poverty-level families to reach the ALICE Threshold;
- Government Programs spent $7 billion, adding another 9 percent;
- Nonprofits in the human services area provided $1 billion, or 1 percent;
- Health Care assistance, the largest single category, provided $33 billion, or 41 percent.
Figure 36.
Categories of Income and Assistance for Households Below the ALICE Threshold, Pennsylvania, 2017

Total Need = $82 Billion

Sources: American Community Survey, 2017; National Association of State Budget Officers, 2018; Office of Management and Budget, 2018; Pennsylvania Child Care Association, 2019; Urban Institute, 2012; U.S. Department of Agriculture, 2017—Characteristics. For more details, see the Methodology Overview on our website: UnitedforALICE.org/methodology

Note: Because funds are allocated differently for different programs, it is not possible to separate spending on ALICE from spending on those in poverty and, in fact, some programs that are focused on those in poverty, such as Medicaid, end up supporting other low-income individuals as well (Finkelstein, Hendren, & Luttmer, 2015).

DEFINITIONS

- **Earned Income** = Wages, dividends, Social Security
- **Health Care** = Medicaid, Children’s Health Insurance Program (CHIP), community health benefits
- **Cash Public Assistance** = Supplemental Security Income (SSI) and Temporary Assistance for Needy Families (TANF)
- **Government Programs** = Head Start, Supplemental Nutrition Assistance Program (SNAP, formerly food stamps), Special Supplemental Nutrition Program for Women, Infants and Children (WIC), the Earned Income Tax Credit (EITC), housing, and human services, federal and state
- **Nonprofits** = Human services revenue not from the government or user fees
- **Unfilled Gap** = Shortfall to ALICE Threshold
Of the total $45.5 billion in assistance to Pennsylvania households earning below the ALICE Threshold in 2017, health care assistance made up nearly three-fourths. Without health care spending, Pennsylvania households would have an Unfilled Gap of 38 percent. In other words, it would take an additional $30 billion in income or assistance to ensure that all Pennsylvania households met the ALICE Threshold. Health care spending closes the gap, but as discussed below, there are several reasons why additional health care spending cannot provide financial stability for ALICE and poverty-level households.

Public assistance used in this analysis includes only programs that are directed specifically at low-income families and individuals; the Assessment does not include programs such as neighborhood policing, which are provided to all households, regardless of income. In addition, the Assessment includes only programs that directly help ALICE families meet the basic Household Survival Budget, such as TANF and Medicaid; it does not include programs that assist low-income families in broader ways, such as college subsidies. The analysis is only of funds spent, not an evaluation of the efficiency of the programs or their efficacy in meeting household needs.

Challenges of Public and Private Assistance

Without public assistance, ALICE households would face even greater hardship and many more would be in poverty, especially in the wake of the Great Recession. Programs like SNAP, the Earned Income Tax Credit (EITC) and Child Tax Credit (CTC), Medicaid, and, increasingly, food banks and other community supports provide a critical safety net for basic household well-being and enable many families to work (Coleman-Jensen, Rabbitt, Gregory, & Singh, 2016; Dowd & Horowitz, 2011; Feeding America, 2014; Rosenbaum, 2013; Sherman, Trisi, & Parrott, 2013).

As stated earlier, this analysis is not an evaluation of the efficiency of the programs in delivering goods or services. However, research has shown that assistance is not always well-targeted, effective, and timely. There are four significant barriers to public and private assistance meeting basic needs:

1. **Duration of benefits:** The majority of government programs are intended to fill short-term needs, such as basic housing, food, clothing, health care, and education. By design, their goal is not to help households achieve long-term financial stability (Haskins, 2011; McKernan, Ratcliffe, & Iceland, 2018; Shaefer & Edin, 2013).

2. **Eligibility thresholds:** Crucial resources are often targeted to households near or below the FPL, meaning that many struggling ALICE households are not eligible for assistance. Federal public assistance programs do not have enough resources to reach all those in need. SNAP, the government’s largest program, reached 681,000 households in Pennsylvania in 2017, covering families in poverty but falling short of meeting the needs of almost all ALICE households that needed assistance in covering the cost of food. Other programs cover even fewer households: TANF, which provides payments from state or local welfare offices, reached about 146,000 Pennsylvania households in 2017, just 8 percent of those below the ALICE Threshold. And Supplemental Security Income, which includes welfare payments to low-income people who are 65 and older and to people of any age who are blind or disabled, supported 278,000 households — only 15 percent of households below the ALICE Threshold (American Community Survey, 2017; Kaiser Family Foundation, 2015; U.S. Department of Health and Human Services, 2014).
Uneven funding or distribution of assistance: Resources may not be available where they are needed, either because there are geographic disparities in distribution across Pennsylvania — such as food pantries in some locations but not all — or because there is not enough funding for a program.

Targeted assistance and services: Because public and nonprofit assistance is allocated for specific purposes and often delivered as services, it can only be used for specific parts of the household budget. Only 8 percent of the assistance provided in Pennsylvania is done through cash transfers, which households can use toward any of their most pressing needs. The remainder is earmarked for specific items, like food assistance or health care, for which the need varies across households below the ALICE threshold. This means that not all households benefit equally from assistance.

The Special Case of Health Care

Health care resources are separated from other government and nonprofit spending because they account for the largest single source of assistance to low-income Pennsylvania households: $33 billion, or 73 percent of all public and private spending on these households in 2017. Health care spending includes federal grants for Medicaid, CHIP, and Hospital Charity Care; state matching grants for Medicaid, CHIP, and Medicare Part D Clawback Payments; and the cost of unreimbursed or unpaid services provided by Pennsylvania hospitals (National Association of State Budget Officers, 2018; Office of Management and Budget, 2018; Urban Institute, 2012).

In Pennsylvania, on average, health care spending per household in 2017 was $17,941, while the average spending per household through other types of assistance was $6,739. Combining the two categories, the average spending on each Pennsylvania household below the ALICE Threshold was $24,680 in cash and services, shared by all members of the household and spread throughout the year (Figure 37). Averages, however, conceal greater variation in the amount of money families need for health care. An uninsured (or even an underinsured) household with a severe and sudden illness could be burdened with hundreds of thousands of dollars in medical bills in a single year, while a healthy household would have few expenses. National research has shown that a small proportion of households facing severe illness or injury account for more than half of all health care expenses, and those expenses can vary greatly from year to year (Kaiser Family Foundation, 2012; Mitchell, 2016; Reid, 2017).

Figure 37.
Public and Nonprofit Assistance Per Household Below the ALICE Threshold, Pennsylvania, 2017

<table>
<thead>
<tr>
<th>Spending Per Household Below the ALICE Threshold, Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEALTH CARE ASSISTANCE ONLY</td>
</tr>
<tr>
<td>$17,941</td>
</tr>
</tbody>
</table>

Sources: ALICE Threshold, 2017; American Community Survey, 2017; National Association of State Budget Officers, 2018; Office of Management and Budget, 2017; Pennsylvania Child Care Association, 2019; Urban Institute, 2012
Health care spending has increased significantly over the last decade as health care costs outpace growth in most areas of the U.S. economy. Across the U.S., federal spending increased from $198 billion in 2007 to $371 billion in 2017, an 87 percent increase, compared with a 22 percent rate of inflation (Centers for Medicare & Medicaid Services, 2019—FY 2016). With such growth it is not surprising that public spending on health care has almost filled the overall gap between earnings and the ALICE Threshold in some states. However, health care spending cannot be used for other household needs such as housing or child care.

**Gaps by Budget Category**

A breakdown of public and nonprofit spending in Pennsylvania by category reveals that there are large gaps in each budget category. Figure 38 compares the budget amounts for each category of the Household Survival Budget (excluding health care, technology, and miscellaneous expenses) for a family of four with income from households below the ALICE Threshold, plus the public and nonprofit spending in each category, to show the gap or surplus in each budget area. Earned income is appropriated based on its proportion of the Household Survival Budget; specific government programs are directed to their targeted budget areas, and nonprofit and cash assistance are evenly distributed across categories.

**Figure 38.**

**Comparing Basic Need With Assistance, by Category, for Households Below the ALICE Threshold, Pennsylvania, 2017**

![Bar chart showing gaps by budget category](chart.png)


Note: Excludes health care, technology, and miscellaneous expense categories
Housing

In the Household Survival Budget for a Pennsylvania family of four, housing accounts for 17 percent of the family budget. Yet if ALICE households spend 17 percent of their income on housing, they are still far short of what is needed to afford rent at HUD’s 40th percentile. To make up the gap, federal housing programs — including Section 8 Housing Vouchers, the Low Income Home Energy Assistance Program, the Public Housing Operating Fund, and Community Development Block Grant Program — provide $1.2 billion in assistance. In addition, nonprofits spend an estimated $204 million on housing assistance statewide. (Because nonprofit spending is not available by category, the estimate for each category here is one-fifth of the total nonprofit budget.) Even still, when income and government and nonprofit assistance for housing are combined, Pennsylvania households below the ALICE Threshold fell 51 percent shy of their total housing need in 2017. Given that gap, it is not surprising that most families spend more of their income on housing, which leaves less for other items.

Child Care

In the Household Survival Budget for a Pennsylvania family of four, child care accounts for 25 percent of the family budget, well above the 10 percent affordability threshold established by the U.S. Department of Health and Human Services. Yet for many ALICE households, 25 percent of what they actually earn is not enough to pay for even home-based child care, the least expensive organized care option with the fewest quality regulations (U.S. Government Accountability Office, 2016). Additional child care resources available to Pennsylvania families include $317 million in federal education spending for Head Start, the program that helps children from low-income families meet their basic needs or that is necessary to enable their parents to work; $296 million in state child care funding through Pennsylvania’s Child Care Development Fund, and $226 million in pre-K funding through the Pennsylvania Pre-K Counts and the Head Start Supplemental Assistance Program. Though advanced education is vital to future economic success, it is not a component of the basic Household Survival Budget, so programs such as Pell grants are not included in the education spending figure. Nonprofits provide additional child care assistance, including vouchers and child care services estimated at $204 million. Yet when income and government and nonprofit assistance are combined, there was still a 52 percent gap, meaning that Pennsylvania’s households below the ALICE Threshold still had only half of what they needed to afford basic child care in 2017.

Food

In the Household Survival Budget for a Pennsylvania family of four, food accounts for 12 percent of the family budget, yet for many ALICE households, 12 percent of what they actually earn is insufficient to afford even the USDA Thrifty Food Plan. Food assistance for Pennsylvania households include $3.6 billion of federal spending on food programs, primarily SNAP, school breakfast and lunch programs, and WIC. Nonprofits also provide approximately $204 million in food assistance, including food pantries, food banks, and soup kitchens, based on the Urban Institute’s nonprofit database. Yet when income and government and nonprofit food assistance are combined, Pennsylvania’s households below the ALICE Threshold still fell 48 percent short of what they required to meet their most basic food needs in 2017.
**Transportation**

In the Household Survival Budget for a Pennsylvania family of four, transportation accounts for 12 percent of the family budget. Yet for many ALICE households, 12 percent of what they actually earn is not enough to afford even the running costs of a car. While Pennsylvania’s public transportation systems are state-funded, there is no government spending on transportation specifically for ALICE and poverty-level families. However, nonprofits provide additional programs, spending an estimated $204 million. When income and nonprofit assistance are combined, there was still a 52 percent gap in resources to meet the basic cost for transportation for all Pennsylvania households below the ALICE Threshold in 2017.

**Taxes**

In the Household Survival Budget for a Pennsylvania family of four, taxes account for 11 percent of the family budget, so this analysis assumes that 11 percent of income is allocated towards taxes. Pennsylvanians received $2.1 billion in refunds and credits from the federal EITC in 2017. Pennsylvania does not have its own state EITC (IRS, 2017—Statistics for 2017 Tax Return; Tax Credits for Workers and Their Families, 2018). Though earning enough to afford the Household Survival Budget would put some ALICE households above the eligibility level for the federal EITC, many households below the ALICE Threshold benefit from the EITC. The average income for households receiving EITC in Pennsylvania in 2015, the latest year for which data are available, was $14,018. In 2017, eligible households collected an average federal tax refund of $2,262. From 2011 to 2013, the federal EITC and the Child Tax Credit (CTC) lifted 223,000 Pennsylvania taxpayers and their households out of poverty, including 116,000 children on average each year (Center on Budget and Policy Priorities, 2016—State Fact Sheets). The per-household tax burden depends on a recipient’s income and the number of children they have. When income and government credits and refunds are combined, there remained a 49 percent gap in resources for all Pennsylvania households below the ALICE Threshold to meet the basic ALICE Threshold for taxes.

**Assistance for Seniors**

Seniors — those age 65 and over — are particularly reliant on government sources of income. But unlike the assistance programs discussed above, Social Security and Medicare are not means-tested programs targeted to households with little or no income (with some exceptions for people under 65 with disabilities). Medicare is available to all people over the age of 65 as a primary health insurance provider, and Social Security income is available to those who have a work history that includes having paid the social security payroll tax (Centers for Medicare & Medicaid Services, 2019—Eligibility and Premium Calculator; Social Security Administration, 2019). Ninety percent of Americans 65 and older receive income through Social Security, which represents about one-third of the total aggregated income of America’s seniors (Social Security Administration, 2018), and nearly 50 million people were enrolled in Medicare as a result of their age in 2017 (Centers for Medicare & Medicaid Services, 2018—Medicare Enrollment Dashboard).

While these two programs are collectively the largest federal expenditures outside of defense spending, it is worth noting that they are not enough to keep many seniors from falling through the cracks. The average retired worker and their dependents receive an average monthly benefit of approximately $1,400 — rarely enough to sustain a household without other sources of income (Social Security Administration, 2018). More than 7 million seniors have incomes low enough to also qualify for Medicaid (Centers for Medicare & Medicaid Services, 2019—Seniors & Medicare and Medicaid), and nearly 5 million also receive SNAP benefits (Center on Budget and Policy Priorities, 2017—SNAP Helps Millions).
VI. LOCAL CONDITIONS: HOUSING AND COMMUNITY RESOURCES

Our lives are profoundly influenced by where we live, and especially where we grow up (Chetty & Hendren, 2015). This is particularly significant for ALICE households: Local economic conditions largely determine how many households in a county struggle financially. Along with the job opportunities, local wages, and public and private assistance discussed earlier in this Report, it is important to understand the local conditions that matter most to ALICE households. These include:

- Housing affordability (represented by the affordable housing gap, housing burden, and real estate taxes)
- Levels of community resources in the areas of education (represented by preschool enrollment), health (represented by insurance coverage), and the social environment (represented by measures of social isolation, access to technology, and voter participation)

This section focuses on the recovery years after the Great Recession, from 2010 to 2017. It looks at the indicators that help explain why so many households struggle to achieve basic economic stability throughout Pennsylvania, and why that struggle is harder in some parts of the state than in others. The ways in which these indicators are related is apparent in Figure 39, where the darker shades of blue represent the counties worse off on each indicator.

Figure 39.
Affordable Housing Gap, Preschool Enrollment, and Health Insurance, Compared With Households Below ALICE Threshold, Pennsylvania, 2017

Sources: American Community Survey, 2017; ALICE Threshold, 2017
HOUSING AFFORDABILITY

The more affordable housing there is in a county, the easier it is for a household in that county to be financially stable. In Pennsylvania, housing is generally less expensive than in most other states, and it became easier to find affordable housing in many counties in the years following the end of the Recession. Yet there is variation in housing affordability between counties and also between metro areas across Pennsylvania. And a common challenge is to find job opportunities in the same counties where there are affordable places for ALICE households to live.

The three key indicators of housing affordability for ALICE households in a given county are the affordable housing gap, the housing burden, and real estate taxes. These indicators, described below, show which counties offer an adequate supply of units that ALICE households can afford, a relatively low percentage of households that are “housing burdened,” and low real estate taxes.

The Affordable Housing Gap

In Pennsylvania, housing is generally affordable for owners, and owning can be more affordable than renting in many parts of the state. But owning is still difficult for those at the low end of the market, since it requires a down payment, the ability to pay real estate taxes and insurance, and a credit rating that qualifies for a mortgage (Joint Center for Housing Studies, 2018; Murray & Schuetz, 2018).

While rental housing can be more expensive than home ownership, it became more affordable across Pennsylvania from 2010 to 2017. This is apparent from the affordable housing gap measure — an estimate of the difference between the total number of households below the ALICE Threshold (renters and owners) in a county and the number of available housing units that those households can afford while spending no more than one-third of their income on housing. This measure assesses the total housing stock in a county and includes subsidized as well as market-rate units that are affordable to ALICE and poverty-level households. The larger the gap, the harder it is for households below the ALICE Threshold to find affordable housing (Figure 39).

The housing gap for affordable units ranged from no gap in 13 Pennsylvania counties to a gap of greater than 20 percent in Carbon, Centre, Monroe, and Montgomery counties. There are also differences between renters and owners. For Pennsylvania renters, the average gap in affordable units was 20 percent across the state in 2017, but for homeowners, the gap was only 3 percent. Rates also varied across counties and regions in 2017. The largest gap in the number of rental units was in Philadelphia County, at almost 100,000 units, while the largest gap as a percentage of rental units was more than 65 percent in Adams, Carbon, and Monroe counties. By region, the largest gaps in rental units were in the counties around Philadelphia and in the center of the state. Gaps in affordable homeownership were concentrated in Bucks, Chester, and Montgomery counties.

Housing Burden

The second key indicator of housing affordability in a county is housing burden — housing costs that exceed 30 percent of household income, as defined by the U.S. Department of Housing and Urban Development. That standard evolved from the United States Housing Act of 1937. While rent thresholds shifted over the ensuing decades, since 1981 the standard has been that 30 percent of income is the most a family can spend on housing and still afford other household necessities (Schwartz & Wilson, 2008).
The rate of housing burden in Pennsylvania is generally low for owners (ranging from 13 to 31 percent across Pennsylvania counties) but remains much higher for renters. On average in 2017, 47 percent of Pennsylvania renters paid more than 30 percent of their household income on rent, down slightly from 51 percent in 2010. Among homeowners, 21 percent paid more than 30 percent of their income on monthly owner costs (which included their mortgage) in 2017, down significantly from 27 percent in 2010 (Figure 40) (American Community Survey, 2010 and 2017).

Rates vary across the state. In 2017, the highest rate of housing burden for renters was in Pike County at 63 percent, while the highest rate of housing burden for owners was in Monroe County, at 31 percent. Sullivan County had the lowest rate of housing burden for renters at 27 percent and Elk and Mercer counties had the lowest rates of housing burden for owners at 13 percent (with significant improvement over their 2010 levels) (American Community Survey, 2017).

**Real Estate Taxes**

While related to housing cost, real estate taxes also reflect a county’s standard of living. Even for renters, real estate taxes raise the cost of housing. The average annual real estate tax in Pennsylvania was $2,138 in 2017 (a 26 percent increase from $1,698 in 2010) (Figure 41). There is wide variation across counties, ranging from $1,041 in Forest County to over five times that in Chester County, at $5,314. From 2010 to 2017, taxes increased by more than 50 percent in Blair, Indiana, Lebanon, Northumberland, and Union counties (American Community Survey, 2007 and 2017).

**COMMUNITY RESOURCES**

Community resources — in the areas of education, health, and the social environment — provide a fundamental support structure for working families. These resources can make a difference to the financial stability of ALICE households in both the short and long term. Yet it is a challenge across many Pennsylvania counties to find adequate key community resources, such as access to quality schools, affordable health care, and supportive social environments. While some community resources are fairly evenly spread across Pennsylvania, others vary widely by county, suggesting that availability of these resources is determined by a combination of state-level factors and local policies.
Education Resources

The provision of public education has long been a fundamental American value, and education is widely regarded as a means to achieve economic success. Quality learning experiences have social and economic benefits for children, parents, employers, and society as a whole.

Education is also important for the health of communities: People with lower levels of education are often less able to be engaged in their communities and less able to improve conditions for their families. Over half of people without a high school diploma report not understanding political issues, while 89 percent of those with a bachelor’s degree have at least some understanding of political issues. Similarly, having a college degree significantly increases the likelihood of volunteering, even controlling for other demographic characteristics (Baum, Ma, & Payea, 2013; Campbell, 2006; Mitra, 2011).

Early learning in particular enables young children to gain skills necessary for kindergarten and beyond, with 85 percent of brain development occurring by age 3 and 90 percent by age 5. Early education also enables parents to work, which enhances the family’s current and future earning potential. For these reasons, the quality of early education available to low-income children could be one of the most important determinants of their future success. In our analysis, the percentage of 3- and 4-year-olds enrolled in preschool and pre-K is a proxy for the level of education resources in a county. The average share of 3- and 4-year-olds enrolled in Pennsylvania was 42 percent in 2017 (Figure 42). According to the National Institute for Early Education Research, the Pennsylvania Department of Education has made progress in the quality of pre-K education and has increased state investment in pre-K programs since 2010. State pre-K met only five out of 10 benchmarks for quality standards on average, with per-child spending at $6,772 in 2010 (in 2017 dollars). By 2017, state programs met on average seven out of 10 benchmarks, and per-child spending increased to $7,254. However, enrollment of 4-year-olds in these state programs dropped slightly over this period, from 17 to 13 percent (American Community Survey, 2017; Friedman-Krauss, et al., 2017).

Within Pennsylvania, preschool enrollment varies widely between counties. In 2017, 68 percent of 3- and 4-year-olds were enrolled in preschool in Blair County, while only 21 percent were enrolled in Fulton County. This indicates that policies and resources devoted to early childhood education differ across the state according to population size, resource availability, and priorities (see Figure 39).

From early learning through post-secondary studies, ALICE households are challenged to find quality, affordable education and training at all levels in Pennsylvania. Secondary and higher education resources — including high school, two- and four-year colleges, and career and technical education — are important to the functioning of the state economy. Ultimately, basic secondary education remains essential for any job. According to the Alliance for Excellent Education, if the graduation rate across all Pennsylvania’s metropolitan areas increased by 5 percent (from 85 to 90 percent), it could mean 300 new jobs and $3.7 million in additional state and local tax revenue, and annual earnings for that graduating class would increase by $85.6 million. At the national level, this increase in graduation rates for the state would amount to an additional $13.8 million in federal tax revenue and a $140 million contribution to the GDP (Alliance for Excellent Education, 2018).
Pennsylvania’s public education system still does not produce equal results for all residents, as demonstrated by the educational achievement gap affecting students from low-income families and families of color. According to the 2017 National Assessment of Educational Progress, Pennsylvania students generally outperformed other states on 4th and 8th grade assessments, performing significantly better than 24 other states on the 4th grade reading test. However, the achievement gaps in Pennsylvania based on race/ethnicity and socioeconomic status are among the largest in the nation, with White students achieving proficiency in 8th grade reading and math at a rate 24 to 38 percentage points higher than Black and Hispanic students (Karoly, 2015; National Assessment of Educational Progress, 2017—Data Tools).

These systemic differences affect school performance and graduation rates. Among public high schoolers in Pennsylvania in 2017, 80 percent of economically disadvantaged students (defined as qualifying for free or reduced-price lunch), 74 percent of Black students and Hispanic students, 73 percent of American Indian/Alaska Native students, and 65 percent of students with limited English proficiency graduated from high school, compared with over 90 percent of White and Asian/Pacific Islander students. As a result, their chances of going to college differ as well, with college enrollment following high school nationally in 2017 at 59 percent for Black teens and 61 percent for Hispanic teens, compared with 70 percent for White teens. In Pennsylvania, young Black residents are nearly half as likely to have a bachelor’s degree as their White peers (National Center for Education Statistics, 2017; The Chronicle of Higher Education, 2013).

Health Resources

Overall, Pennsylvania was ranked as the 28th healthiest state in the country in 2017, as measured by America’s Health Rankings. Rankings are based on measures of health behaviors, community and environmental factors, state policies, clinical care, and health outcomes. Pennsylvania’s primary strengths were high rates of primary care physicians, a small disparity in health status by educational attainment, and high rates of meningococcal immunization among youth. The state still struggled, however, with high levels of air pollution, low per-capita public health funding, and a high drug-related death rate. Within the state, there is also geographic diversity when it comes to the factors that contribute to good health. According to the 2018 County Health Rankings and Roadmaps report (which ranked counties based on health behaviors, clinical care, social and environmental factors, and the physical environment), the top five healthiest counties in Pennsylvania were Montgomery, Bucks, Centre, Chester, and Cumberland. The bottom five counties were Fayette, Forest, Greene, Indiana, and Philadelphia (United Health Foundation, 2018; University of Wisconsin Population Institute, 2018—State Health Reports).

For people living below the ALICE Threshold, poor mental and physical health are both a cause and a consequence of being low-income. The stress of financial hardship can have a range of effects, from fatigue and depression to increased risk of heart disease — and those health problems, in turn, can further compromise work attendance, earnings, and income. In Pennsylvania, there is a correlation between poor mental health and low income in the 10 counties with the highest number of poor mental health days reported by adults. More than 42 percent of households in these counties lived below the ALICE Threshold, compared with 33 percent in counties with the lowest number of poor mental health days (Egerter, Braverman, & Barclay, 2011; University of Wisconsin Population Institute, 2018—Poor Mental Health Days).

In addition to driving health outcomes, socioeconomic status also impacts access to resources: With greater income, wealth, and social status comes greater access to community resources that promote health. Within communities, access to quality, affordable health care is essential, and a strong predictor of receiving good care is having health insurance. Many ALICE families fall into a critical gap in health insurance coverage: They often earn more than Medicaid eligibility levels but not enough to afford the high deductibles of the lowest-cost Affordable Care Act (ACA) plans (Braverman, et al., 2018). The percentage of uninsured people in Pennsylvania has decreased since 2010 — from 10 percent down to 6 percent in 2017. With...
the introduction of the ACA in 2014, low-income households have had more access to health insurance, though they are still slightly less likely to have coverage than higher-income households. Of Pennsylvania residents under age 65 with annual income below 200 percent of the FPL, 89 percent had health insurance in 2017, while for residents under age 65 at all income levels, the rate was 91 percent (Figure 43) (Kaiser Family Foundation, 2017—State Health Facts).

Coverage rates vary across Pennsylvania, and as rates have improved, differences across counties have decreased. The lowest rate of insured households in 2017 was 87 percent in Lancaster, Mifflin, and Snyder counties, and the highest was 97 percent in Armstrong, Beaver, Butler, Carbon, Colombia, Montgomery, Washington, and Westmoreland counties (see Figure 39) (American Community Survey, 2017).

Another important factor for ALICE families is access to health care providers. Many areas of Pennsylvania do not have enough providers as seen in the number of Health Professional Shortage Areas (HPSAs) designated by the U.S. Health Resources and Services Administration. Across Pennsylvania there are over 400 HPSAs — 147 in primary care, 153 in dental care, and 112 in mental health care. Figure 44 shows primary care HPSAs (cross-hatched areas) and their overlap with the percentage of households earning below the ALICE Threshold. It also shows shortages in health care facilities (gold dots), which include federally qualified health centers, state mental hospitals, and rural health clinics (U.S. Department of Health and Human Services, 2017—HPSA Find).

This is an issue across the state, but especially in rural areas: 54 percent of HPSAs in Pennsylvania are in rural areas. In these areas, hospitals are often the primary means of delivering health care — an inefficient and expensive method of service that is not economically sustainable. All 42 rural hospitals in Pennsylvania report low and declining operating margins, and half reported losses in 2015 (American Hospital Association, 2019; Hughes, 2017; U.S. Department of Health and Human Services, 2017—HPSA Find).
Nearly 48,000 people — or more than 130 Americans each day — died of accidental opioid overdose in the U.S. in 2017, a more than threefold increase since 2007. The opioid epidemic has hit Pennsylvania particularly hard, with the Pennsylvania Department of Health declaring the epidemic the state’s “worst public health crisis.” In 2017, there were 5,388 drug overdoses in the state (2,548 were opioid overdoses), representing nearly 8 percent of all overdoses in the country. Pennsylvania’s rate of 44 overdose deaths per 100,000 people far exceeds the national rate of 22 per 100,000 (American Community Survey, 2017; Centers for Disease Control and Prevention, 2019; Kaiser Family Foundation, 2019—Opioid; National Institute on Drug Abuse, 2019—Opioid Summaries).

Addiction crosses all socioeconomic groups: People of all incomes, geographies, ages, and races/ethnicities suffer from substance use disorders. While much media and public health attention has focused on the opioid crisis in Philadelphia and Allegheny counties, which together account for more than one-third of overdoses in Pennsylvania, there have been opioid deaths in almost every county in the state — urban and rural, wealthy and low-income (Figure 45).

In Pennsylvania, there is no significant relationship between rates of drug overdose (represented by crosshatching in Figure 45) and economic hardship (blue shading). While several national studies have shown that counties with worse economic prospects typically have the highest rates of opioid prescriptions, opioid-related hospitalizations, and overdose deaths, the data do not show a correlation in Pennsylvania (partly explained by data-collection inconsistencies). For example, Beaver, Cambria, Fayette, Lawrence, Montour, Philadelphia, and Westmoreland counties, which have high rates of households below the ALICE Threshold (more than 30 percent), also have among the highest rates of overdose deaths (more than 50 per 100,000). But other struggling counties, such as Cameron, Clarion, and Clearfield, which have an even greater percentage of households below the ALICE Threshold (more than 40 percent), have relatively low rates of overdose deaths (fewer than 20 per 100,000) (Dasgupta, Beletsky, & Ciccarone, 2018; Ghertner & Groves, 2018; Oquendo & Volkow, 2018; Rossen, Bastian, Warner, Khan, & Chong, 2019; Ruhm, 2018).

Figure 45.
Percent Below ALICE Threshold and Drug Overdose Death Rate, Pennsylvania Counties, 2017

Sources: ALICE Threshold, 2017; Pennsylvania Bureau of Health Statistics and Registries, 2018
The impact of addiction and substance use disorders on families most often is a decline in their financial position — causing many families to become or remain ALICE. A family’s income may be reduced if the addiction reduces an adult’s ability to work, and families often have substantial health care costs; for example, addiction treatment ranges from $1,176 to $6,552 per month. In addition, substance use disorders take a toll on the stability of families and marriages, parenting, and on the physical and mental health of family members (Daley, Smith, Balogh, & Toscaloni, 2018; National Institute on Drug Abuse, 2018 and 2019—Medications; Pennsylvania Department of Health, 2019—Ensuring Access; Scholl, Seth, Kariisa, Wilson, & Baldwin, 2019).

People dealing with opioid addiction and their families experience the brunt of the emotional and financial strain of this epidemic, but the consequences of the opioid crisis have also drained resources for communities and strained the social fabric. Nationally, estimates of the cost of the opioid epidemic range from $54 to $78 billion, including up to $40 billion in lost productivity, $28 billion in health costs, and $8 billion in criminal justice costs (amfAR, 2018; Florence, Zhou, Luo, & Xu, 2016; Kneebone & Allard, 2017; Krueger, 2017; Pennsylvania Department of Health, 2019—Ensuring Access; Pennsylvania Senate Committee on Health, Education, Labor, and Pensions, 2017).

Because the causes of addiction and substance use disorders are complex, there are no easy solutions. The factors fueling the opioid epidemic range from the rise in prescriptions and an influx of synthetic opioids (mainly fentanyl) to declining economic prospects and an array of individual risk factors including heredity, chronic pain, and traumatic events, especially in childhood. A range of solutions, from monitoring prescription drug use to connecting individuals to treatment, can make a difference. But addressing additional root causes will take improvements in the economy as well as clinical interventions, such as improved management of chronic pain patients and early intervention for children at increased risk of trauma or abuse (Centers for Disease Control and Prevention, 2018; DEA Philadelphia Division and the University of Pittsburgh, 2018; Gertner & Groves, 2018; Kneebone & Allard, 2017; Pennsylvania Department of Health, 2019—Opioid Epidemic; Ruhm, 2018).

The Social Environment

The social environment in which we live has a significant impact on life satisfaction and physical and mental well-being. Social environments include the culture, people, and institutions with which we interact. These environments can be supportive and act as protective factors, buffering negative health impacts, providing contacts and resources, and improving quality of life. Conversely, when they are negative or lacking, such as in neighborhoods with high levels of poverty, violence, and social turmoil, they can contribute to hardship.

Being engaged in a community enables families to make the most of their surrounding resources. Civic engagement is facilitated by local nonprofits, interest groups, libraries, an active local government, and faith communities, all supported by infrastructure (everything from indoor and outdoor community spaces to sewer and water services to broadband, as well as the housing and education resources mentioned earlier in this section). Civic engagement is associated with increased belonging and commitment to one’s community, more social support, and better physical and mental health (e.g., lower stress and fewer illnesses). However, being engaged also takes time and resources, and is especially hard for those working multiple jobs, juggling child care and errands, or dealing with chronic health issues (Chetty, et al., 2016; Chetty & Hendren, 2015; Nabatchi, Gastil, Weiksner, & Leighninger, 2012; Pancer, 2015; Woolf & Aron; 2013).

Although the social environment is difficult to measure and map, there are three indicators that provide some insight: social isolation, access to technology, and voter participation.
Social Isolation

Feelings of loneliness and isolation have been associated with poor health outcomes, cognitive decline, and an increased risk of mortality. Having a positive social environment is especially important for seniors, yet loneliness is pervasive in the American senior population. In a nationally representative sample of older people, 43 percent reported feeling lonely. Contributing to this issue is the number of seniors who live alone. In Pennsylvania in 2017, 28 percent of seniors lived alone — 9 percent of males and 20 percent of females. The percentage of seniors living alone varies by county in Pennsylvania, ranging from 21 percent in Adams County to 34 percent in Allegheny and Philadelphia counties. Nationally, about one third of people over the age of 65 live alone and there is variation in living arrangements by gender and race/ethnicity. Senior women are more likely than senior men to live alone, and non-Hispanic White and Black women are more likely to live alone (39 percent) compared with women of other races/ethnicities (21 percent of senior Asian women and 23 percent of senior Hispanic women) (Hafner, 2016; Institute on Aging, 2018; Perissinotto, Cenzer, & Covinsky, 2012).

Some seniors live in group facilities, including assisted living facilities, long-term nursing care, and rehabilitation centers. Across Pennsylvania, 4 percent of seniors live in group facilities, with the lowest percentage in Beaver, Crawford, and Monroe counties (2 percent) and the highest percentage in Somerset County (7 percent). Group living quarters can provide additional opportunities for social support and connection, but also the potential for interpersonal conflict if the conditions don’t promote positive social interaction or meet individuals’ unique needs.

Access to Technology

Access to digital technology has exploded over the last three decades; by 2017, 91 percent of adults owned a computing device. But access to technology still varies by income and geography. Low-income adults are more likely to own smartphones (64 percent of those with household income below $30,000) than to have broadband internet access (53 percent), while more than 90 percent of those earning more than $100,000 have both. Access to high-quality technology also varies significantly by income: Only 13 percent of Americans have the highest quality fiber-optic internet connection (American Community Survey, 2017; Anderson, 2017).

For many families, this gap translates directly to reduced job opportunities, educational opportunities, health care access, and financial tools. For example, low-income adults are more likely to use their phones to search and apply for jobs; 32 percent of smartphone users with income below $30,000 have applied for a job on their phone, compared to 7 percent of users with income above $75,000. This high usage of smartphones for a critical task indicates that low-income households have limited access to broadband, either at home or through libraries or government job and training centers (Becker, et al., 2010; Horrigan, 2016, 2018; Smith, 2015).

In Pennsylvania, 80 percent of households have a broadband internet subscription, just below the national average of 81 percent. But there is still significant variation by income: 36 percent of households with income below the ALICE Threshold do not have a broadband internet subscription, compared with only 9 percent for households above the ALICE Threshold (Figure 46). Rates vary even more by location. The lowest rates are among low-income households in rural areas: In rural areas of Pennsylvania, almost half of households below the ALICE Threshold do not have an internet subscription (American Community Survey, 2017; Perrin, 2017—Digital Gap; Ryan, 2018).

Centre County, home to Penn State, stands out as the county with the highest rate of internet access across all income levels. This is primarily driven by the large student body in University Park and State College. Both young households and those engaged in education are among the highest users of the internet (American Community Survey, 2017; Ryan, 2018).
Gaps in the use of technology also exist by race/ethnicity, age, and disability, with Black and Hispanic adults, adults 65 and over, and those with a disability all less likely to go online. The growing use of smartphones among Black and Hispanic adults has helped close the gap, though they still lag in owning a computer or subscribing to broadband. Disability alone is a factor in reduced use of smartphones and broadband adoption, and when it is combined with age, rates of usage decline even further (Anderson & Perrin, 2017; Perrin, 2017—Smartphones).

**Figure 46.**
Internet Access, Pennsylvania, 2017

Voter turnout is another indicator of civic engagement in a county. The share of voting-age Pennsylvania residents who voted in the 2016 presidential election was 64 percent, above the national average of 60 percent. According to Pennsylvania exit polls, ALICE accounted for roughly one-third of the voting electorate: 38 percent of voters had household income below $50,000, 31 percent had income between $50,000 and $100,000, and 31 percent had income above $100,000 (Figure 47) (CNN Politics, 2016; United States Elections Project, 2016; U.S. Election Assistance Commission, 2016).

There was also large variation in voter turnout across the state: In counties where data was available, turnout ranged from 34 percent in Forest County to 71 percent in Bucks County. Highest rates were in the counties surrounding Philadelphia and Pittsburgh. Variation in voting is not only due to candidates and issues on the ballot for local elections, but also to the percentage of residents who are citizens and therefore eligible to vote. Yet as a rough indicator, voter turnout shows that residents are more civically engaged in some areas of the state than in others (American Community Survey, 2016).

**Figure 47.**
Voter Turnout, Presidential Election, Pennsylvania, 2016

Source: American Community Survey, 2017
CONCLUSION

This Report on Asset Limited, Income Constrained, Employed (ALICE) households across Pennsylvania offers a new set of tools — on both the state and the county level — that policymakers and stakeholders can use to understand financial hardship in the state. Using the Household Survival Budget, the Report explains how much it costs to live at the most basic level in the local economy. The Report reveals that a full 37 percent of households in Pennsylvania earn below the ALICE Threshold for economic survival.

In order to address the state’s economic challenges, it is important to recognize that ALICE families are forced to take risks in order to get by. Whether forgoing health insurance, car repairs, or even just a meal, these compromises affect not only the families involved but also their wider communities.

ALICE households range from young families with children to senior citizens. They face an array of challenges: low-wage jobs located far from their homes, high-cost yet insufficient housing, poor access to high-quality child care, financial barriers that limit access to low-cost banking services, and few or no assets to cushion the cost of an unexpected repair or health emergency. Some households become ALICE after an emergency, while others have been struggling near the poverty line since the Great Recession. Effective policy solutions will need to reflect this reality.

What will it take to make a difference for ALICE families and expand the options they have? By surveying housing and community conditions, Pennsylvania policymakers and other stakeholders can better identify where there are job opportunities, where housing is affordable relative to local wages, where strong community resources exist for ALICE households — and where there are gaps.

The ALICE Income Assessment documents that despite aggregate ALICE household earnings of more than $39 billion and another $45.5 billion in spending by government, nonprofits, and health care, there are still nearly 1.9 million households in Pennsylvania that struggle financially.

Without public assistance, ALICE households would face even greater hardship, and many more would slide into poverty. Because they struggle to satisfy their basic needs, it’s almost impossible for them to gain enough traction to improve their overall circumstances. And so far, government assistance does little to address this predicament. The majority of programs aim to alleviate poverty and help the poor obtain basic housing, food, clothing, health care, and education — not to enable long-term economic stability (Haskins, 2011; Shaefer & Edin, 2013).

Economic insecurity is pervasive among ALICE households. This is clearest in Social Security spending: Most senior households have incomes that are above the Federal Poverty Level (FPL) but often still below the ALICE Threshold for economic survival. Quantifying the problem can help stakeholders best decide whether to fill that gap by increasing income for ALICE households or by decreasing expenses of basic household necessities.

While ALICE families differ in their composition, obstacles, and magnitude of need, there are three broad trends that will influence who becomes ALICE in Pennsylvania and what the implications will be for the wider community:

- The changing American household
- Increasing vulnerability of workers
- Growing inequality of health

These trends will have significant implications for both local communities and Pennsylvania as a whole.
THE CHANGING AMERICAN HOUSEHOLD

Pennsylvania’s rate of population growth, at 0.14 percent, is one of the lowest in the country. Yet demographics within the state are shifting, creating new household configurations, many of them in ALICE families. Baby boomers are aging, millennials are driving economic and social change, and immigration trends are changing the racial and ethnic composition of communities. These changes impact the demand for housing, health care, transportation, and community services. The resulting households are creating different kinds of communities, with many implications for who becomes ALICE and where ALICE households live and work (World Population Review, 2018).

Growing Populations: Millennials and Baby Boomers

The growth of certain age groups is changing the landscape in Pennsylvania and across the country. Both millennials and baby boomers are powerful demographic forces. Unlike previous generations, millennials are more often choosing to live in urban areas and delaying both marriage and having children. The large boomer cohort encompasses a group that is working longer, remains involved in a wide array of activities, and is generally healthier than previous generations.

In terms of population, seniors (65 years and over) are currently Pennsylvania’s smallest population cohort by age, but the elderly population is projected to grow from almost 2 million (15 percent) in 2010 to 3 million (23 percent) by 2030, a 50 percent increase (Figure 48). In contrast, demographers predict that the number of 0- to 19-year-olds will fall from 3.2 million to 3.0 million, and their share of the state population will decline from 25 to 23 percent. And the number of 20- to 64-year-olds will fall from 7.6 million to 7 million, and their share will decline from 60 to 54 percent (Pennsylvania State Data Center, 2018; Weldon Cooper Center for Public Service, 2016).

Figure 48.
Population Projection, Pennsylvania, 2010 to 2040

In terms of population, seniors (65 years and over) are currently Pennsylvania’s smallest population cohort by age, but the elderly population is projected to grow from almost 2 million (15 percent) in 2010 to 3 million (23 percent) by 2030, a 50 percent increase (Figure 48). In contrast, demographers predict that the number of 0- to 19-year-olds will fall from 3.2 million to 3.0 million, and their share of the state population will decline from 25 to 23 percent. And the number of 20- to 64-year-olds will fall from 7.6 million to 7 million, and their share will decline from 60 to 54 percent (Pennsylvania State Data Center, 2018; Weldon Cooper Center for Public Service, 2016).
Pennsylvania’s overall growth in population also masks differences across the state. Most growth is expected to continue in the Philadelphia metro area, with less or even declining growth in rural areas of the state where the population is aging more quickly. But even the major cities, traditionally the engine of growth, find slowing increases in population (Behney, et al., 2014; DiStefano, 2017).

**Millennials**

Millennials are the most racially diverse generation in American history. Nationally, 43 percent of millennials are non-White, the highest share of any generation. And with diversity increasing in younger age cohorts, future generations (like Gen Z, the oldest of whom are now graduating college) will be even more diverse. In Pennsylvania, the White under-25 population was the only racial/ethnic group to decrease between 2010 and 2017. The state’s Asian and Latino millennial populations grew the fastest (W. H. Frey, 2018; Lazarski, 2018).

With more millennials having gone to college, they are also on track to be the nation’s most educated generation. Yet they are also more likely than previous generations to be in debt and living in their parents’ homes (Cilluffo & Cohn, 2017; Cohn & Caumont, 2016; W. H. Frey, 2018).

Young workers are a state’s future economic growth. With an aging population, there will be a greater burden on young workers to support those who have aged out of the labor force. The Elderly Dependent Index, which measures the ratio of working-age citizens (16 to 64 years of age) to those 65 years and older and not in the labor force, rose from 25 to 1 in 2010 to 30 to 1 in 2017, an average growth of 0.7 per year. By 2025, millennials are expected to comprise 75 percent of the entire U.S. workforce (Pennsylvania State Data Center, 2018).

But college debt, low wages, and underemployment limit millennials’ economic contribution and may cause them to become part of the ALICE population. The financial constraints on this population have a ripple effect on the wider economy as well: Housing construction slows, as do furniture and appliance manufacturing, and there are indirect effects on retail and utilities, all of which dampen economic growth (Cilluffo & Cohn, 2017; Keely, van Ark, Levanon, & Burbank, 2012; U.S. Department of Education, 2017).

**Baby Boomers**

On the other end of the population spectrum, the senior population (older baby boomers who are 65 and over) is growing even faster than the millennials. This senior generation also faces increased financial challenges — the added expenses of living longer, the increasing cost of health care, and minimal retirement savings. Because of these age-specific issues and the difficulties of working and saving as we age, the situation of the baby boomers raises well-founded concerns that extend beyond the impact on individual seniors to the potential slowing of the entire economy (Bloom, Canning, & Fink, 2011).

Workforce challenges have been especially severe for baby boomers. Because the demands of the labor market have changed — with job losses, lower-wage jobs, and less available work overall — many seniors do not have the retirement savings that they had planned on. According to the Employee Benefit Research Institute’s latest survey, 41 percent of U.S. households headed by someone between the ages of 35 and 64 are projected to run short of money in retirement (Greenwald & Fronstin, 2019; VanDerhei, 2019).

As a result, those on the brink of retirement are finding that they often cannot afford to fully leave the workforce. Even younger baby boomers feel these pressures: Nationally, those aged 55 and over are expected to make up a larger share of the labor force in the next decade. The over-55 age group steadily increased its share of the U.S. labor force from 12 percent in 1992 to 14 percent in 2002 and
further to 21 percent in 2012; it is projected to increase to 26 percent by 2022. In Pennsylvania, 27 percent of 65- to 74-year-olds were still in the workforce in 2017, as were 7 percent of those 75 years and older (American Community Survey, 2017; BLS, 2014—Share of Labor Force; Bricker, et al., 2014).

More baby boomers are also living in multigenerational households — those that include two or more adult generations or those with grandparents and grandchildren. Growing racial and ethnic diversity in the U.S. helps explain some of the rise in multigenerational living. The Asian and Hispanic populations overall are growing more rapidly than the White population, and these groups are more likely than Whites to live in multigenerational family households (Cilluffo & Cohn, 2017).

**Growing Populations: Migration and Immigration**

In addition to internal growth and aging, Pennsylvania’s population is changing through migration, both domestic (primarily from New York and New Jersey) and foreign. In Pennsylvania, there was significant variation in migration by age group in 2017, with the largest movement being a net gain of almost 9,000 college-aged students. The only age groups with net migration out of the state were a very small number of people over the age of 50. Blacks, Hispanics, Asians, and foreign-born migrants are more common in the younger age groups (Figure 49) (Aisch, Gebeloff, & Quealy, 2014; Alter, Fuller, Raybuck, & Sontheimer, 2018; Behney, et al., 2014).

**Figure 49.**
**Population Inflows and Outflows, Pennsylvania, 2017**

![Figure 49. Population Inflows and Outflows, Pennsylvania, 2017](image)

Source: American Community Survey, 2017
Immigration

Immigration plays a small but increasing role in Pennsylvania’s racial and ethnic composition. The number of immigrants has risen over time, from 508,291 (4 percent of the population) in 2000 to 893,769 (7 percent) in 2017. More than half of immigrants in the state (53 percent) have become citizens, 31 percent are legal permanent residents, and 16 percent are undocumented. The majority of current immigrants in Pennsylvania come from Asia (39 percent) with the largest groups from India and China. The next largest groups come from the Caribbean (15 percent), Central America and Mexico (10 percent), Eastern Europe (9 percent) and Africa (8 percent) (Aisch, et al., 2014; American Community Survey, 2016; Migration Policy Institute, 2017; Pew Research Center, 2019).

Immigrants and their children will account for the vast majority of current and future U.S. workforce and economic growth. Nationally, the portion of the labor force that is foreign-born has risen from about 11 percent to just over 16 percent in the last 20 years. Without immigrants, there would be an estimated 18 million fewer working-age adults in the country in 2035, and U.S. population growth would be less than 1 percent annually, slow by historical standards (National Academies of Sciences, Engineering, and Medicine, 2017).

As both workers and entrepreneurs, foreign-born Pennsylvanians are an important source of economic growth in Pennsylvania, making up 7.6 percent of the state’s workforce (495,780 workers) in 2015. Across the state, there were 51,291 immigrant businesses accounting for 9 percent of all self-employed Pennsylvania residents and generating $1.2 billion in business income in 2015, according to the U.S. Census Survey of Business Owners. As consumers, the state’s immigrants had a combined purchasing power of about $19 billion in 2014. Immigrants are largely concentrated in and around Philadelphia, making up 19 percent of the labor force in Philadelphia and the 10 surrounding counties (American Immigration Council, 2017; Eichel, 2017; New American Economy Research Fund, 2017).

Overall, immigrants have a positive impact on long-term Pennsylvania and U.S. economic growth. Immigrant workers run businesses and pay taxes, contribute to a range of fields from engineering and science to the service sector, and in 2012 were 30 percent more likely to start their own businesses than native-born residents. Forty-four percent of Fortune 500 companies were founded by immigrants or their children, including nine headquartered in Pennsylvania. Nationally, these companies include Google, Intel, and eBay. At the other end of the occupational spectrum, in service jobs, lower-skilled immigrant workers such as child care providers form the foundation that enables higher-income parents to pursue full-time careers while having children. All of these factors contribute to economic growth and the tax base (Center for American Entrepreneurship, 2017; Furman & Gray, 2012; Najarro, 2018; National Academies of Sciences, Engineering, and Medicine, 2017).

The fiscal impact of immigrants also shifts as the children of immigrants become adults. At working ages, children of immigrants are among the strongest economic and fiscal contributors within the U.S. (National Academies of Sciences, Engineering, and Medicine, 2017; Pereira, et al., 2012; Perryman Group, 2008; The Pew Charitable Trusts, 2014; U.S. Chamber of Commerce, 2013).

Implications of Demographic Trends

The growth of Pennsylvania’s millennial, baby boomer, and immigrant populations will have an impact both on the wider economy and on the communities where ALICE lives and works. As these changes unfold, there will be opportunities to improve financial stability for ALICE families in Pennsylvania, but there will also be additional pressures, particularly in two areas — infrastructure and elder care.
Infrastructure
There will be greater pressure on the state’s infrastructure, especially within the housing market, with demands for smaller, affordable rental units. Different groups prioritize different amenities for these units. Many young millennials prefer housing near urban centers with shopping, restaurants, and public transportation. Seniors generally want housing that is accessible to family, health care, and other services. And many immigrants want locations close to schools, jobs, and public transportation. However, unless changes are made to Pennsylvania’s infrastructure or housing stock, the current shortage of affordable housing units will increase, pushing up prices for low-cost units and making it harder for ALICE households to find and afford basic housing (Department of Numbers, 2017; HUD, 2017—Fair Market Rents; Vespa, 2017).

Changes in modes of transportation may offer Pennsylvanians more options in the future. With the rise of new forms of transportation, from ride-sharing companies like Uber and Lyft to self-driving cars, there are more ways to be mobile than owning a car or using public transportation. With many millennials preferring not to own cars and many older adults no longer driving, these services will be desirable. While we have yet to see the definitive shift toward automation predicted to happen in the next decade, self-driving technology is already being used in the long-haul trucking industry, enabling more goods to be transferred to and from rural areas. Ride-sharing companies have already altered the urban transportation landscape, providing new options for passengers but also impinging on the traditional taxi and livery industries, where many drivers are ALICE workers (Formby, 2017; Schmidt, 2017).

The changing transportation dynamic could also impact social service and health care delivery. For example, Uber is currently working with Meals on Wheels to provide rides to volunteers delivering food. In the future, fleets of publicly owned self-driving cars could provide transportation for seniors and those with a disability to doctor’s offices and social service providers at a fraction of the cost of building a new and easily accessible public transportation system (Arcadis, HR&A Advisors, and Sam Schwartz, 2017; Cakebread, 2017; United Way, 2018; Zimmer, 2016).

Housing could also be impacted by the evolution of self-driving cars. If they can offer lower-cost transportation and more productive commuting time, the proximity of housing to work and amenities might become less important, thereby increasing the range of locations for affordable housing. In addition, a reduced need for car ownership will change the demand for houses with garages, and for on-street parking (Jiao, Miró, & McGrath, 2017).

Elder Care
The aging population will increase demand for geriatric health services, including assisted living and nursing facilities, and home health care. Seniors will face a number of challenges in getting the care they need, including not having enough savings and fewer available caregivers.
**Numbers of available caregivers:** In Pennsylvania, the caregiver support ratio — the number of potential caregivers aged 45 to 64 for each person aged 80 and older — was 5.8 to 1 in 2010 and is projected to fall to 3.9 to 1 by 2030, and then to 3.3 to 1 in 2050. Out of the 50 states, the Long-Term Services and Supports State Scorecard ranked Pennsylvania 36th in 2017 in its support for family caregivers and 43rd overall in its long-term support and services for older adults on a scale that measures affordability, access, and quality of life (AARP Public Policy Institute, 2015; Pennsylvania State Data Center, 2018; Redfoot, Feinberg, & Houser, 2013; Reinhard, et al., 2017).

With the increased demand for caregivers, there is a growing need for more paid direct care workers (home health aides, personal care aides, and nursing assistants), who are themselves likely to be ALICE. Home health aides, one of the fastest-growing jobs in Pennsylvania, are paid $11.75 per hour and require reliable transportation, which can consume a significant portion of the worker’s wage. These jobs do not require extensive training and are not well regulated, yet they involve substantial responsibility for the health of vulnerable clients. Together, these factors may lead to poor-quality caregiving and the risk of physical, mental, and financial abuse and neglect — an issue that is on the rise across the country. In 2016, Pennsylvania received nearly 30,000 elder abuse complaints, tripling over the last few years (Hook, 2017; MetLife Mature Market Institute, 2011a; Unified Judicial System of Pennsylvania, 2014; U.S. Bureau of Justice Statistics, 2015).

**Immigrants in the caregiving workforce:** Immigrants make up a large share of employees at the nation’s nursing homes, assisted living facilities, and home care agencies. A recent study found that one in four direct care workers is foreign-born, and that share is probably much higher among “gray market” workers — home care workers hired directly by families and often paid under the table (Espinoza, 2017).

The immigrant direct care workforce is economically and politically vulnerable. These workers are largely women who work mostly part-time or seasonal jobs with a median annual income of $19,000. This is despite the fact that immigrant direct care workers are more likely to have higher-education degrees than U.S.-born direct care workers. Fewer immigrant direct care workers are nursing assistants, who earn a higher income and more often have employer-sponsored health insurance. A large majority of immigrant direct-care workers come from Central American, Caribbean, and Southeast Asian countries, all regions targeted by recent immigration restrictions. Losing foreign-born direct care workers at a time when the U.S. senior population is growing would both increase the cost and reduce the quality of care.

> Losing foreign-born direct care workers at a time when the U.S. senior population is growing would both increase the cost and reduce the quality of care.
Unpaid family caregivers: Family caregiving has significant value. The presence of an informal caregiver can improve well-being and recovery and defray medical care and institutionalization costs. Yet caregiving is also costly for families in several ways beyond the direct costs, including mental and physical strain on the caregiver, and lost income due to decreased hours or job loss, which also impact future earnings. Many family caregivers are ALICE workers, with almost half (47 percent) reporting household income of less than $50,000 per year. A recent report by AARP found that family caregivers earning less than $32,500 annually spent on average 44 percent of their income on caregiving in 2016 (AARP Public Policy Institute, 2015; Dixon, 2017; MetLife Mature Market Institute, 2011b; Pennsylvania State Data Center, 2018; Rainville, Skufca, & Mehegan, 2016; Ramchand, et al., 2014; Tanielian, et al., 2013).

INCREASING VULNERABILITY OF WORKERS

There are a few trends converging to destabilize markets and reshape the American, if not global, workforce: the ripple effects of natural and human-made disasters through a connected global economy, the shifting of risk from companies to workers and from high- to low-wage jobs, and the often-disruptive effects of technology on jobs and workplaces. Each of these trends is likely to become more prevalent going forward — and because ALICE families have the fewest resources to weather instability and risk, these changes will impact them disproportionately.

With the U.S. fully participating in the global economy, our economic reality is a complex, integrated system that both benefits from technological advances and can be derailed by disruptions in any part of the world. Technology has expanded international connections and increased the speed of these interactions, but that connectedness can function for better and for worse. When an earthquake and tsunami pummeled Japan in 2011, the global supply chain of semiconductor equipment and materials was disrupted. With Japan responsible for 20 percent of the global semiconductor market, the cost of the world’s semiconductor products increased, including those made for Apple’s iPad. And there is no global governing body to help moderate the effects of cycles of disaster, inflation, or industry bubbles (Amadeo, 2011; Morgenstern, 2011; Van Paasschen, 2017; World Economic Forum, 2017).

Exposure to Environmental Hazards

The impact of natural and human-made disasters is often felt more by ALICE workers and low-income communities. More affordable homes are often located in vulnerable areas. Droughts, floods, crop failures, violent weather, rising sea levels, and ocean acidification directly threaten the homes of ALICE families and the jobs where ALICE works. For example, ALICE families who live in flood-prone areas may suffer the financial cost of flood damage, and an ALICE worker suffers lost wages when crops fail and there is less work (NASA, 2018; Van Paasschen, 2017). In Pennsylvania, floods, fires, and storms are the most common natural disasters (Fowler, et al., 2018; Pennsylvania Emergency Management Agency, n.d.).

Yet, ALICE workers, especially those in maintainer jobs, are critical to rebuilding communities after a disaster. When they can’t work during these periods of recovery — because of relocation, injury, or caregiving responsibilities (e.g., due to closed schools or senior centers) — community resilience is negatively impacted overall, and ALICE households suffer lost wages.
A report by Oxfam America and the Hazards and Vulnerability Research Institute outlines the factors that contribute to lack of resilience to natural disasters (Oxfam America, 2009):

- **Economic standing**: This is the most important factor contributing to vulnerability to disaster. Households without their own resources — most importantly, ongoing income from salary vs. lost wages, as well as savings and insurance — are forced to rely on assistance. In addition, lower-income households can have difficulty getting to disaster assistance centers (due to transportation and child care issues) and may have a lack of knowledge of and comfort with governmental procedures (Fothergill & Peek, 2004).

- **Age extremes**: The young and the elderly are more dependent on care and less able to evacuate in times of disaster.

- **Rural and urban communities**: Extremes in population density — both sparse and very dense — compound risks.

- **Special needs populations**: Households with a member with special needs have a more difficult time preparing for, responding to, and recovering from disasters.

- **Housing quality**: Poor quality in housing construction makes homes vulnerable to damage.

Risks from environmental hazards, natural and human-made, are often shifted to workers and low-income communities. Lower-income workers are particularly likely to be exposed to hazards such as pollutants in factory work, chemicals and pesticides in farming and manufacturing, and injuries in nursing and construction. Since these costs are often cumulative, risks intensify with the increasing volume. ALICE is more likely to live in areas with flooding or exposure to hazardous materials. The Pennsylvania Emergency Management Agency identifies exposure to hazardous materials as one of the most serious problems facing Pennsylvania. In particular, 20 cities in Pennsylvania were identified as having higher rates of lead exposure than Flint, Michigan had in 2014 (Fowler, et al., 2018; Frostenson, 2016; NASA, 2018; Pennsylvania Emergency Management Agency, n.d.; Ratcliffe, et al., 2019; Van Paasschen, 2017; Watson, et al., 2014).

**Future Jobs**

Many are predicting the demise of ALICE workers’ maintainer jobs due to automation. Recent research and media coverage often focuses on innovations that automate jobs, such as self-checkout lines at the grocery store. Yet jobs that repair the physical infrastructure and care for the workforce are actually predicted to grow faster than all other types of occupations in the coming decades. And many innovations, like online customer service, have created new maintainer jobs rather than replacing them with automation (Frey & Osborne, 2013; Herzenberg, 2019; Vinsel & Russell, 2016).

Pennsylvania’s workforce faces a future dominated by low-paying jobs requiring few advanced educational credentials. From 2016 to 2026, most of the fastest-growing jobs in Pennsylvania will pay less than $20 per hour. Only 21 percent will require a bachelor’s degree and 17 percent will require some college or post-secondary non-degree award; 37 percent of new jobs will not require any formal educational credential at all and 24 percent will require only a high school diploma (Figure 50) (BLS, 2017—Occupational Employment Statistics; BLS, 2017—Occupational Outlook Handbook; Pennsylvania Department of Labor and Industry, 2016).
## Figure 50.
New Job Growth by Occupation, Pennsylvania, 2016 to 2026

<table>
<thead>
<tr>
<th>Occupation</th>
<th>2016 Employment</th>
<th>Annual New Growth</th>
<th>2017 Hourly Wage</th>
<th>Education or Training</th>
<th>Likelihood of Being Replaced by Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combined Food Preparation &amp; Serving Workers</td>
<td>145,800</td>
<td>2,420</td>
<td>$9.06</td>
<td>None</td>
<td>92%</td>
</tr>
<tr>
<td>Registered Nurses</td>
<td>141,420</td>
<td>1,894</td>
<td>$32.80</td>
<td>Bachelor's degree</td>
<td>1%</td>
</tr>
<tr>
<td>Personal Care Aides</td>
<td>89,460</td>
<td>1,669</td>
<td>$11.26</td>
<td>High school diploma or equivalent</td>
<td>74%</td>
</tr>
<tr>
<td>Laborers &amp; Freight, Stock &amp; Material Movers</td>
<td>136,020</td>
<td>1,427</td>
<td>$13.93</td>
<td>None</td>
<td>85%</td>
</tr>
<tr>
<td>Home Health Aides</td>
<td>47,040</td>
<td>1,263</td>
<td>$11.75</td>
<td>High school diploma or equivalent</td>
<td>39%</td>
</tr>
<tr>
<td>Nursing Assistants</td>
<td>78,610</td>
<td>790</td>
<td>$14.13</td>
<td>Postsecondary nondegree award</td>
<td>1%</td>
</tr>
<tr>
<td>Waiters &amp; Waitresses</td>
<td>98,740</td>
<td>732</td>
<td>$10.24</td>
<td>None</td>
<td>94%</td>
</tr>
<tr>
<td>Heavy &amp; Tractor-Trailer Truck Drivers</td>
<td>84,610</td>
<td>730</td>
<td>$21.54</td>
<td>Postsecondary nondegree award</td>
<td>79%</td>
</tr>
<tr>
<td>Janitors &amp; Cleaners</td>
<td>95,570</td>
<td>674</td>
<td>$12.46</td>
<td>None</td>
<td>66%</td>
</tr>
<tr>
<td>Software Developers, Applications</td>
<td>25,130</td>
<td>666</td>
<td>$44.60</td>
<td>Bachelor's degree</td>
<td>4%</td>
</tr>
<tr>
<td>Medical Assistants</td>
<td>26,930</td>
<td>588</td>
<td>$14.77</td>
<td>Postsecondary nondegree award</td>
<td>30%</td>
</tr>
<tr>
<td>Cooks, Restaurant</td>
<td>47,540</td>
<td>547</td>
<td>$11.55</td>
<td>None</td>
<td>96%</td>
</tr>
<tr>
<td>Construction Laborers</td>
<td>47,680</td>
<td>530</td>
<td>$17.40</td>
<td>None</td>
<td>88%</td>
</tr>
<tr>
<td>General &amp; Operations Managers</td>
<td>72,410</td>
<td>527</td>
<td>$53.85</td>
<td>Bachelor's degree</td>
<td>16%</td>
</tr>
<tr>
<td>Accountants &amp; Auditors</td>
<td>57,850</td>
<td>498</td>
<td>$32.45</td>
<td>Bachelor's degree</td>
<td>94%</td>
</tr>
<tr>
<td>Maintenance &amp; Repair Workers, General</td>
<td>60,990</td>
<td>431</td>
<td>$18.14</td>
<td>High school diploma or equivalent</td>
<td>64%</td>
</tr>
<tr>
<td>Medical Secretaries</td>
<td>24,800</td>
<td>419</td>
<td>$16.31</td>
<td>High school diploma or equivalent</td>
<td>81%</td>
</tr>
<tr>
<td>Hairdressers, Hairstylists &amp; Cosmetologists</td>
<td>39,920</td>
<td>414</td>
<td>$10.69</td>
<td>Postsecondary nondegree award</td>
<td>11%</td>
</tr>
<tr>
<td>Licensed Practical &amp; Licensed Vocational Nurses</td>
<td>38,740</td>
<td>358</td>
<td>$22.31</td>
<td>Postsecondary nondegree award</td>
<td>6%</td>
</tr>
<tr>
<td>Carpenters</td>
<td>43,200</td>
<td>346</td>
<td>$22.36</td>
<td>High school diploma or equivalent</td>
<td>72%</td>
</tr>
</tbody>
</table>

Many of these jobs are also at the greatest risk of being replaced by technology, though estimates vary. Oxford economists Frey and Osborne estimate that over the next two decades in Pennsylvania, 59 percent of jobs in the top-20 fastest-growing occupations could be replaced by technology. In addition to automating existing jobs, technology is creating new on-demand jobs and services, with the most attention going to gig-economy jobs such as TaskRabbit work and Uber and Lyft driving (Frey & Osborne, 2013).

**Predicting new occupations:** There is a wide array of new jobs predicted to arise in the next 20 to 30 years, including augmented reality architects, alternative currency bankers, waste data managers, 3-D printing engineers, privacy managers, wind-turbine repair techs, nano-medics, drone dispatchers, robotic earthworm drivers, body part and limb makers, memory augmentation therapists, mass energy storage developers, and self-driving car mechanics (T. Frey, 2011; Hagan, 2017; Mejia, 2017; World Economic Forum, 2016).

While these jobs seem a long way from today’s mechanics and personal-care providers, most are still maintainer jobs — largely filled by ALICE workers who care for the infrastructure and the workforce, in occupations that ensure the economy runs smoothly. In other words, our physical infrastructure may change, but it will still need maintenance, and the maintainer workforce will still need to be educated and cared for (Vinsel & Russell, 2016).

The new jobs, however, will not necessarily be filled by the same workers who held the jobs that these new titles replace. For example, a cashier does not necessarily have the skills to repair digital checkout kiosks. Jobs that remain, especially those that require lower levels of education, will be service jobs that cannot be automated — such as health aides, janitors, sales representatives, and movers — and will continue to be the lowest-paid. Yet even these jobs will increasingly require digital skills (Brynjolfsson & McAfee, 2014; Frey & Osborne, 2013).

**Ability to work with technology:** In the face of rapidly rising computing power, an ability to work with data and make data-based decisions will become an increasingly vital skill even within maintainer jobs, so ALICE workers will need new skill sets. The ability to work with technology will be increasingly important for jobs at all levels, from retail assistants to more senior positions. With the increasing amount of digital information being generated and stored, there will be more value placed on utilizing data to improve business productivity.

With increased mechanization, many jobs will require working alongside machines as well as building and repairing them. In Pennsylvania, this dynamic is already a big part of agriculture and manufacturing. The McKinsey Global Institute estimates that in 60 percent of all occupations, an average of 30 percent of work activities are automatable, and therefore more workers will be required to work alongside machines (Manyika, 2017). For example, at Ford’s Chicago assembly plant, operators used to spend 70 percent of their time scanning and 30 percent repairing defects. Now they spend 10 percent of their time scanning and 90 percent of their time fineressing the final assembly of a vehicle (Hagan, 2017; Pete, 2013).

In addition, the pace of these changes may have to be faster than anticipated. By one estimate, 50 percent of subject knowledge acquired during the first year of a four-year technical degree in 2016 will be outdated by the time students graduate (Organisation for Economic Co-operation and Development, 2016; World Economic Forum, 2016).

There may be some safety benefits to ALICE workers with advances in technology, which can reduce the risk of injury for workers such as warehouse packers. For the public, increasing quality control through automation can improve safety, such as in pharmaceutical dispensing. The regularity of these processes reduces human error and will continue to improve public safety through real-time monitoring and reaction in occupations such as long-distance driving and emergency response (Bond, 2017; McKinsey Global Institute, 2017).
**More consultants, more risk:** Initially, the gig economy was seen as a way for many ALICE households to fill short-term gaps in standard employment, with work that might be more lucrative than jobs in the traditional employment market. However, the size of the contingent workforce has increased to up to one-third of the overall workforce, with estimates that it could reach 40 to 50 percent by 2020. With more and more workers solely reliant on contract work, the number of people experiencing gaps in income and going without benefits is also rising, and this trend is expected to increase (Abraham, et al., 2016; Eden & Gaggl, 2015; Edison Research, 2018; Freelancers Union & Upwork, 2017; Intuit, 2017; Katz & Krueger, 2016; Manyika, et al., 2016; Smith, 2016; U.S. Government Accountability Office, 2015).

**Disruptive Technologies and Job Turnover**

The cost of disruption is often borne disproportionately by ALICE workers. For example, when a business invests in a technological innovation, it increases productivity, eliminates some jobs, and creates new ones. The business increases profits and the economy benefits from greater productivity. The employee with the new job benefits only if wages are high enough to cover the cost of training to gain the skills needed for the job and the transaction costs of getting a new job (job search, relocation, new clothes, etc.). The employee in the old job, who may have been excellent in that role, may not have the skills for the new job and/or may be unable to relocate and therefore becomes unemployed, imposing huge and immediate costs on his or her family.

One of the clearest examples of the cost of job turnover comes from the North American Free Trade Agreement (NAFTA). Included in the agreement were funds to help workers whose manufacturing jobs move abroad. In 2014, this involved over 62,000 workers, and the cost of their job training, job search and relocation allowances, income support, and assistance with health care premium costs was just above $300 million, or more than $4,800 per worker. Unemployed workers who aren’t covered by NAFTA aren’t offered such aid and must pay these costs themselves, but ALICE workers can’t afford them (U.S. Department of Labor, 2014).

Employee turnover is also costly for businesses. From a human resources perspective, experts estimate that turnover costs account for 20 to 30 percent of the annual salary of workers making less than $50,000, a cost that includes recruiting, interviewing, hiring, orientation and training, lost productivity, potential customer dissatisfaction, reduced or lost business, administrative costs, and lost expertise (Bersin, 2013; Bolden-Barrett, 2017; Boushey & Glynn, 2012; Merhar, 2016).

Finally, while new technologies ostensibly make everyday life easier, there are also costs for consumers, including the time it takes to learn about a new product or process, the actual cost of the item, cancellation fees, and psychological effort and time to implement and incorporate it into their lives. ALICE families especially do not have the time or funds to adapt, and the disruption can add to the ongoing stress of insufficient income (Klemperer, 1987; Zhang, Chen, Zhao, & Yao, 2014).

**Growing Inequality of Health**

The third trend that will affect ALICE households throughout Pennsylvania is an increasing level of inequality in health. The cost burden of health care is increasing for all but the healthiest Pennsylvania residents. That cost burden is also increasing for government and businesses — a trend that is not sustainable, and that will most likely result in less access to quality health care for ALICE families, more costly health emergencies, and poorer health overall (Kaiser Family Foundation, 2017—Health Insurance Coverage; Norris, 2018).
Cost of and Access to Health Insurance

The dwindling power of Medicare and Medicaid: The recent uptick in the percentage of Pennsylvanians with health insurance is in large part due to the expansion of Medicaid. With more people covered and a falling ratio of workers to both Medicaid recipients and seniors, there will be growing demand for care and shrinking sources of revenue.

While many seniors are active and healthy, as they live longer, they require more health care than their younger counterparts. The prevalence of chronic conditions such as cancer, dementia, and diabetes increases with age, and older bodies are more prone to injury. As a result, health care costs for seniors are higher than for other age groups. For example, nationally in 2010, health care spending amounted to $18,424 per person for people aged 65 and older, tripling the $6,125 that was spent on working-age individuals. And that spending gap only widens as seniors reach 80 and 90 years old (Leatherby, 2016; Nardi, French, Jones, & McCauley, 2015; Neuman, Cubanski, Huang, & Damico, 2015).

An aging population and increasing health care costs will impact the effectiveness of Medicare and Medicaid and the demands on health care providers, beneficiaries, and taxpayers. As the Pennsylvania population has aged, enrollment in Medicare and Social Security has increased steadily and is projected to increase even more. Medicare enrollment increased from 2 million Pennsylvanians in 2000 to 2.6 million in 2017 and is projected to rise to 3.3 million in 2026 (a 25 percent increase from 2017 to 2026). The number of Pennsylvania residents collecting Social Security increased from 1.9 million in 2000 to 2.1 million in 2017 and is projected to reach 2.6 million in 2026 (a 26 percent increase from 2017 to 2026). With more people covered and a falling ratio of workers to both Medicaid recipients and seniors, there will be growing demand for care and shrinking sources of revenue (Figure 51).

Figure 51.
Enrollment in Medicare and Social Security, Pennsylvania, 2000 to 2026

Medicare provides health care coverage primarily to adults ages 65 and over, but also to younger adults with permanent disabilities. It has different sources of funding for different services, such as hospital care, physician care, and prescription drugs. Medicaid, which provides health coverage for low-income Americans, is often used by seniors to cover the long-term cost of nursing home facilities (Centers for Medicare & Medicaid Services, 2017—Annual Report).

Medicare spending is growing at a faster rate than the growth in the senior population, Social Security, or the overall economy. In Pennsylvania, spending on both Medicare and Social Security is growing faster than their rates of enrollment and outpaces the growth of the state economy. From 2000 to 2014, Medicare spending more than tripled, while Social Security increased by 77 percent. They are projected to continue to grow to 2026 — a 21 percent increase in Medicare spending and a 72 percent increase for Social Security from 2014 (Figure 52).

Nationally, Medicare expenditures are expected to grow at an average rate of 7.1 percent from 2016 to 2025, higher than the 5.4 percent rate of economic growth overall. As a percentage of the GDP, the cost of Medicare will increase from 3.6 percent in 2016 to 5.9 percent by 2091. Medicaid spending, which slowed in its growth from 2016 to 2017, is expected to quicken and to average nearly 6 percent each year through 2025 — a direct result of the increasing elderly and disabled U.S. population (Centers for Medicare & Medicaid Services, 2017—Annual Report; Cubanski & Neuman, 2018; Van de Water, 2017).

**Figure 52.**
Cost of Medicare and Social Security, Pennsylvania, 2000 to 2026

![Cost of Medicare and Social Security, Pennsylvania, 2000 to 2026](image)


Seniors will bear additional costs because Medicare does not cover all of their health care. Excluded are long-term services and supports as well as dental care, premiums, deductibles, and cost-sharing for Medicare-covered services. These costs are increasing to the point at which out-of-pocket health care costs are likely to use up half of a Medicare beneficiary’s average Social Security income by 2030 (Cubanski, Neuman, Damico, & Smith, 2018).
Decreased availability of employer-sponsored health insurance: ALICE households also face the challenge of declining rates of employer-sponsored health insurance. Insurance through large employers has remained steady or even grown in some places, but some small employers have dropped insurance benefits. Nationally, while 96 percent of employers with 50+ employees offered health benefits in 2016 (up from 95 percent in 2014), the share of businesses with fewer than 50 employees offering coverage dropped from 32 percent in 2014 to 29 percent in 2016. These struggles are exacerbated by the increasing proportion of workers who rely on contingent work, which typically offers no insurance coverage (Noguchi, 2017). In addition, the repeal of the Affordable Care Act’s individual mandate in the 2017 tax bill means that younger, healthier people will be more likely to forgo health insurance going forward, making insurance more expensive for those remaining in the market (Pear, 2017; Stearns, 2017).

THE WEALTH–HEALTH GAP

Socioeconomic status has long been a powerful determinant of health. The National Academies of Sciences, Engineering, and Medicine project that of people born in 1960, those in the lowest-income quintile have a shorter life expectancy than those in the highest-income quintile: 13 years shorter for men (76 years compared to 89 years) and 14 years shorter for women (78 years compared to 92 years) (National Center for Biotechnology Information, 2015).

The wealth-health divide is exacerbated by differences, depending on income, in the safety of both living and working environments. Those with the fewest resources live and often work in areas with unhealthy conditions, such as contaminated water and polluted air, because those areas are less expensive. The impact of pollution, toxic exposure, and disease compounds over time, and without resources, these families cannot afford to move to safer areas, mitigate these hazards, or avoid risky workplaces (Harari, 2014; Komlos & Kelly, 2016; Regalado, 2015).

Race and ethnicity are also tied to the level of adverse environmental exposure people face in their neighborhoods and at their jobs. Several large studies have revealed an association between low socioeconomic status and greater harm from air pollution. A comprehensive review from Harvard University researchers revealed that compared to the rest of the population, Black, Asian, Hispanic, and Medicaid-eligible individuals had a higher likelihood of death from any pollution-related cause, with Black people almost three times as likely to die from exposure to air pollutants than other groups (Di, et al., 2017). Moreover, a 30-year analysis of 319 commercial hazardous waste treatment and storage sites in the U.S. found a consistent pattern of placing hazardous waste facilities in low-income and primarily Black and Hispanic neighborhoods (Mohai & Saha, 2015).

These differences are projected to grow wider as the compound impact of unsafe living and working environments produces even poorer health outcomes for those with the fewest resources, while technical advances in medical care offer even better health outcomes to those with the most (Chetty, Stepner, Abraham, et al., 2016; Komlos & Kelly, 2016; National Academies of Sciences, Engineering, and Medicine, 2015).

The health care gap could increase in two ways. First, precision medicine — the ability to personalize medical treatments, products, and intervention — is increasingly effective, but costly and therefore out of reach for many patients. This is especially the case when it comes to treatments for cancer and rare diseases. Second, biotechnology and genetic engineering have made it possible to go beyond treatment of a specific injury or disease and upgrade preventative health care. Researchers are, for example, experimenting with procedures that could enable families to correct genes that cause illnesses like cystic fibrosis, or add genes that protect against infection or dementia, and pass those improvements on to future generations. Yet these types of innovations will be extremely expensive if and when they reach the marketplace (Harari, 2014; Komlos & Kelly, 2016; Regalado, 2015).
THE DENTAL HEALTH DIVIDE

Nowhere are wealth-health disparities starker than in the divide in dental care. Higher-income Americans have dental insurance (most often separate from health insurance) and access to care that provides resistance to tooth decay and breakage, and promotes jaw comfort, clear speech, and easier maintenance; all of which contribute to better overall health. The wealthiest families spend thousands of dollars on supplemental dental care to achieve whiter, straighter, stronger smiles, which leads to more social and job opportunities.

Those with the lowest incomes rarely have dental insurance and Medicaid’s dental coverage varies from state to state, so these families often forgo preventative care. They are far more likely to suffer from tooth decay and gum infection, which can increase the risk of cancer and cardiovascular diseases and can affect speech, nutrition, sleeping, learning, playing, and overall quality of life. In addition, crooked or yellow teeth can stigmatize people in social settings and reduce job prospects, as they are associated with low educational achievement and social mobility. According to a 2015 American Dental Association survey, 29 percent of low-income respondents reported that the appearance of their mouth and teeth affected their ability to interview for a job.

Expanded dental coverage for Pennsylvanians with income up to 138 percent of the Federal Poverty Level (FPL) became available through Medicaid (Medical Assistance) and the Children’s Health Insurance Program (CHIP) in 2015. Children up to the age of 21 are eligible for routine dental care, and adults, if eligible, are entitled to primary dental care with a copay depending on the specific health plan.

For adults 65 years and older in Pennsylvania and across the country, Medicare does not cover routine oral health and dental care. Those with dental needs that increase with age must purchase an insurance plan or pay out of pocket. Many seniors with severe needs, such as root canals and crowns, who are unable to afford additional expenses may have their teeth pulled. As a result, nearly one in five Americans older than 65 do not have a single real tooth.

Even Pennsylvanians with dental coverage have difficulty accessing dental care because of the limited number of dentists in the state and a shortage of those who accept the Medical Assistance and CHIP. As of 2018, Pennsylvania has 166 Dental Care Health Professional Shortage Areas (HPSAs). Only 47 percent of Pennsylvania’s dental health needs are met with the current number of dentists. In 2015, 66 percent of Pennsylvania dentists accepted payment from Medicaid or CHIP, and while this is a low rate of participation, it was much higher than the U.S. average of 38 percent.

In addition, with the eligibility cutoff for the Dental Wellness Plan at 138 percent of the FPL, there are many ALICE households that can still not afford the dental care they need. The Health Reform Monitoring Survey of the Urban Institute and the Robert Wood Johnson Foundation found that in 2015, 24 percent of adults with income above 138 percent but below 400 percent of the FPL still had an unmet need for dental care due to unaffordability.

Finally, there are also environmental impacts that need to be considered. For example, Pennsylvania lags behind the national average when it comes to the percentage of the population served by fluoridated water (which has been shown to improve dental health). In 2014, 55 percent of Pennsylvania residents had access to fluoridated water, compared to the national average of 75 percent.

NEXT STEPS

There is a basic belief in America that if you work hard, you can support your family. Yet the data presented in this Report shows that for nearly 1.9 million households in Pennsylvania, this is not the case: Working families are still struggling due to the mismatch between the basic cost of living and the wages of many jobs across the state, exacerbated by systemic inequities in opportunity and wealth. By making this clear, the ALICE data challenges persistent assumptions and stereotypes about people who can’t afford to pay their bills or are forced to use public or social services — that they are primarily people of color, live only in cities, are unemployed, or are struggling as the result of some moral failing. The data on ALICE households shows that hardship in Pennsylvania exists across boundaries of race/ethnicity, age, and geography.

With projected demographic changes and persistent barriers to stability, many ALICE and poverty-level families will continue to face hardship. In particular:

- At least 40 percent of Pennsylvania households do not have money set aside for an unexpected emergency.
- The majority of adults under 25 across the country are unable to afford to live on their own, and for both economic and cultural reasons are delaying getting married, having children, or moving for new job opportunities.
- More seniors are aging without saving for retirement.
- There are fewer workers to meet the growing demand for senior caregiving.
- Income and wealth disparities persist by race, ethnicity, gender, and sexual orientation.

OVERCOMING THE OBSTACLES: IDEAS BEING DEBATED, CONSIDERED, AND PILOTED

Economic change will continue, and these changes will both provide opportunity and inflict costs. Yet the distribution of opportunity and cost is not usually even or equitable. To have a positive impact on ALICE families, communities need to consider a range of system changes that would help ALICE to weather downturns in the short term and become more financially secure in the long term. Policymakers, academics, and advocates have proposed a range of broad ideas that could be adapted on a local, statewide, or national front. The following are four of the biggest obstacles to financial stability for ALICE families, and a sample of ideas and pilot programs being debated and considered across the country.

Widening Skills Gap

Going forward, most jobs, and especially higher-paying jobs, will require digital skills. Since 2004, the share of occupations that require high levels of digital skills has more than doubled, from 10 to 22 percent (Liu, 2017). For ALICE to maintain employment over time, workers will need accessible, high-quality technology training throughout their lifetime. Public K–12 schools can incorporate digital skills into all aspects of the curriculum for students, higher education can offer more focused programs, and companies can invest in training for their employees.
Lack of Stable and Viable Employment

For ALICE, finding well-paying jobs with security and financial stability is becoming harder as low-wage and gig-economy jobs continue to dominate the landscape. Fluctuating income — through unpredictable schedules and on-demand work — is one of the biggest problems ALICE workers face. At the same time, employers are also trying to navigate a changing business environment, remain competitive, and offer comprehensive benefit packages. The following are several possible solutions that address these challenges that ALICE workers and businesses face:

- **Fewer barriers to employment:** ALICE’s barriers can include lack of job skills, family care responsibilities, physical and mental health problems (including substance use disorders), limited English proficiency, and lack of reliable transportation. There are several evidence-based solutions, such as work programs that provide direct connections to employment (including apprenticeships), an individualized approach (to address a wide range of challenges, from soft skills to housing), and the development of career pathways over time through work and education. Successful outcomes require employers, government agencies, and nonprofits to weave together larger webs of connected programs and resources (Tessler, 2013; U.S. Department of Health and Human Services, 2012—Career Pathways; Van Horn, Edwards, & Greene, n.d.; Yellen, 2017).

- **Portable benefits:** Benefits such as health insurance, retirement plans like a 401(k), or paid leave could move with the worker from job to job, and across multiple jobs at once. These can be delivered in multiple forms — through programs that are not connected to work or the employer at all, or through programs that involve employers but establish benefits that can be provided across employers. Some examples of this approach already exist in the construction industry and business associations. Legislators in New York and Washington are considering benefit management systems that would allow employers to pay into workers’ benefit funds (Foster, Nelson, & Reder, 2016; Guillot, 2017; Maxim & Muro, 2018; Quinton, 2017; Small Business Majority, 2017a; Strom & Schmitt, 2016).

- **Small business support:** Because of the less stable nature of many small businesses, their employees would benefit from measures that helped them weather fluctuations in their schedule and long-term employment, which include establishing portable benefits as mentioned above. In addition, small business entrepreneurs and their employees need more support to help them overcome common barriers, including limited resources to invest in skill development; student debt, which limits an owner’s ability to invest in their businesses; and lack of access to affordable child care, which increases absenteeism and decreases their productivity (Beesley, 2016; Small Business Majority, 2016, 2017b).

- **Employee participation:** Gains in productivity have traditionally been shared across the economy with workers, management, and even communities. In the last few decades, there has been a shift away from this shared prosperity. Compensation for most workers, especially in maintainer jobs, has not increased with the cost of living, even in cases where there have been significant gains in productivity. Instead of sharing gains with employees, companies have chosen to spend more on capital, and more recently on profits and dividends to increase stock prices. Since most corporate leaders’ compensation is directly linked to stock prices, they have benefited hugely from this practice. The compensation of top U.S. executives has doubled or tripled since the first half of the 1990s, while workers’ wages have remained flat. Investment in capital can have long-term benefits, but the shift in strategy to focus on short-term stock prices reduces prosperity — for wages and stock prices alike — in the long term (Economic Policy Institute, 2018—The Productivity Pay-Gap; Lazonick, 2014; Sprague & Giandrea, 2017).
• **Lifetime employment**: Considering examples from other countries can expand thinking on this topic. For example, guaranteed employment is an innovative policy that has been utilized in Germany and Japan. Companies guarantee employment for large numbers of workers. To avoid layoffs, the practice allows for transfers and defined reductions in hours and wages in lean times (Noorderhaven, Koen, & Sorge, 2015).

**Gap Between Wages and Benefits**

As more companies and states consider raising wages, there can be an unintended consequence on benefits. When wages of workers who receive public assistance increase above the eligibility threshold, they are no longer eligible for the benefit, resulting in a net loss. Figure 53 provides an example of a family of four’s eligibility for the Supplemental Nutrition Assistance Program (SNAP, formerly food stamps) in Pennsylvania. If working full time at an hourly wage of $15.80 ($2,633, a month in 2017), the family income rises above the eligibility level for SNAP, which is 130 percent of the FPL. If, however, the family earned below this amount, they would receive about $632 per month in SNAP benefits. These benefits, combined with a full-time job earning $15 an hour, would total $3,132 per month. If the family’s wages increased to $16 per hour, the family would no longer be eligible for SNAP, essentially lowering their total monthly income to $2,667, which is $465 less than they would have received earning $15 per hour. It is important to note that even with these benefits, families making low wages are still well below the Household Survival Budget hourly wage of $29.67 (Center on Budget and Policy Priorities, 2018—A Quick Guide to SNAP; Pennsylvania Department of Human Services, 2018—SNAP; Perez, 2018).

**Figure 53.**
Benefit Cliff for SNAP, Family of Four, Pennsylvania, 2017

Sources: American Community Survey, 2017; Household Survival Budget, 2017; Pennsylvania Department of Human Services, 2018—SNAP; Perez, 2018
Assistance programs where this is most pronounced are SNAP and Medicaid, but the cliff also affects CHIP, TANF, WIC, and SSI, as well as unemployment, housing, heat, and child care subsidies. States across the country are examining ways to address these issues:

- **Increase benefits**: Current benefits bring some families above the poverty level but are not sufficient to bring a family to financial stability. For example, Head Start early education for 3- to 5-year-olds reaches less than half of eligible preschool-age children, and Early Head Start reaches less than 5 percent of eligible infants and toddlers. Efforts to increase benefits range from adjusting income eligibility limits or provider reimbursement rates to improving access through more accessible and efficient enrollment and renewal administration (Isaacs, Katz, & Kassabian, 2016; National Women’s Law Center, 2015; Wilke, 2018).

- **Create a sliding scale as wages rise**: Several states, including Pennsylvania, are considering altering public assistance eligibility requirements to allow families to stay on longer while gradually reducing their assistance as wages rise to incentivize advancing employment opportunities (Albelda & Carr, 2017; Carey, 2018; Crandall, 2017—An Overview of Cliff Effects; Vermont Legislative Research Service, 2017; Wright, Carey, Bingulac, & Crandall, 2018).

- **Make affordable quality child care available**: Access to child care is important for families with children, enabling children to be ready for Kindergarten and parents to work. Eligibility for child care subsidies in Pennsylvania was 200 percent of the FPL, $49,200 for a family of four in 2017. While state estimates are not available, the value of child care subsidies for an infant and a four-year-old was $850 per month (still below the Household Survival budget child care cost of $1,229). A family would have to earn $5 more per hour throughout the year to afford child care without this subsidy (Pennsylvania Department of Human Services, 2018—Child Care Works; U.S. Department of Health and Human Services, 2019—FY 2016).

To make more quality child care available, a range of options are being tried across the country from universal pre-K to asset building. To address the specific benefits cliff in child care assistance, some states have implemented a sliding scale payment program, where copayments gradually rise in proportion to increases in income; additionally, some states have readjusted their eligibility requirements (Crandall, 2017—A Whole Family Approach; Pennsylvania Department of Human Services, 2018—Child Care Works; Pennsylvania Department of Human Services, 2018—Medical Assistance; Vermont Legislative Research Service, 2017).

In addition, some states are packaging child care with other supports that help parents work and increase their wellbeing and stability. Some programs include uniform paid family leave, some programs focus on streamlining and integrating eligibility systems with technology, and others have applied innovative business processes to improve administrative efficiency (Gould, Austin, & Whitebook, 2017; Hahn, Rohacek, & Isaacs, 2018).

**Lack of Savings and Assets**

Without enough money for their current expenses, ALICE families find it nearly impossible to save for emergencies or invest in future goals like education or retirement. A lack of savings is one of the biggest problems facing low-income families. Expansion in programs and infrastructure are needed to help them weather emergencies and periods of low income. Here are two approaches for policymakers to consider:
Access to credit: For those with low incomes, saving for emergencies is nearly impossible. Access to credit at low rates has proven to be effective to help ALICE workers and employers — especially small businesses — weather an emergency. However, ALICE families still need to have enough income to repay the loan, or they risk greater long-term financial crises (Collins & Gjertson, 2013; Mayer & Jencks, 1989).

Private and public financial instruments: These range from new types of financial products to a guaranteed income or allowance. Employers could make wages more immediately available (rather than wait two weeks until payday), and banks could do the same for deposited funds. Financial institutions and the government could offer insurance or credit, as well as tax credits and savings incentives, to protect workers against dips in income. Going even further, for centuries economists, theologians, and policy makers have proposed a minimum guaranteed income for all families, though proposals run the gamut of approaches. The idea has received more bipartisan attention recently as more workers face periods of low-wages or unemployment (Murray, 2016; Schiller, 2017; Shaefer & Edin, 2013; Van Parijs & Vanderborght, 2017).

Systemic Bias

Bias against marginalized groups persists in the workplace, the housing market, education, health care, and the law, despite positive shifts in public opinion and attitudes regarding differences in race and ethnicity, age, sex, gender identity, sexual orientation, and disability.

The most prevalent gaps in education, income, and wealth are those that exist along racial lines, and they reflect systemic policies and institutional practices that discriminate on the basis of race and ethnicity. Discriminatory practices have been embedded in our social structures and legal system, especially in terms of housing policies, immigration practices, voting rights, school funding, and health care programs. To make a difference for ALICE households, changes need to be made within institutions that impede equity in the legal system, health care, housing, education, and jobs (Agency for Healthcare Research and Quality, 2015; Cramer, 2012; Goldrick-Rab, Kelchen, & Houle, 2014; Shapiro, Meschede, & Osoro, 2013; The Sentencing Project, 2018).

For solutions to be effective, they must be as comprehensive and as interconnected as the problems are. Siloed solutions do not work. Because conditions vary across counties and states, the solutions to the challenges that ALICE and poverty-level households face will vary as well. Stakeholders — family, friends, nonprofits, businesses, policymakers, academics, and the government — will need to work together with innovation and vision and be willing to change the structure of the local and national economy and even the fabric of their communities.

Every Pennsylvanian should have the opportunity to thrive. Ultimately, if ALICE households can become financially stable, Pennsylvania’s economy will be stronger and its communities more vibrant — improving life not just for ALICE, but for everyone. The data detailed in this Report can be a jumping-off point to create new and better ideas that can help working families move toward this goal. There is no one solution: A range of strategies will be needed to ensure that working people and their families aren’t left behind.