

2019-  
2020

# Environmental Scanning Report



Hagerstown  
Community  
College

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## INTRODUCTION

An environmental scan is the process of examining external trends, issues, and events in order to determine their impact upon an institution. Environmental scanning focuses on the identification of emerging issues, situations, and potential pitfalls that may affect the college's future.

Environmental scanning by the Planning and Institutional Effectiveness Division enables the College to look at emerging, up-to-date demographic trends in the service region, state and nation, global trends, economic/business data, social trends, and enrollment potential by student type/populations, course or program potential (credit and noncredit). Information from environmental scanning activities helps establish a link between strategic planning and projected trends, resulting in data-based decisions to improve and update programs and services. When administrators, faculty, and staff are informed of changes, they are better able to prepare for the changes by determining future strategic institutional directions.

This report has been divided into six broad categories: Demographics, Economy, Education, Workforce and Economic Development, Technology, Public Policy and Accountability. These trends, facts, findings, and implications could or will affect Hagerstown Community College. No one can predict the future, but by understanding and examining the trends, issues, and events that impact the life of the community college, we can begin to create a plan that looks to the possibilities for HCC's future and opportunities.

# DEMOGRAPHICS

## United States – National

### 6 demographic trends shaping the U.S. and the world in 2019

- 1) Millennials are the largest adult generation in the United States, but they are starting to share the spotlight with Generation Z.
  - 2) Hispanics are projected to be the largest racial or ethnic minority group in the U.S. electorate when voters cast their ballots next year.
  - 3) The American family continues to change.
  - 4) The immigrant share of the U.S. population is approaching a record high but remains below that of many other countries.
  - 5) The U.S. unauthorized immigrant population is at its lowest level in more than a decade.
  - 6) Incomes are rising in the U.S., but the increase is not being felt equally by all Americans.
- The United States, like several other developed countries in the world, stands at the precipice of shifting demographics and population changes. The U.S. birth rate continues its steady decline as Americans put income stability, economic opportunity, and other factors before starting a family, a shift from previous generations. This leaves individuals and families to start child-rearing at an older age. It also cuts off the years of fertility that are possible for many couples. As a result, families are having fewer children, and the average family size is shrinking.

- Fears of bringing children into a troubled world may be as old as recorded history. The government reported last year that U.S. birth rates had hit a 30-year low, attributed partly to millennials who felt they were under economic duress.

A recent poll for Business Insider found that 30 percent of Americans agree, at least somewhat, that the potentially life-threatening effects of climate change should be factored into decisions about whether to have children. A little more than 8 percent of those surveyed strongly held that view. And a New York Times poll last summer revealed that 11 percent of those who don't want children, or aren't sure, cited climate change as one reason.

- The United States of 2050 will look different from that of today: whites will no longer be in the majority. The U.S. minority population, currently 30 percent, is expected to exceed 50 percent before 2050. No other advanced, populous country will see such diversity.

In fact, most of America's net population growth will be among its minorities, as well as in a growing mixed-race population. Latino and Asian populations are expected to nearly triple, and the children of immigrants will become more prominent. Today in the United States, 25 percent of children under age 5 are Hispanic; by 2050, that percentage will be almost 40 percent.

- Europe and North America have absorbed the largest share of the world's 272 million migrants, a population that has grown by 23 percent over the past decade, according to a UN report.

The report found that there were 82 million migrants living in Europe and 59 million in North America in 2019, followed by northern Africa and western Asia with 49 million each.

There were 51 million more migrants in the world in 2019 than in 2010, a 23 percent increase, according to the report prepared by the population division of the UN Department of Economic and Social Affairs.

It said migrants account for 3.5 percent of the world's population today, compared with 2.8 percent in 2000.

The UN's country-by-country analysis shows that half the world's 272 million migrants live in just 10 countries, with the United States in first place with 51 million.

The landscape of relationships in America has shifted dramatically in recent decades. From cohabitation to same-sex marriage to interracial and interethnic marriage, here are eight facts about love and marriage in the United States.

1. Half of Americans ages 18 and older were married in 2017, a share that has remained relatively stable in recent years but is down 8 percentage points since 1990.
  2. Love tops the list of Americans' reasons to marry
  3. The number of U.S. adults cohabiting with a partner is on the rise
  4. Remarriage is on the rise.
  5. One-in-six newlyweds (17%) were married to someone of a different race or ethnicity in 2015.
  6. Support for the legalization of same-sex marriage has grown in the past 10 years.
  7. Millennials and Generation Z have been at the vanguard of changing views on same-sex marriage.
  8. Sizable minorities of married people are members of a different religious group than their partner, but marriages and partnerships across political party lines are relatively rare.
- 
- Single parents are raising one in every three kids across the nation — and single-parent households are 4.5 times more likely than married households to live in poverty.
  - During the 2016–17 academic year, the share of high school students not graduating on time dipped to a record low, with about one in seven U.S. students (15%) veering off their academic track.
  - The nation's child poverty rate dropped four percentage points to 18% in 2017. Despite this good news, the poverty rate for African-American and American Indian kids remains substantially higher — at 33%.
  - More than a million youth across the United States are not in school or working. At the state level, kids in West Virginia were most likely to fit this statistic: 11% were out of school and unemployed in 2017.

- The nation's child population added more than 9 million kids since 1990. Half of this growth came from three states: Texas (2.5 million), Florida (1.2 million) and California (1.1 million).
- Nearly half of the nation's child population (47%) are now kids of color. At the local level, every state reported a higher proportion of non-white kids compared to three decades ago.
- Over the past three decades, educational attainment has improved for parents across the country. Yet in 2017, 31% of Latino kids had no parent who held a high school diploma. Just 5% of white children fit this same statistic.
- More than 1 in 5 college students in the U.S. are raising kids. That's more than 4 million undergraduates, and they are disproportionately women and people of color. Of those students, more than half will leave school without getting a degree.

That's all according to a new report from the U.S. Government Accountability Office, a federal watchdog. The report, first obtained by NPR, found that schools often aren't giving student parents information that could help them access untapped federal money to pay for child care.

Student parents can apply to use federal financial aid dollars, including loans, to help pay for child care, but the GAO found many students are leaving this money on the table, often because they don't know it's there.

Student parents make up 22% of the undergraduate population, according to the GAO. And given the push to improve college graduation rates — and cut down on folks who are having trouble paying back student loans, but never finished their degree — Reichlin Cruse of the Institute for Women's Policy Research says it's time to start thinking of student parents in "a holistic way."

North America went through a period known as the 'baby boom' after World War II, in which birth rates shot up dramatically for about two decades. The first members of this generation reached retirement age in 2011, and the continued departure of baby boomers from the labor force is impacting the economy in interesting new ways.

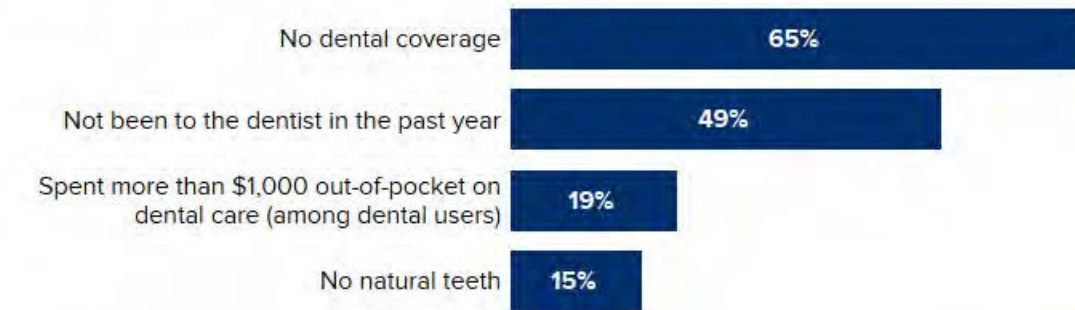
- By 2030, over 20% of the population will be 65 or over, which means that they'll be past the current age of retirement.
- As more baby boomers retire, a smaller percentage of the population will be working-age members of the labor force.
- In general, people spend almost 40% less once they enter retirement
- As baby boomers get older, they will be forced by tax laws to withdraw savings from their tax-advantaged retirement accounts, such as 401(k)s in the U.S. or RRSPs in Canada.
- Unlike their parents' generation, baby boomers tend to be tech savvy. For entrepreneurs, this could provide an opportunity to serve retiring boomers who have a lot of leisure time, but boomers have also shown that they are more willing to work into retirement age if provided the type of flexibility that the internet and other digital technologies can provide.
- As the economy has grown since the 2008 Recession, employers have found it more and more difficult to fill all of their available roles. Some of this can be attributed to a strong economy, but the retirement of baby boomers will continue to challenge efforts to grow the economy.
- The slowdown in labor force growth could impact overall economic growth
- One phenomenon that may hold back an economic downturn, however, is that many baby boomers are eager to work past retirement age. In fact, Americans over the age of 55 accounted for over half of the employment gains made in 2018, and more people over the age of 55 are working than any time in the U.S. since 1961.
- Some observers in the U.S. are worried that the high proportion of retirement age Americans could create problems for entitlement programs like Medicare and Social Security. In fact, a recent report shows that funds for those two programs could run out by 2035, which will probably mean higher taxes to make up the difference.



- Forty-five percent of baby boomers have no retirement savings at all.
- In the U.S., the average heterosexual married couple can expect to spend about \$285,000 on healthcare in retirement. This includes health-related services and goods not covered by Medicare, and the cost of healthcare continues to rise. This could affect boomers' ability to spend money in other sectors of the economy.

Baby boomers are currently retiring, but soon the first baby boomers will reach their life expectancy age. This means that more and more baby boomers will require long-term and supplementary healthcare, which will result in growth for industries related to healthcare, such as medical equipment or pharmaceuticals.

## Dental costs for Medicare beneficiaries



SOURCE: Kaiser Family Foundation

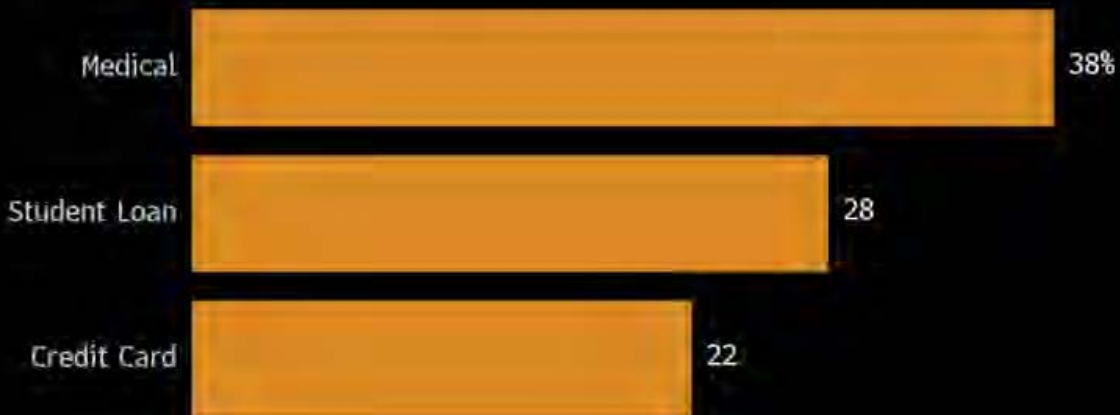


Medical debts are more likely than other kinds to get in the way of Americans trying to buy or rent a home, according to an annual survey by real-estate data firm Zillow.

The survey found that 38% of people who owe money for health care said they'd been turned down for a mortgage or home rental because of those liabilities -- a higher rate of rejection than for other kinds of debt like student loans or credit cards.

### Rejection

Medical debt is a frequently cited reason for U.S. mortgage denials



Source: Zillow

- Students are counted where they reside on April 1, 2020 AND spend most of their time, which means that the majority of students will be counted in their college community. Therefore, the 2020 Census presents an important opportunity to foster campus-community partnerships to ensure complete counts through education and engagement with some of the hardest-to-count populations in our states, including in rural communities, communities of color, non-English speaking populations and off-campus, first generation students, students experiencing homelessness, adult, renter and highly mobile students. Colleges and universities have a special responsibility to the communities in which we are situated to ensure a complete count in the 2020 Census because it will directly impact political representation for the next decade and impact funding and other decisions guided by census data.



Students from diverse socioeconomic and demographic backgrounds and first-generation students have the greatest potential to be most impacted by Census undercounts. Engaging with these groups, our campuses can emphasize how they can be leaders by educating their families and other members of hard-to-count populations, and helping them to complete the 2020 Census. In addition, rural-serving institutions can play an important role in the communities that face particular challenges as the Census transitions to an online survey. Rural communities that are already struggling economically can ill-afford to lose funding because they are undercounted.

## Demographic Trends Shaping the US

America is constantly changing, being reshaped by demographic trends. Even if it's something you don't particular pay attention to, it's happening all around us. For example, we know that the population is getting older – while 13 percent of the population is at least 65 years old, that's expected to reach about 20 percent by 2050, something that's been referred to as the “greying of America,” as *Smithsonian.com* notes. But what are some of the demographic changes that are transforming the country today?

### More and More Americans are Living in Multigenerational Households

With housing prices skyrocketing in so many places around the country, it's not all that surprising that an increasing number of Americans live in a multigenerational household. It's also why so many are choosing to move to more affordable places, purchasing Atlanta homes for sale, or in other cities in the south and Midwest regions. Pew Research revealed that in 2009, 51.5 million or 17% of the population lived in a multigenerational household, but by 2016, it was a record 64 million, or 20% of the total population. And, it's growing among nearly all racial groups and age groups.

### Asian Immigrants are the Primary Source of New Immigrants

While there's lots of talk about immigrants moving in from south of the border, there are more Asian immigrants than Latin American immigrants, including Mexico, to the U.S. They're now the only major racial or ethnic group with numbers that are rising, primarily due to immigration although African immigrants are growingly steadily.

### There are More Millennials Than Baby Boomers Now

Millennials (those born between 1981 and 1996) take over baby boomers in 2019 as the largest population group in the U.S. The number of millennials is projected to reach 73 million, while the boomer population is expected to decline to 72 million as people in the age group die. In 1999, they're numbers were nearly 79 million. Millennials have been the largest generation in the U.S. labor force since 2016 when they surpassed Generation X.

### Changing Demographics Mean Changes in American Politics

There's a significant gap between generations on political and social issues. Young adult millennials are much more likely to hold liberal views than those of older generations, which means as time goes on there's likely to be an even more noticeable shift in politics.

### Families are Changing

Just half of American adults are married today, down significantly from previous decades, while unmarried partners living together is on the rise. In 2007, 39% of U.S. adults lived without a partner or spouse, but 10 years later that figure had grown to 42%, with more choosing to live alone. The share of adults who have never married at all is at a historic high. At the same time, more women are having children, and they're also having more children, with numbers that are growing for the first time in decades. In 2006, 80% of women aged 40 to 44 had ever given birth, but in 2016, that increased to 86% – and, on average they had 2.07 children, up from 1.86 a decade earlier.

- Nearly a third of U.S. adults (31%) follow local news very closely, but local news does not play an equally vital role for all Americans. Older Americans, black adults and those with a high school education or less show considerably more interest in local news than their counterparts, according to a new analysis from Pew Research Center. These same groups prefer getting their local news via the TV rather than online.
- As part of World Mental Health Day, Business Insider took a look at the mental-health state of millennials (defined by the Pew Research Center as the cohort turning ages 23 to 38 in 2019). It doesn't look pretty — depression and "deaths of despair" are both on the rise among the generation, linked to issues such as loneliness and money stress.

Millennials also feel that their jobs have an outsize role in their overall mental health. Because of longer work hours and stagnant wages, millennials suffer from higher rates of burnout than other generations. Many of them have even quit their jobs for mental-health reasons.

While some millennials can't afford to get help, they're more likely to go to therapy than previous generations, destigmatizing the concept in the process.

## Suicide Facts & Figures: United States 2019

Suicide can be prevented, yet it continues to be a public health problem and a leading cause of death in the United States. More investment in suicide prevention education and research will reduce the number of untimely deaths of Americans each year.

### Basic Facts

On average, **129 Americans** died by suicide each day. \*

**1.4 million** Americans attempted suicide. \*

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**90%** of those who died by suicide had a diagnosable mental health condition at the time of their death.

---

**Firearms** accounted for more than half (**51%**) of all suicide deaths. \*

### Demographics

Men died by suicide **3.5x** more often than women. Women were **1.4x** more likely to attempt suicide. \*

---

**47,173** Americans died by suicide. Suicide was the **10th leading cause of death** in the United States. \*

- **2nd** leading cause of death for ages 15-34 \*
- **4th** leading cause of death for ages 35-54 \*
- **1.6x** higher rate among American Indian/Alaska Native adolescents and young adults \*

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In 2016, the suicide rate was **1.5x higher** for veterans than for non-veteran adults.

### Cost

**950,000+** years

The number of years of potential life that were lost to suicide before age 65. \*

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**\$69 billion**

The combined medical and work loss costs in the United States in 2015. \*

\*Data from the Centers for Disease Control and Prevention, 2017. Find additional citation information at [afsp.org/statistics](https://afsp.org/statistics).

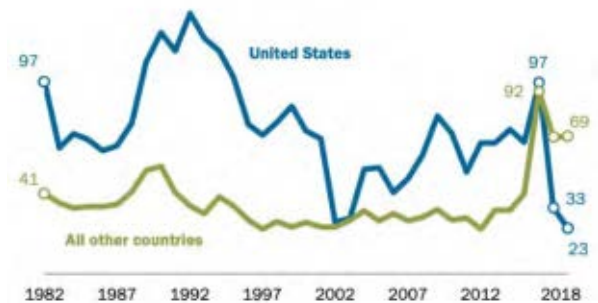
afsp.org/statistics American Foundation for Suicide Prevention

The United States plans to admit a maximum of 18,000 refugees in fiscal year 2020, down from a cap of 30,000 in the one that ended Sept. 30, 2019, under a new refugee admissions ceiling set by the Trump administration. This would be the lowest number of refugees resettled by the U.S. in a single year since 1980, when Congress created the nation's refugee resettlement program.

- The decline in U.S. refugee admissions comes at a time when the number of refugees worldwide has reached the highest levels since World War II
- Refugee admissions into the U.S. have declined substantially during Donald Trump's presidency
- Historically, the total number of refugees coming to the U.S. has fluctuated with global events and U.S. priorities
- Refugees from the Democratic Republic of Congo far outnumbered those from other countries in fiscal 2019
- The U.S. has admitted far more Christian refugees than Muslim refugees in recent years
- Texas, Washington, New York and California resettled roughly a quarter of all refugees in fiscal 2019
- Americans have been divided in recent years over whether the U.S. should accept refugees

### U.S. trailed rest of world in refugee resettlement in 2017 and 2018 after leading it for decades

Number of refugee admissions, in thousands, by calendar year



Note: Figures rounded to the nearest thousand.

Source: Pew Research Center analysis of United Nations High Commissioner for Refugees data, accessed June 12, 2019.

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There were 10.5 million unauthorized immigrants in the U.S. in 2017.

The number of Mexican unauthorized immigrants declined since 2007, while the total from other nations ticked up.

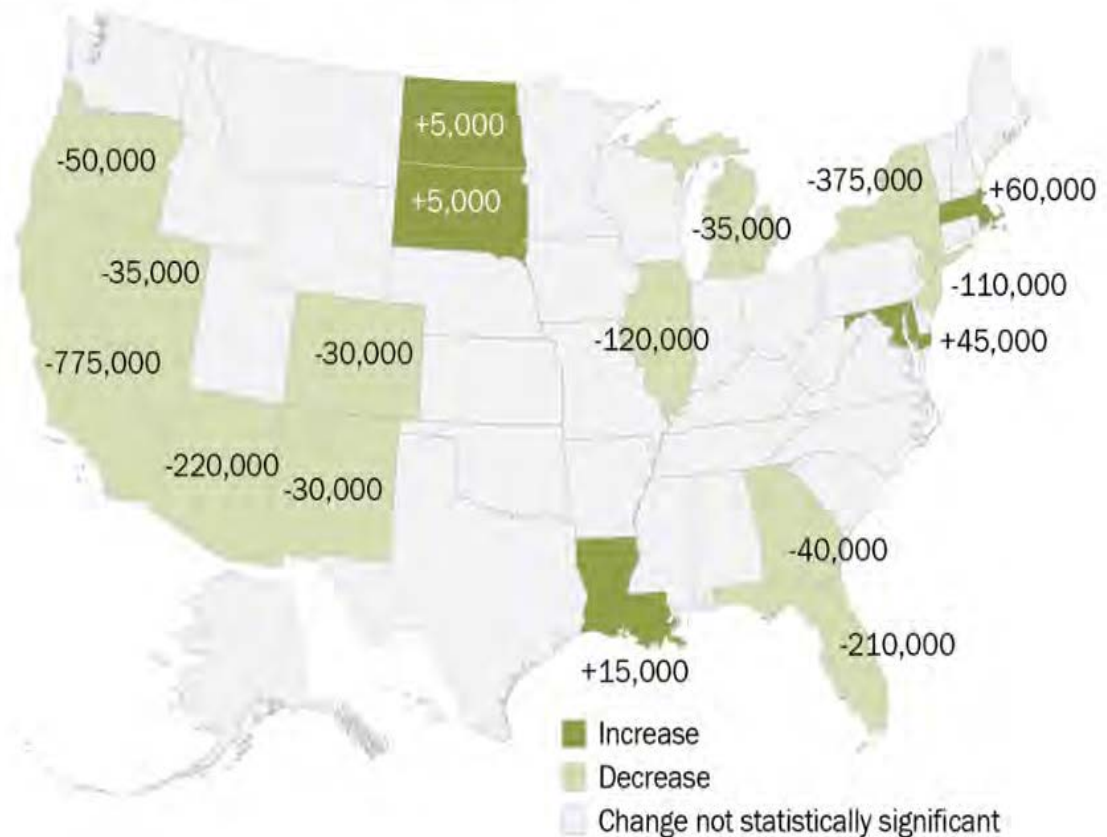
The U.S. civilian workforce includes 7.6 million unauthorized immigrants, representing a decline since 2007.

Six states account for 57% of unauthorized immigrants: California, Texas, Florida, New York, New Jersey and Illinois.

A rising share of unauthorized immigrants have lived in the U.S. for more than a decade.

## Unauthorized immigrant populations changed in 17 states over the past decade

*Statistically significant change, 2007 to 2017*

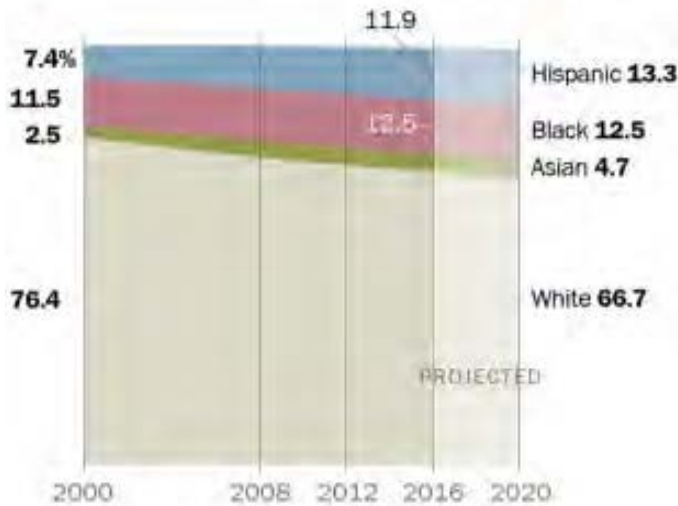


Note: All numbers are rounded. Significant changes based on 90% confidence interval. Source: Pew Research Center estimates based on augmented U.S. Census Bureau data.

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## Hispanics projected to become largest minority group in electorate in 2020

% of eligible voters by racial and ethnic group



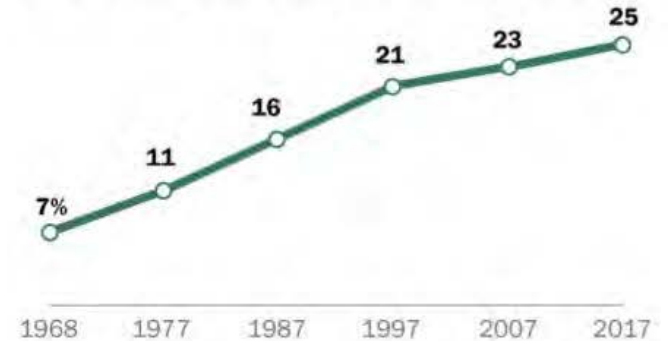
Note: Figures do not sum to 100% because other single-race categories and multiracial are not shown. Eligible voters are U.S. citizens ages 18 and older. Whites, blacks and Asians are single-race non-Hispanics, Hispanics are of any race. Asians include Pacific Islanders.

Source: Data from 2000 to 2016 from Pew Research Center analysis of 2000 decennial census and 2008, 2012 and 2016 American Community Survey (IPUMS). Data for 2020 from Pew Research Center projections of the electorate based on U.S. Census Bureau 2017 population projections.

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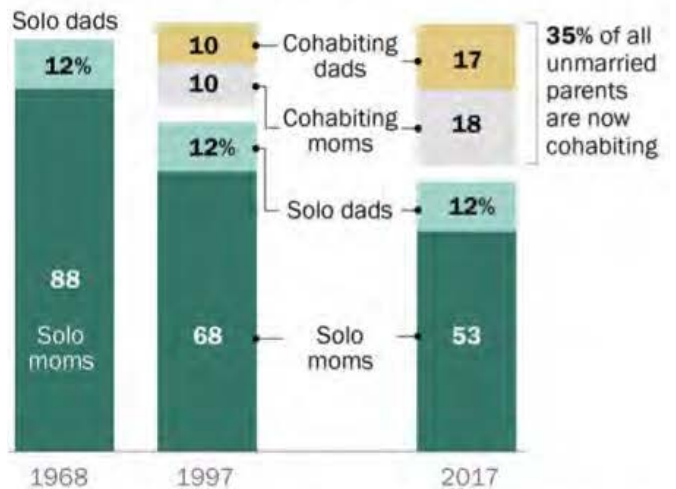
## One-in-four U.S. parents are unmarried

% unmarried, among all parents living with a child



## Growing share of unmarried parents are cohabiting

% cohabiting/solo, among all unmarried parents living with a child



Note: "Parents" are all U.S. parents living with at least one child younger than 18. Data regarding cohabitation available since 1997 only. Figures may not add to 100% due to rounding.

Source: Pew Research Center analysis of Current Population Survey March Supplement (IPUMS).

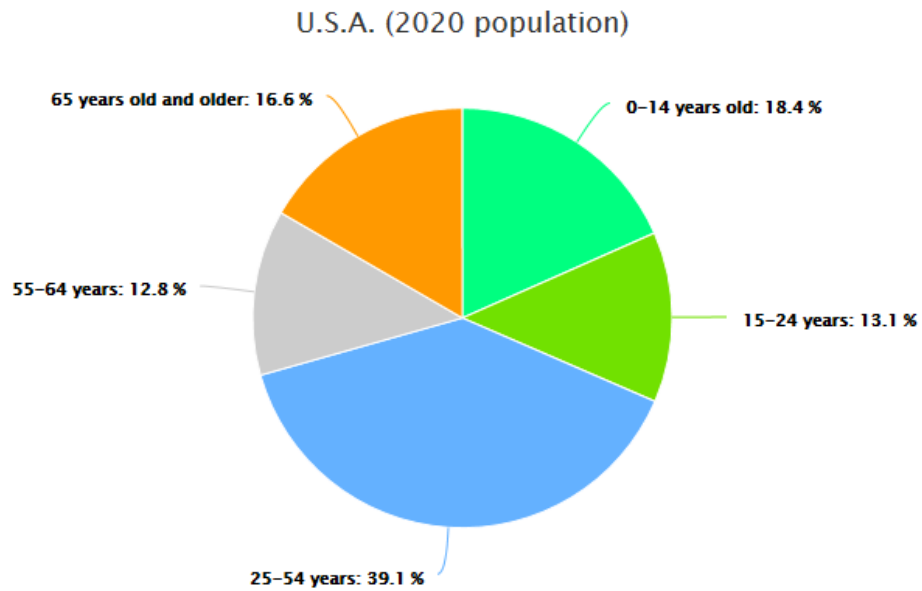
"The Changing Profile of Unmarried Parents"

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# Population by Broad Age Groups

[View detailed age groups](#)



Age Group	Males	Male %	Females	Female %	Total Age Group Population	Age Group's share of total population
0-14	31,078,969	51.11%	29,732,002	48.89%	60,810,971	18.37%
15-24	22,157,053	50.93%	21,344,600	49.07%	43,501,653	13.14%
25-54	65,113,056	50.31%	64,316,748	49.69%	129,429,804	39.10%
55-64	20,751,951	49.16%	21,459,462	50.84%	42,211,413	12.75%
65+	24,684,987	44.84%	30,363,819	55.16%	55,048,806	16.63%

## Which Generation are You?

Generation Name	Births Start	Births End	Youngest Age Today*	Oldest Age Today*
<b>The Lost Generation The Generation of 1914</b>	1890	1915	104	129
<b>The Interbellum Generation</b>	1901	1913	106	118
<b>The Greatest Generation</b>	1910	1924	95	109
<b>The Silent Generation</b>	1925	1945	74	94
<b>Baby Boomer Generation</b>	1946	1964	55	73
<b>Generation X (Baby Bust)</b>	1965	1979	40	54
<b>Xennials</b>	1975	1985	34	44
<b>Millennials Generation Y, Gen Next</b>	1980	1994	25	39
<b>iGen / Gen Z</b>	1995	2012	7	24
<b>Gen Alpha</b>	2013	2025	1	6

(\*age if still alive today)

- **MILLENNIALS** only relax for just 60 minutes a day because they're so engrossed in their mobile phones, a study has found.

A poll of 2,000 adults found hectic home and work lives mean those aged 18-34 get less than 60 minutes to themselves each day. And around six in 10 even say they 'never' truly relax, because they're always checking their phone for emails and messages. One tenth even admitted they struggle to go longer than 10 minutes without checking their smartphones. A staggering nine in 10 also confess to opening their phone, even though they know they haven't had any messages, just to look at the screen.

But even older generations are struggling to relax, getting just 90 minutes to unwind each day.

- Ten thousand Americans will turn 65 years old every day from now through 2029. As those Americans age, they will transform our country's healthcare system -- to the tune of a 5.8% annual increase in our national health expenditures from now through 2025, according to the Centers for Medicare and Medicaid Services.
- Generation Z has singled themselves out as a generation that's already working themselves to the bone.

Nearly a quarter (24%) of Gen Z say they feel guilty taking any time off work, which means they don't take all their paid time off in a year. (They're followed by millennials, at 19%, Gen Xers, at 16%, and boomers, at 8%.)

Another quarter (24%) of Gen Z say they fret that taking all of their allotted vacation time would cause people to judge them at work — and they worry about this much more than any other generation at work. The closest behind them are millennials, at 15%.

And if Gen Zers do go on vacation, they were the most likely to say they feel under pressure to check email or voicemail while they're on holiday (47%), followed by millennials (40%).

### How Generation Z Differs from Millennials

1. Less Focused
2. Better Multi-Taskers
3. Bargains (Millennials care more about prices than Gen Z)
4. Gen Z is Full of Early Starters (Many employers are predicting that more teens, between the ages of 16 and 18 will go straight into the workforce, opting out of the traditional route of higher education, and instead finishing school online, if at all)
5. Gen Z Is More Entrepreneurial
6. Gen Z Has Higher Expectations Than Millennials
7. Gen Z Is Big On Individuality
8. Gen Z Is More Global (Generation Z will become more global in their thinking, interactions, and relatability)

This generation makes up 25.9% of the United States population, the largest percentage, and contribute \$44 billion to the American economy. By 2020, they will account for one-third of the U.S. population, certainly worth paying attention to.

# Marketing to Millennials? Meh. The Future is Gen Z.

By 2035 Gen Z has the potential to become the largest spending generation in history.

Why do they buy and how do they buy?  
Will your business be able to reach them?

**1995-2015**

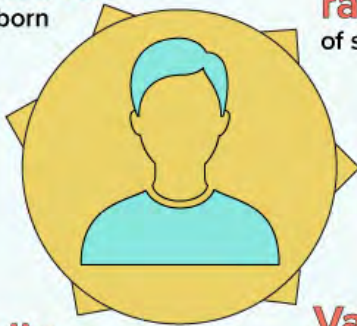
Gen Z is born

1st generation

**raised** in the era of smartphones

**60 million**

American members of Gen Z

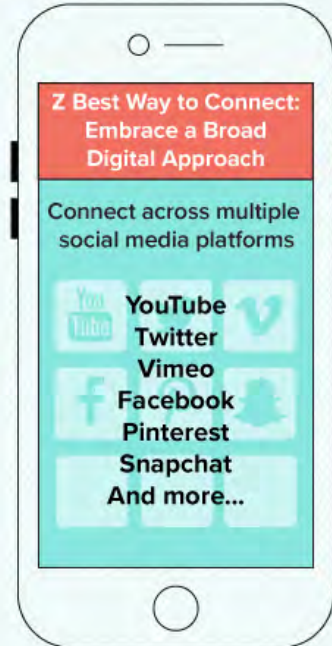


Not aware of a time that did not include **social media**

Most **ethnically diverse**

generation in U.S. history

**Values** creativity and diversity



## Utilizing Z Best Messaging & Marketing Techniques

Forget everything you learned about marketing to millennials. Gen Z has an even shorter attention span. Brevity is the soul of sales.



use Instagram daily



check Snapchat daily

100+ million users share over 400 million snaps on a daily basis



check Twitter daily



of 1,000 Gen Z respondents watch YouTube **2+ hours** every day



browse an internet-connected device while watching TV



of Gen Z parents said their children influence household purchases

Marketing savvy companies that capture the attention of Gen Z now will be better qualified to continue future engagement with this generation.

As we continue to learn about Gen Z, the biggest takeaway for a company's marketing team (and the company itself) is to stay ahead of the curve.

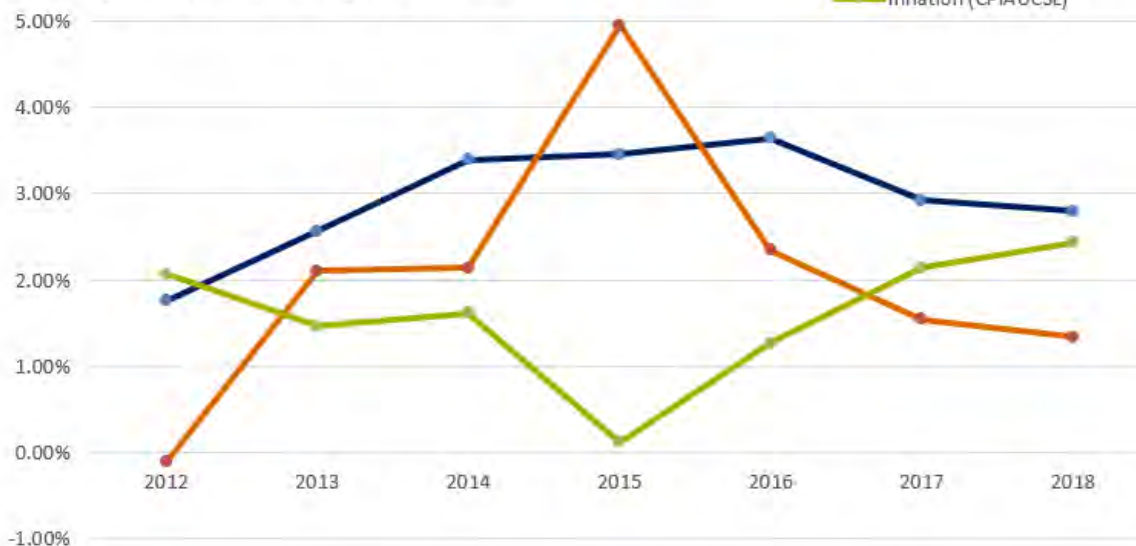
CREATED BY  
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DIGITAL

[MADFISHDIGITAL.COM](http://MADFISHDIGITAL.COM)

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## Cost Growth Comparisons

housing rents, senior living and inflation



According to the Bureau of Labor Statistics, people 55 or older will spend more on housing than any other type of expenditure. After analyzing data from people who moved into senior living between 2017 and 2018, A Place for Mom (APFM) found cost growth changed as follows:

Independent living rates for seniors grew by 2.6 percent from 2017 to 2018, bringing median monthly costs to \$2,552 in 2018. Assisted living costs for seniors grew slightly by 2.4 percent from 2017 to 2018, bringing median costs to \$3,942 in 2018, and memory care costs grew 3.2 percent from 2017 to 2018, bringing median costs to \$5,003 in 2018.

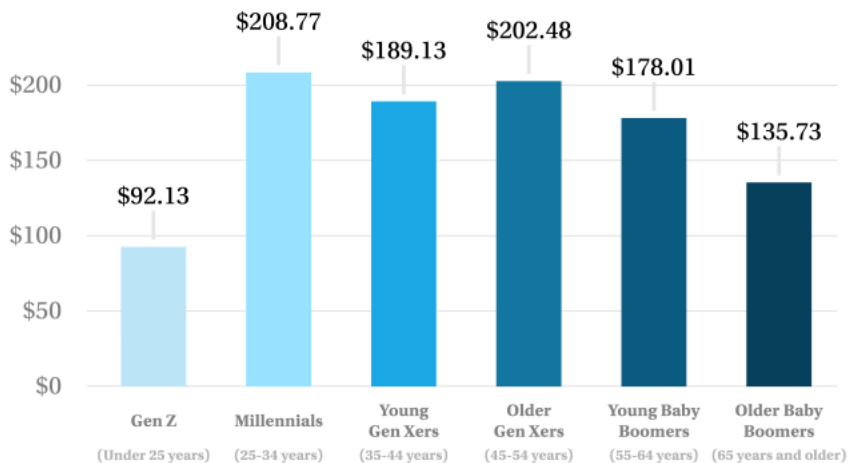
“These findings are significant, especially when viewed in comparison to increases in healthcare costs, which were up approximately 5.3 percent from 2017 to 2018 according to Centers for Medicare & Medicaid Services National Health Expenditures fact sheet,” said Charlie Severn, vice president of brand marketing with APFM. “The cost of senior housing is growing at a much slower rate than healthcare overall.”

- The United States placed No. 18 out of 44 countries for health, happiness and financial security of its retirees this year, falling two spots from 2018, according to the global retirement index from Natixis Investment Managers, an asset management firm.

The overall score for the U.S. was 72%. The top 10 countries for retirees scored 76% or higher.

The U.S. saw declines in three of the four categories that make up the index. It went from 10th place to 9th in finances in retirement; from 19th to 20th in quality of life; and from 26th place to 28th in material well-being. Its standing remained unchanged for the health of its retirees.

## Daily Spending by Age



How much does the average American spend on a daily basis in different categories? Overall, Americans spend the most on housing, followed by groceries, utilities, and health insurance. Younger Gen Xers — ages 35-44 — spend the most out of all the groups on housing and groceries, whereas older Gen Xers — ages 45-54 — spend the most on utilities. Older baby boomers — those ages 65 and older — spend the most overall on health insurance.

# Employers, Did you know

## DID YOU KNOW?

IN A SURVEY BY THE NATIONAL SAFETY COUNCIL (NSC):

\*39% OF EMPLOYERS HAVE EXPERIENCED ABSENTEEISM PROBLEMS FROM EMPLOYEES USING PRESCRIPTION DRUGS

\*29% HAVE SEEN IMPAIRED OR DECREASED JOB PERFORMANCE

\*22% HAVE EXPERIENCED HUMAN RESOURCES COMPLAINTS AND REDUCED EMPLOYEE MORALE

\*15% HAVE EXPERIENCED A NEAR MISS OR INJURY

\*10% HAVE ACTUALLY HAD EMPLOYEES OVERDOSE AT WORK.

\*OVERALL, SEVEN IN 10 COMPANIES REPORTED ISSUES FROM PRESCRIPTION DRUGS.

**ADDICTION STOPS HERE**



PARTNER WITH US TO HELP PREVENT ADDICTION IN YOUR WORKPLACE AND OUR COMMUNITY



Washington Goes Purple  
Prevent Addiction.



Wellbeing in the U.S. has leveled off in 2019 after two years of decline, with the Well-Being Index score of 61.4 statistically unchanged relative to 2018. This ends a deterioration that began in 2017 but still indicates a nation that has substantially lower wellbeing overall than what was measured in the peak year of 2016.

U.S. Well-Being Index and Element Scores, 2014-2019 (YTD)

	2014	2015	2016	2017	2018	2019 YTD	Change Since 2016	Change Since 2018
Well-Being Index score	61.6	61.7	62.1	61.5	61.2	61.4	-0.7*	0.2
Physical score	61.0	60.9	61.1	60.5	61.0	61.2	0.1	0.2
Community score	61.2	61.2	61.9	62.0	61.9	62.0	0.1	0.1
Financial score	59.7	60.8	61.5	61.1	61.0	61.6	0.1	0.6**
Social score	61.1	61.1	61.5	59.9	59.7	60.0	-1.5*	0.3
Career score	60.2	60.5	61.1	59.7	59.5	59.6	-1.5*	0.1

\* Indicates statistically significant decline; \*\* indicates statistically significant improvement (p<.05)

GALLUP NATIONAL HEALTH AND WELL-BEING INDEX, 2014-2019

Career and social wellbeing are the primary sources of the overall drop in the Well-Being Index score since 2016. The remaining three elements, however, are now statistically unchanged since that time, with financial wellbeing showing significant improvement in the past year.

These data are based on 9,645 surveys with U.S. adults across all 50 states, conducted through the first eight months of 2019. The Well-Being Index is calculated on a scale of 0 to 100, where 0 represents the lowest possible wellbeing and 100 represents the highest possible wellbeing. The Well-Being Index score for the nation comprises metrics affecting overall wellbeing and each of the five essential elements of wellbeing:

- **Career:** liking what you do each day and being motivated to achieve your goals
- **Social:** having supportive relationships and love in your life
- **Financial:** managing your economic life to reduce stress and increase security
- **Community:** liking where you live, feeling safe and having pride in your community
- **Physical:** having good health and enough energy to get things done daily

Source: Emsi Occupation Data, 2018



Americans gave \$427.71 billion to charity in 2018 amid complex year for charitable giving

### Highlights about Charitable Giving by Source

- Giving by foundations had a record-breaking year, reaching its highest-ever dollar amount even when adjusted for inflation, and growing to its largest share (18%) of total giving to date in 2018.
- Giving by individuals decreased as a percentage of total giving in 2018 to 68% (down from 70% in 2017), despite achieving its third-highest total dollar amount on record, adjusted for inflation.
- Giving by corporations experienced solid growth in 2018. This type of giving is highly responsive to changes in corporate pre-tax dollars and GDP, and its year-over-year trend lines tend to be more turbulent as a result.
- Giving by bequest did not keep pace with inflation.

### The Numbers for 2018 Charitable Giving by Source:

↓ **Giving by individuals** totaled an estimated \$292.09 billion, declining 1.1% in 2018 (a decrease of 3.4%, adjusted for inflation).

↑ **Giving by foundations** increased by an estimated 7.3%, to \$75.86 billion in 2018 (an increase of 4.7%, adjusted for inflation). Data on foundation giving are provided by Candid (formerly known as the Foundation Center).

= **Giving by bequest** totaled an estimated \$39.71 billion in 2018, remaining flat with a 0.0% increase from 2017 (a 2.3% decline, adjusted for inflation).

↑ **Giving by corporations** is estimated to have increased by 5.4% in 2018, totaling \$20.05 billion (an increase of 2.9%, adjusted for inflation).

## Highlights about 2018 Giving to Charitable Organizations

- Charitable sectors saw uneven growth in 2018 in current dollars, with two categories of recipient organizations growing, three categories staying relatively flat, and four categories declining.
- Some of the categories of charitable organizations that had declines in 2018, including giving to education and giving to foundations, experienced strong growth in 2017, even when adjusted for inflation. It is not unusual for strong growth in giving one year to be followed by slower growth or a decline in the following year, especially in terms of inflation-adjusted dollars.
- Giving to the public-society benefit subsector decreased in 2018 after eight years of consecutive growth. Similarly, giving to religion declined in 2018 after six years of slow growth and one year of flat growth in inflation-adjusted dollars in 2017
- Giving to human services, health, and arts, culture and humanities organizations stayed relatively flat in 2018 in current dollars, and did not keep pace with inflation
- International affairs and environment and animal organizations were the two types of recipient organizations that experienced substantial growth in giving in 2018.





# 2019 State Child Care Facts in the State of: Maryland



## CHILD CARE NEED<sup>1</sup>

POPULATION	MARYLAND	UNITED STATES
Total residents	5,996,079	321,004,407
Children age birth to 4 years	366,748	19,839,997
Children age birth to 4 years living in poverty	51,968	4,390,252
Children age 5 to 11	523,008	28,709,244
Total families with children	627,631	33,469,709
Single parent families	201,236	10,802,250
Families in poverty	96,089	8,253,388

CHILDREN UNDER AGE 6 POTENTIALLY IN NEED OF CHILD CARE	MARYLAND	UNITED STATES
Children in two-parent families, both parents in labor force	184,877	8,708,721
Children in single-parent families, parent in the labor force	120,409	6,248,816
Total children under age 6 potentially needing child care	305,286	14,957,537

NUMBER OF WORKING MOTHERS	MARYLAND	UNITED STATES
With infants under one year	51,007	2,502,585
With children under age 6 only	117,287	5,538,989
With children age 6 to 17 only	307,891	14,854,271
With both children under age 6 AND children age 6 to 17	88,511	4,406,577
Married working mothers	326,056	15,867,548
Single working mothers	133,354	6,664,103

## AVAILABILITY OF CHILD CARE<sup>2</sup>

SPACES IN CHILD CARE PROGRAMS	MARYLAND
Total spaces/slots	211,031
Percent of spaces in child care center programs	80%
Percent of total spaces in licensed FCC homes	20%
Percent of total spaces in school-age care programs	NA*
Percent of total spaces in other programs	0%
Percentage spaces/slots of licensed programs	
Percent of licensed spaces for infants	18%
Percent of licensed spaces for toddlers	18%
Percent of licensed spaces for preschool-aged children	32%
Percent of licensed spaces for school-aged children	32%

\*School-age slots are included in the center-based programs slots

## TYPES OF AVAILABLE CHILD CARE

TYPES OF CHILD CARE	MARYLAND
Number of center-based child care programs	2,707
Percent of centers nationally accredited	4%
Do faith-based programs need to be regulated?	Yes
Number of regulated faith-based programs	206
Number of family child care (FCC) homes	5,430
Percent of FCC homes nationally accredited	2%
Number of school-aged care programs	7,874
Percent of licensed programs with slots for school-aged children	89%
Percent of licensed programs with slots for ONLY school-aged children	8%
Number of other regulated child care centers	NA
Number of other regulated FCC homes	NA

## CHILD CARE WORKFORCE

NUMBERS, INCOME, AND SUPPORT OF THE CHILD CARE WORKFORCE <sup>3</sup>	MARYLAND	UNITED STATES
Child care workers (in centers)	8,870	564,630
Average annual income of child care workers	\$25,980	\$24,610
Total paid early childhood workforce <sup>4</sup>	NA	2.2 million

## FOR FURTHER INFORMATION

CCR&R CONTACTS	URL
Maryland Family Network	<a href="http://www.marylandfamilynetwork.org">http://www.marylandfamilynetwork.org</a>
Child Care Aware <sup>®</sup> of America	<a href="http://usa.childcareaware.org">http://usa.childcareaware.org</a> <a href="http://www.childcareaware.org">www.childcareaware.org</a>

## NOTES

- **NA:** Not Applicable
- **NR:** Data Not Reported or Not Available

## 2019 County Health Rankings for the 24 Ranked Counties in Maryland

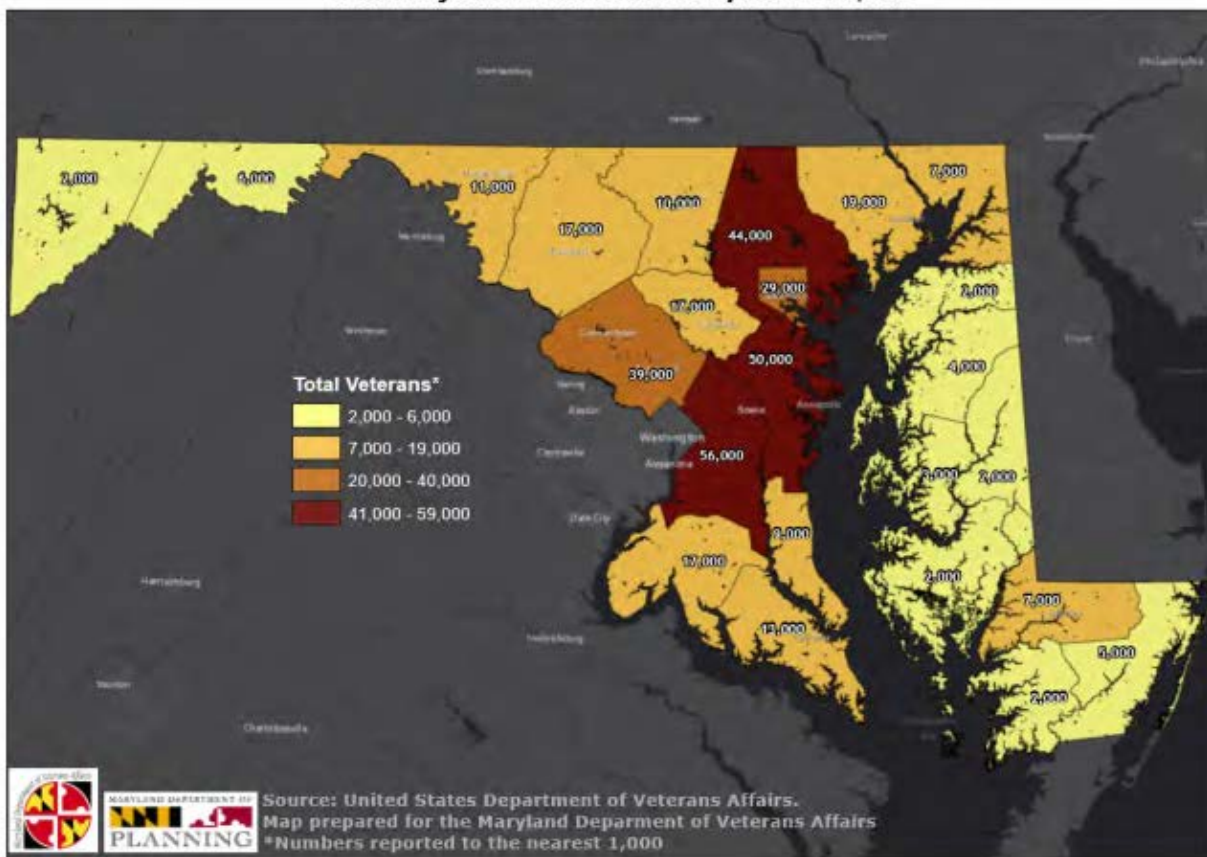
County	Health Outcomes	Health Factors
Allegany	20	18
Anne Arundel	8	8
Baltimore	13	10
Baltimore City	24	23
Calvert	6	5
Caroline	21	22
Carroll	4	3
Cecil	18	19

County	Health Outcomes	Health Factors
Charles	12	12
Dorchester	22	21
Frederick	3	4
Garrett	15	13
Harford	10	7
Howard	2	1
Kent	14	14
Montgomery	1	2

County	Health Outcomes	Health Factors
Prince George's	11	16
Queen Anne's	7	6
Somerset	23	24
St. Mary's	5	11
Talbot	9	9
Washington	17	15
Wicomico	19	20
Worcester	16	17

### Projected Number of Veterans in Maryland by County:2019

\*Total Projected Veterans in Maryland: 371,000



# Homelessness Is a Problem in Maryland



7,144

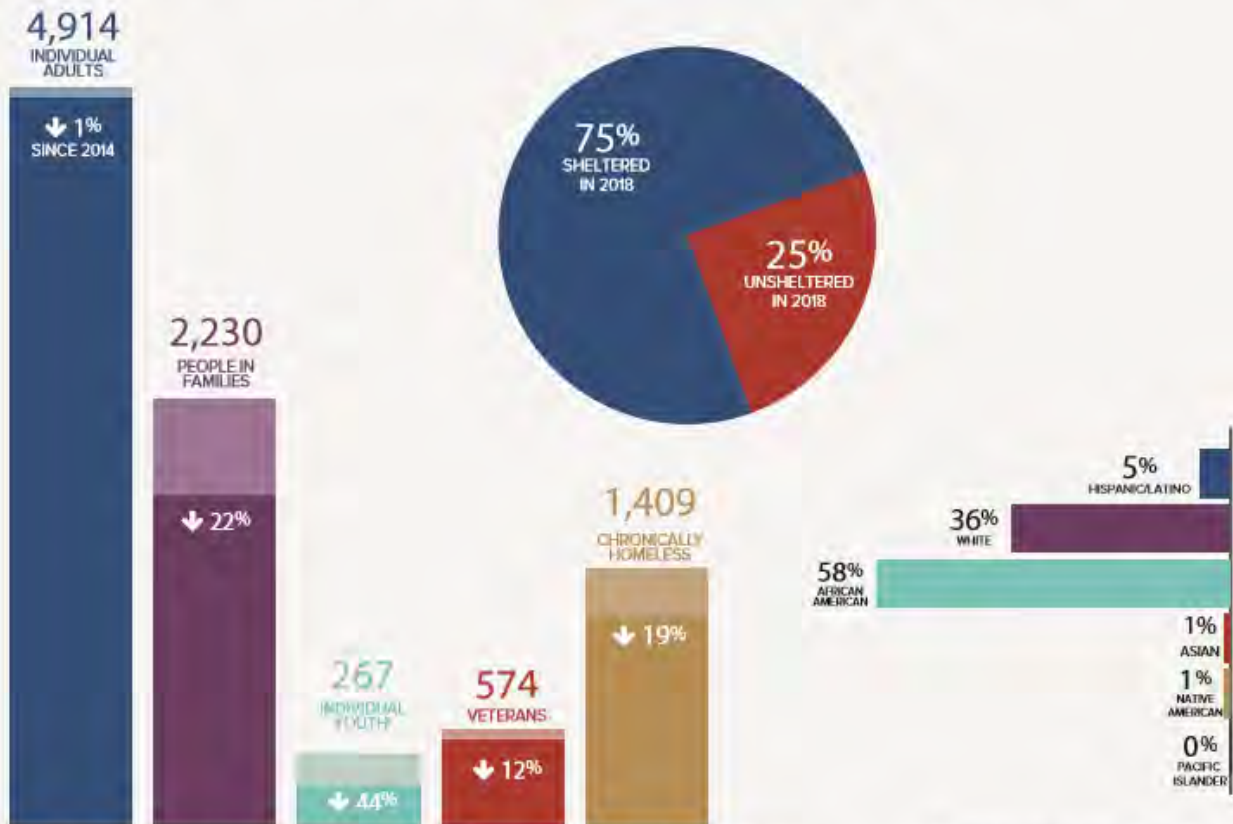
MARYLANDERS EXPERIENCED HOMELESSNESS IN 2018.

↓ 9%

SINCE 2014

BUT WE'RE MAKING PROGRESS.

NO ONE SHOULD HAVE TO BE HOMELESS.  
Here's who experiences homelessness in Maryland.



Categories are not mutually exclusive. Statistics drawn from 2014 - 2018 HUD Point in Time Counts to reflect the most recent four-year trends.  
\*HUD did not begin gathering youth statistics until 2017.

Categories are not mutually exclusive. Statistics drawn from 2018 Point-In-Time Count.

More and more young adults remain at home long after they have completed high school. In 2006, 29.0% of Americans aged 18 to 34 lived at their parents' home. In 2017, this share increased to 34.6%.

The rate of younger adults living with their parents varies widely from state to state. In a few states, less than 20% of residents 18 to 34 live with their parents. In others, more than 40% of the same age group have remained at home.

#### 5. Maryland

- 18-34 yr. old population living with parent(s), 2017: 40.0%
- 18-34 yr. old population living with parent(s), 2006: 31.2% (11th highest)
- Cost of living: 9.4% higher than avg.
- Median age at first marriage: 29.6 (12th highest)
- Annual unemployment rate: 3.8% (18th highest - tied)

#### 13. Pennsylvania

- 18-34 yr. old population living with parent(s), 2017: 36.4%
- 18-34 yr. old population living with parent(s), 2006: 33.9% (4th highest)
- Cost of living: 2.1% lower than avg.
- Median age at first marriage: 29.7 (11th highest)
- Annual unemployment rate: 3.8% (18th highest - tied)

#### 16. West Virginia

- 18-34 yr. old population living with parent(s), 2017: 35.6%
- 18-34 yr. old population living with parent(s), 2006: 28.8% (22nd highest)
- Cost of living: 13.0% lower than avg.
- Median age at first marriage: 27.9 (12th lowest)
- Annual unemployment rate: 4.9% (3rd highest - tied)

## **Washington County, MD**

Healthy Washington County is proud to present the FY2019 Community Health Needs Assessment report for Washington County, MD. This Community Health Needs Assessment was developed and promoted by Healthy Washington County (HWC). Healthy Washington County is a coalition of public and private organizations working to improve the health of people living in this community. The coalition strives to achieve this through raising awareness around personal health status and healthier behaviors. Bringing people and organizations together around health issues that affect quality of life in the region, we raise awareness, create opportunities for networking, and support finding solutions. Ultimately, Healthy Washington County aims to provide the means by which individuals can achieve their healthiest potential. This report includes a comprehensive review and analysis of the data regarding health issues and needs of people living in the Washington County region. This study was conducted to identify the health strengths, challenges and opportunities unique to our community and to provide useful information to health care providers, policy makers, collaborative groups, social service agencies, community groups and organizations, churches, businesses, and consumers who are interested in improving the health status of the general population. The results enable our health systems and other providers to strategically establish priorities, develop interventions and commit resources to improve the health status of our service region.

The top health needs identified for Washington County were prioritized as:

1. Substance Abuse
2. Mental Health
3. Obesity and Weight loss
4. Wellness
5. Diabetes
6. Heart Disease and Hypertension
7. Adverse Childhood Events
8. Senior Elder issues
9. Cancer
10. Nutrition and Healthy Eating
11. Transportation
12. Homelessness
13. Recreation and Exercise
14. Access to Health Care
15. Poverty
16. Teenage Pregnancy
17. Dental
18. Education
19. Affordable Health Care
20. Smoking
21. Medication
22. Child health
23. Employment
24. Crime
25. Affordable Housing
26. Vision / Hearing



- Intoxication deaths in Washington County decreased during the first two quarters of the year.

From January to June of this year, 41 people died in the county from drug- and alcohol-related intoxication, according to statistics that were released Tuesday by the Maryland Department of Health.

That number was 46 during the same time last year, which represents an 11% decrease.

The number of people who died statewide also decreased. The statistics show 1,332 people died from January to June of 2018, compared to 1,182 from January to June of 2019.

Victoria Sterling, director of behavioral health services for the Washington County Health Department, said she believes increased education and the wider use of Narcan, a drug that counteracts the effects of an opioid overdose, are among the reasons that the numbers have improved.

- International immigration in the county has climbed between 2010 and 2018, according to statistics from the U.S. Census Bureau.

Although there have been increases and decreases during the eight-year period, the number of individuals per year coming into the county through immigration has gone from 120 people in 2010-2011 to 215 people in 2017-2018, according to the statistics. The total number of immigrants coming to the county during the eight-year period was 1,783, according to the census, out of a total population of 150,578 people around the same time.

A U.S. Census spokesman said his agency does not make any estimates about immigrants in the county who are unaccounted for.

- Agriculture in Washington County, and all across the nation, has seen substantial changes over the last 50 years. Technology, development, production enhancements, rising costs, regulations, and growth are all factors that have changed the fabric and composition of agriculture. Understanding the importance and significance of agriculture in Washington County is the first step to realizing you cannot survive without agriculture in one of its many forms.

#### **Washington County Agriculture Profile (USDA Census of Agriculture, 2012)**

- Number of Farms: 860
- Land in Farms: 129,600 Acres
- Average Size of Farm: 151 Acres
- Total Land Area: 458 Square miles

### **OVER 40 PERCENT OF WASHINGTON COUNTY HOUSEHOLDS ARE ALICE OR LIVING BELOW THE POVERTY LEVEL.**

- In Washington County, 22,888 households – 41 percent – struggled to afford basic household necessities like housing, food, health care, child care, and transportation despite working hard.
- Every county in Maryland has 30 percent or more households that are unable to afford life's basic necessities.
- Despite the combination of ALICE's wages and some public assistance, ALICE households still face an average 15 percent unfilled income gap to reach financial stability.
- Because government assistance expenditure is increasingly composed of health care spending, which cannot be transferred to meet other needs, there are larger gaps in the areas of housing (45 percent) and child care (54 percent).

## POVERTY



\*Supplemental Security Income (SSI) cash public assistance income, or Food Stamp/NAIP Benefits

source: ontrackwc.org

## COMMUNITY SNAPSHOT

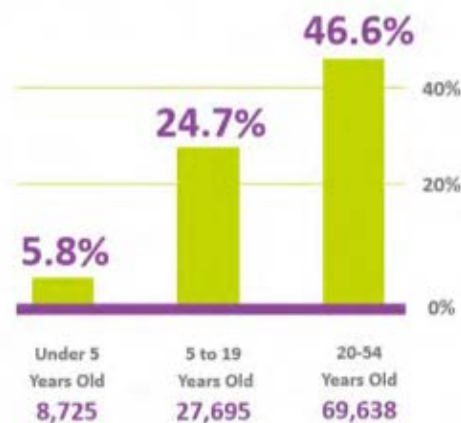
### Overall Population:

149,546

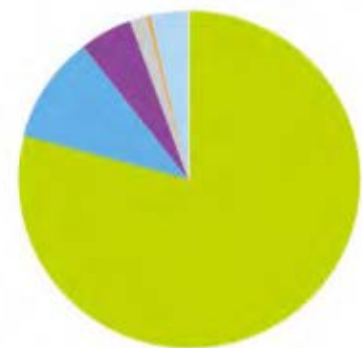


- Male
- Female

### Age Groups



### Race/Ethnicity



- White: 82.9%
- Black/African American: 10.5%
- Hispanic/Latino (any race): 4.5%
- Asian: 1.8%
- American Indian/Alaska Native: 0.2%
- Two or more races: 3.6%

- Washington County is becoming home to an increasing number of foreign-born people.

International immigration in the county has climbed between 2010 and 2018, according to statistics from the U.S. Census Bureau.

Although there have been increases and decreases during the eight-year period, the number of individuals per year coming into the county through immigration has gone from 120 people in 2010-2011 to 215 people in 2017-2018, according to the statistics. The total number of immigrants coming to the county during the eight-year period was 1,783, according to the census, out of a total population of 150,578 people around the same time.

## SCHOOLS AND COLLEGES<sup>3,8</sup>

### Educational Attainment - age 25 & over (2013-2017)

High school graduate or higher	87.0%
Bachelor's degree or higher	21.5%

### Public Schools

Number: 25 elementary; 8 middle/combined; 8 high
Enrollment: 22,681 (Sept. 2018)
Cost per pupil: \$13,220 (2017-2018)
Students per teacher: 15.6 (Oct. 2018)
High school career / tech enrollment: 4,019 (2017)
High school graduates: 1,698 (July 2018)

### Nonpublic Schools

Number: 34 (Sept. 2018)
-------------------------

Higher Education (2018)	Enrollment	Degrees
<b>2-year institution</b>		

Hagerstown Community College	4,148	568
------------------------------	-------	-----

The University System of Maryland at Hagerstown offers more than 20 undergraduate and graduate degree programs through the following Maryland institutions: Coppin State, Frostburg State, Salisbury, and Towson universities; University of Maryland Eastern Shore; and University of Maryland University College. Purdue Global University offers certificate and degree programs at its Hagerstown campus.

## POPULATION<sup>2,3</sup>

	Washington County Households	Washington County Population	Western Maryland*	Maryland
2000	49,726	131,923	236,699	5,296,486
2010	55,687	147,430	252,614	5,773,552
2020**	60,185	156,800	261,250	6,141,900

\*Allegany, Garrett, and Washington counties

\*\*Projections

Selected places population (2010): Hagerstown 39,662; Halfway 10,701; Robinwood 6,918; Fountainhead-Orchard Hills 5,666; Boonsboro 3,336; Maugansville 3,071

## POPULATION DISTRIBUTION<sup>2,3</sup> (2018)

Age	Number	Percent
Under 5	8,584	5.7
5 - 19	27,726	18.4
20 - 44	46,935	31.1
45 - 64	41,675	27.6
65 and over	26,006	17.2
Total	150,926	100.0
Median age		40.6 years

## INCOME<sup>3</sup> (2013-2017)

Distribution	Percent Households		U.S.
	Washington Co.	Maryland	
Under \$25,000	20.6	14.2	21.3
\$25,000 - \$49,999	22.7	17.1	22.5
\$50,000 - \$74,999	19.3	16.5	17.7
\$75,000 - \$99,999	13.5	13.1	12.3
\$100,000 - \$149,999	14.1	18.7	14.1
\$150,000 - \$199,999	5.8	9.7	5.8
\$200,000 and over	3.9	10.7	6.3
Median household	\$58,260	\$78,916	\$57,652
Average household	\$75,383	\$103,845	\$81,283
Per capita	\$28,742	\$39,070	\$31,177
Total income (millions)	\$4,221	\$226,495	\$9,658,475

## HOUSING<sup>3,10</sup>

Occupied Units (2013-2017) 55,999 (64.5% owner occupied)

### Housing Transactions (2018)\*

Units sold	1,634
Median selling price	\$190,088

\*All multiple listed properties; excludes auctions and FSBO



# ECONOMY

## United States – National

- It's becoming harder for Americans to join the richest 1 percent. That's according to new figures published by the Internal Revenue Service this week, which found that in order to enter that coveted — and exclusive — club, U.S. taxpayers had to earn \$515,371 in 2017, a 7.2 percent increase from the previous year, even after adjusting for inflation. Bloomberg News first reported the story. The cut-off is even steeper to join the top 0.1 percent at \$2.4 million in 2017, a 38 percent jump since 2011, when the Occupy Wall Street movement — slogan: "We are the 99 percent" — swept through the country, Bloomberg reported. Meanwhile, the top 0.001 percent, an elite and small group of only 1,433 taxpayers, earned at least \$63.4 million each in 2017.
- While many Americans have little to no retirement savings at all, even young savers who do are perhaps too willing to draw from that stash to cover unrelated expenses.

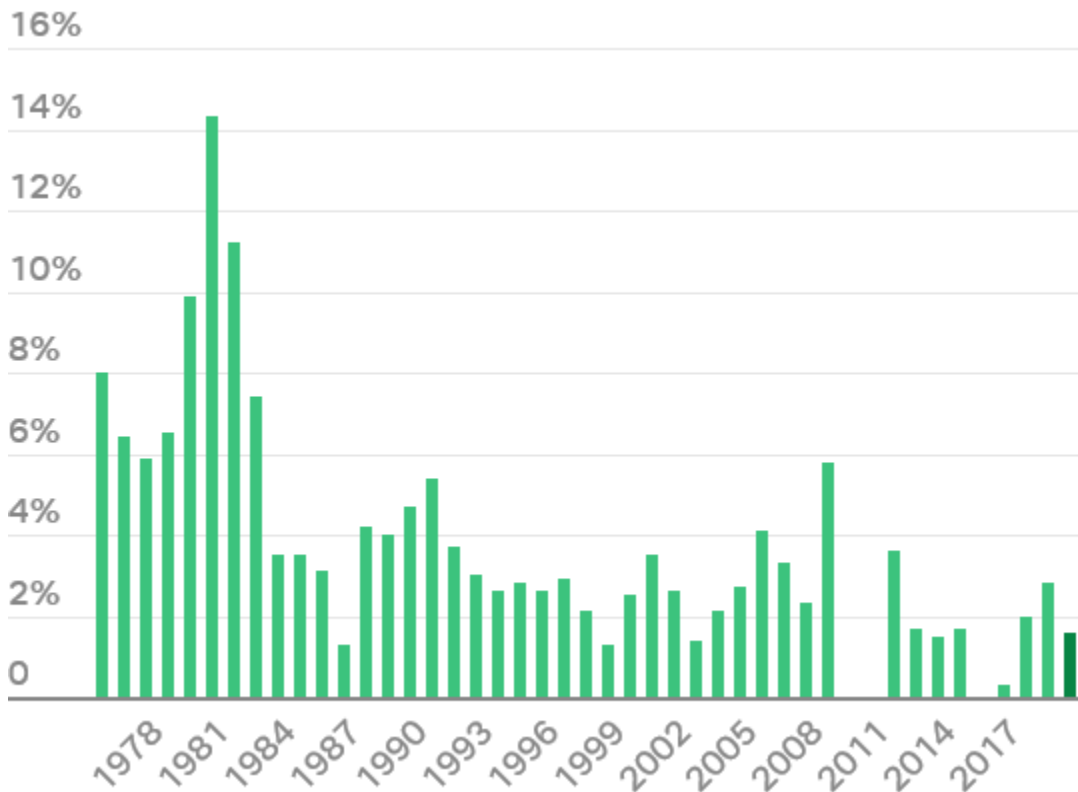
A new survey from TD Ameritrade showed that millennials were more likely than either Generation X or Baby Boomers to tap retirement funds for non-pressing expenses, like vacations or taking a sabbatical from work.

More than half of millennials (53 percent) said they would draw from retirement savings to spend during a job loss, cover medical bills (52 percent) or cover their child's education (52 percent). Just shy of half said they would take pull from retirement savings to pay down credit card debt (48 percent), buy a house (47 percent), cover living expenses during a sabbatical (45 percent), cover living expenses during parental leave (45 percent) or make a move (45 percent).

More than 40 percent said they would do so to buy a car, pay for a vacation, cover wedding expenses or pay down education debt.

- 68 million Americans who rely on Social Security will receive a 1.6% bump in their benefits next year, the Social Security Administration announced. For an average retiree who gets a monthly check of \$1,460, that adds up to an additional \$23.40 a month, according to the Senior Citizens League, an advocacy group.

About half of seniors rely on Social Security for at least half their income, and about a quarter depend on it for at least 90% of their income, AARP says.





# Grandparents Still Work to Support Grandchildren

About 1.3 Million Grandparents in the Labor Force Are Responsible for Most of the Basic Care of Coresident Grandchildren Under Age 18



Note: Among grandparents not responsible for care of coresident grandchildren, 2,067,276 were in the labor force and 2,761,313 were not.

United States<sup>®</sup>  
**Census**  
Bureau

U.S. Department of Commerce  
U.S. CENSUS BUREAU  
[census.gov](http://census.gov)

Source: 2017 American Community Survey  
[www.census.gov/programs-surveys/acs/](http://www.census.gov/programs-surveys/acs/)

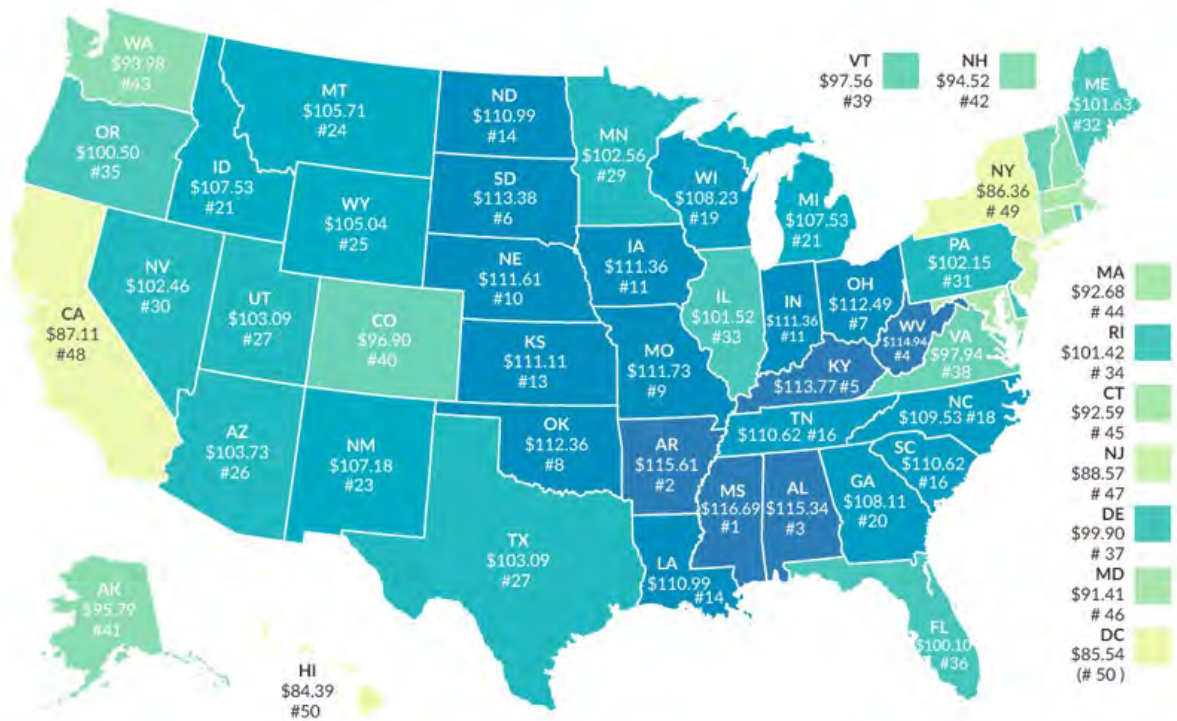


## Regional Price Parities by State, 2017

State	Relative Value of \$100	Rank
Maryland	\$ 91.41	46
West Virginia	\$114.94	4
Pennsylvania	\$102.15	31
Virginia	\$ 97.94	38

### The Relative Value of \$100

What is the Real Value of \$100 in Your State?



Notes: Numbers represent value of goods that \$100 dollars can buy in each state compared to the national average. The Bureau of Economic Analysis has developed a methodology using Personal Consumption Expenditure and American Community Survey data to estimate average price levels in each state for household consumption, including rental housing costs. D.C.'s rank does not affect states' ranks, but the figure in parentheses indicates where it would rank if included. Data is as of 2017.

Source: U.S. Bureau of Economic Analysis, *Regional Price Parities*.



A Goldman Sachs look at data from the Bureau of Labor Statistics found growth for the bottom half of earners at its highest rate of the cycle. And even among that bottom half, the biggest gains are going to workers earning the least. A *New York Times* analysis of data from the Federal Reserve Bank of Atlanta found that wage growth among the lowest 25 percent of earners had exceeded the growth in every other quartile.

In fact, according to Bunker's research, wages for low-income workers may be growing at their highest rate in 20 years.

### Wage growth is being led by low-wage industries

**Average hourly earnings, production and nonsupervisory workers, year-over-year changes**



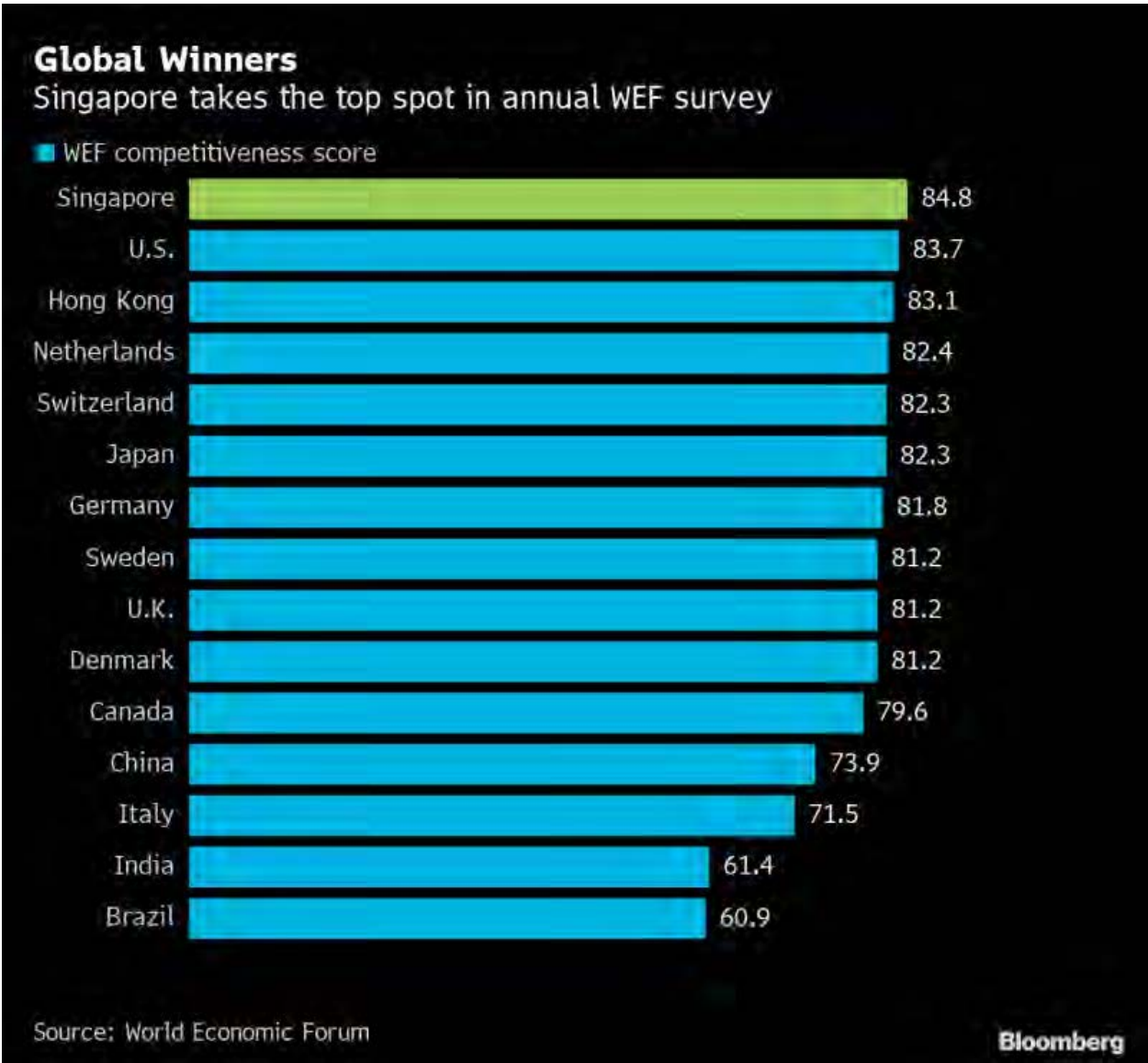
Source: Indeed analysis of Bureau of Labor Statistics data



The U.S. dropped from the top spot in the World Economic Forum’s annual competitiveness report, losing out to Singapore.

Hong Kong, the Netherlands and Switzerland made up the rest of the top five, according to the WEF survey. On the U.S., it noted growing uncertainty among business leaders and said trade openness has declined.

While the U.S. drops down to second in the survey of 141 countries, the WEF said it remains an “innovation powerhouse,” ranking first in business dynamism and second on innovation capability. Also in the top 10 were Japan, Germany, Sweden, the U.K. and Denmark. Canada and France were ranked 14th and 15th respectively, while China was in 28th place.



Household incomes in the United States have rebounded from their 2012 bottom in the wake of the Great Recession. And for the most part, the typical incomes of households headed by less-educated adults as well as more-educated adults have increased, according to newly released Census Bureau data.

Among all households headed by those ages 25 and older, median household income (in 2018 dollars) increased 13% from 2012 (\$57,100) to 2018 (\$64,800). The incomes of households headed by adults with a ninth to 12th grade education – but short of a high school diploma – increased 14% during this span, likely the most of any education group. In contrast, the median income of households headed by adults with at least a bachelor’s degree rose by 8%.

## Some households headed by less-educated adults have experienced the largest income gains during recovery

*Median income in 2018 dollars for households with heads ages 25 and older*

	Percent gain	2012 income	2018 income
Total	13%	\$57,100	\$64,800
Grade 9-12	14	25,600	29,200
HS grad	6	43,700	46,100
Some college	8	53,700	57,800
Associate	4	63,000	65,600
Bachelor’s	6	88,300	93,500
Master’s	9	101,200	110,300
Professional*	13	142,000	160,000
Ph.D.	5	128,200	135,200

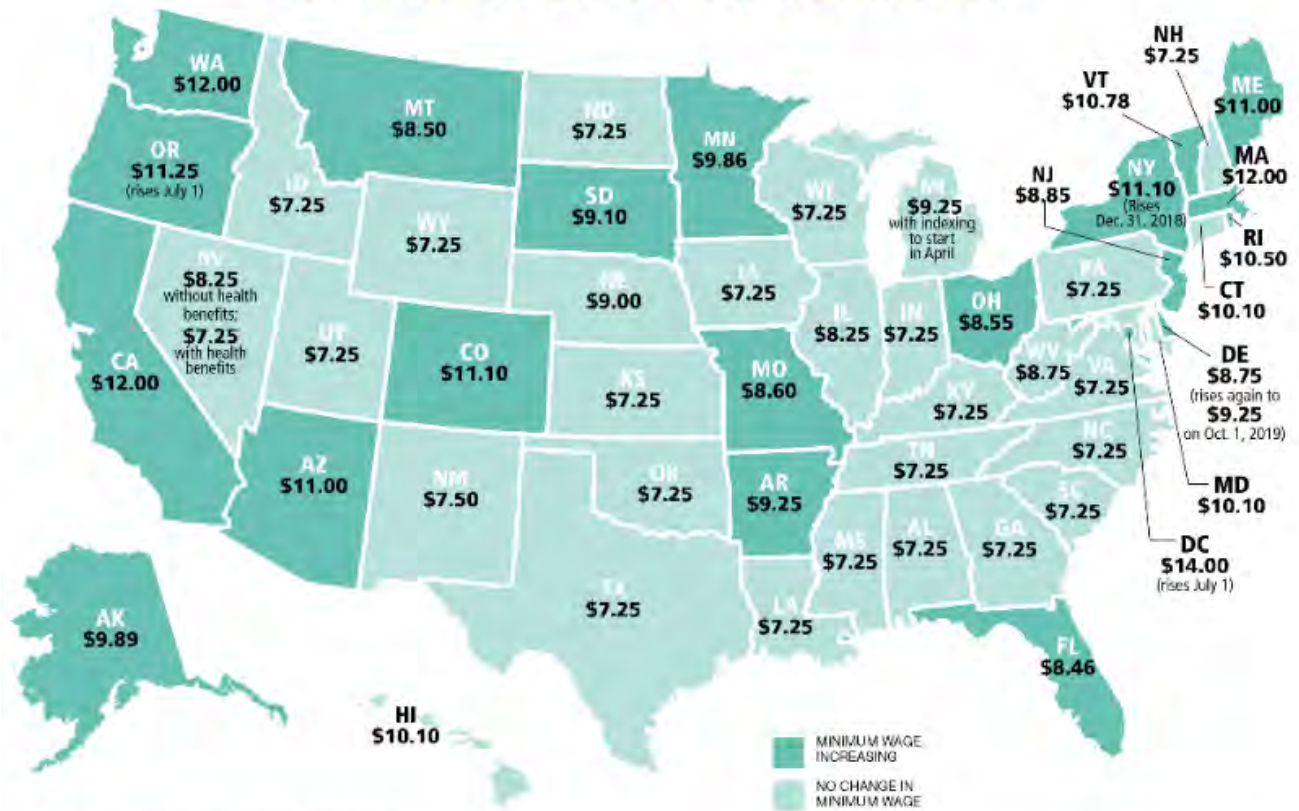
\*The 2018 and 2012 household income figures for professionals may not be comparable due to changes in the survey.

Note: Percentage gain computed from unrounded figures. Incomes of households maintained by those with less than a ninth-grade education are not shown. Households headed by a GED holder or alternative credential are included in the high school graduate category. Professional refers to householders with a professional degree beyond a bachelor’s degree (such as an M.D., DDS or J.D.).

Source: Pew Research Center analysis of U.S. Census Bureau historical income tables.

PEW RESEARCH CENTER

## 2019 STATE-BY-STATE SUMMARY



## TIPPED WAGE RATES

### INDIVIDUAL STATE RATES:

Arizona: \$7.50	Illinois: \$4.95	North Dakota: \$4.86
Arkansas: \$2.63	Iowa: \$4.35	Ohio: \$4.30
Colorado: \$7.18	Maine: \$4.35	Pennsylvania: \$2.83
Connecticut: \$6.38	Maryland: \$3.63	Rhode Island: \$3.89
Delaware: \$2.23	Massachusetts: \$3.75	South Dakota: \$4.43
Dist. of Columbia: \$3.89	Michigan: \$3.52	Vermont: \$5.25
Florida: \$5.44	Missouri: \$3.93	West Virginia: \$2.63
Hawaii: \$9.35	New Hampshire: \$3.26	Wisconsin: \$2.33
Idaho: \$3.35	New York: \$7.50	

### FEDERAL RATE OF \$2.13:

Alabama, Georgia, Indiana, Kansas, Kentucky, Louisiana, Mississippi, Nebraska, New Jersey, New Mexico, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Utah, Virginia, Wyoming

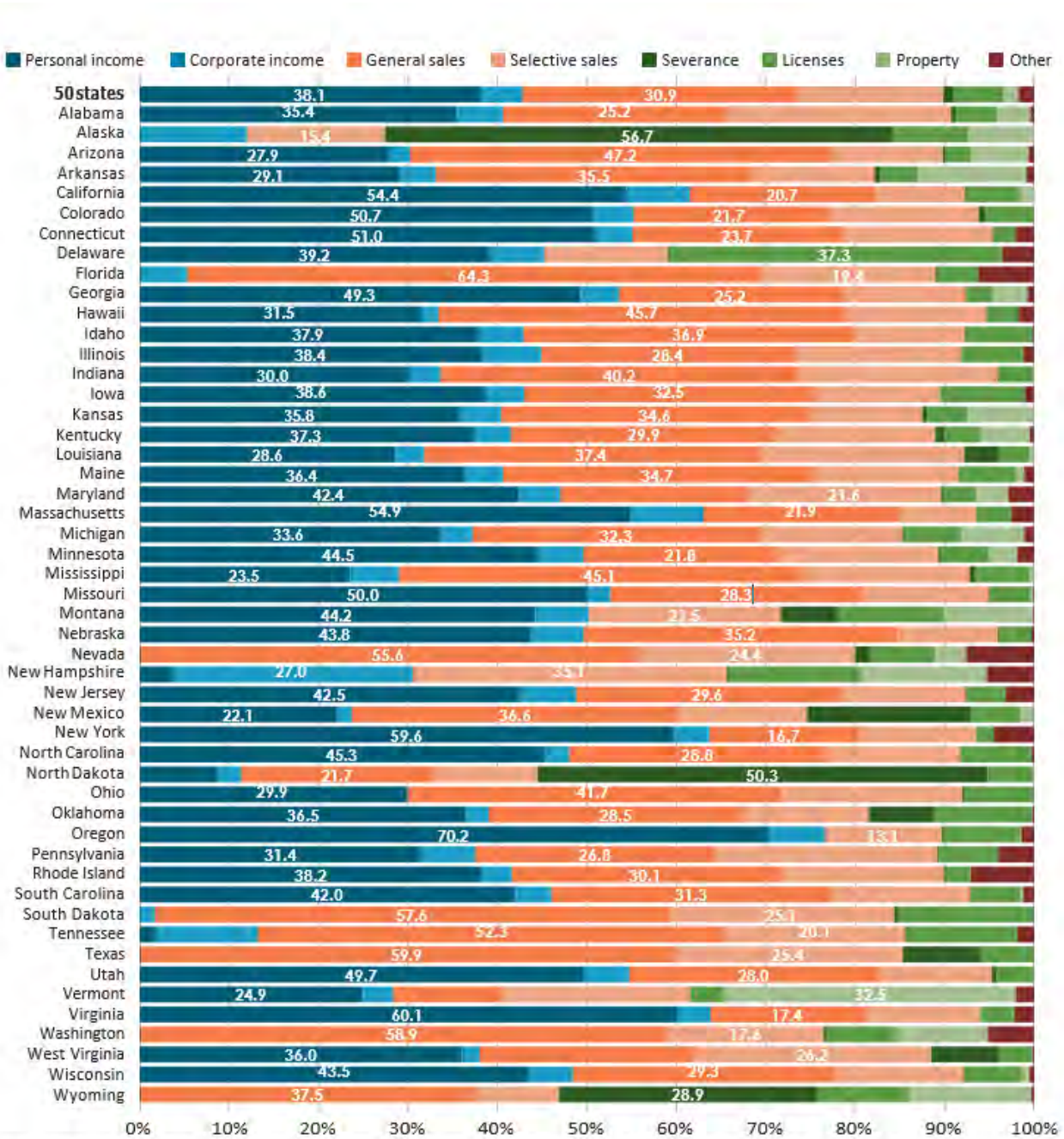
### NO TIP CREDIT:

Alaska, California, Minnesota, Montana, Nevada, Oregon, Washington

## How States Raise Their Tax Dollars

Taxes make up about half of state government revenue, with the bulk coming from levies on personal income and general sales of goods and services.

### Mix of Tax Sources by State, FY 2018



Note: Unlike 41 states with broad-based personal income taxes, New Hampshire and Tennessee tax only certain dividend and interest income.

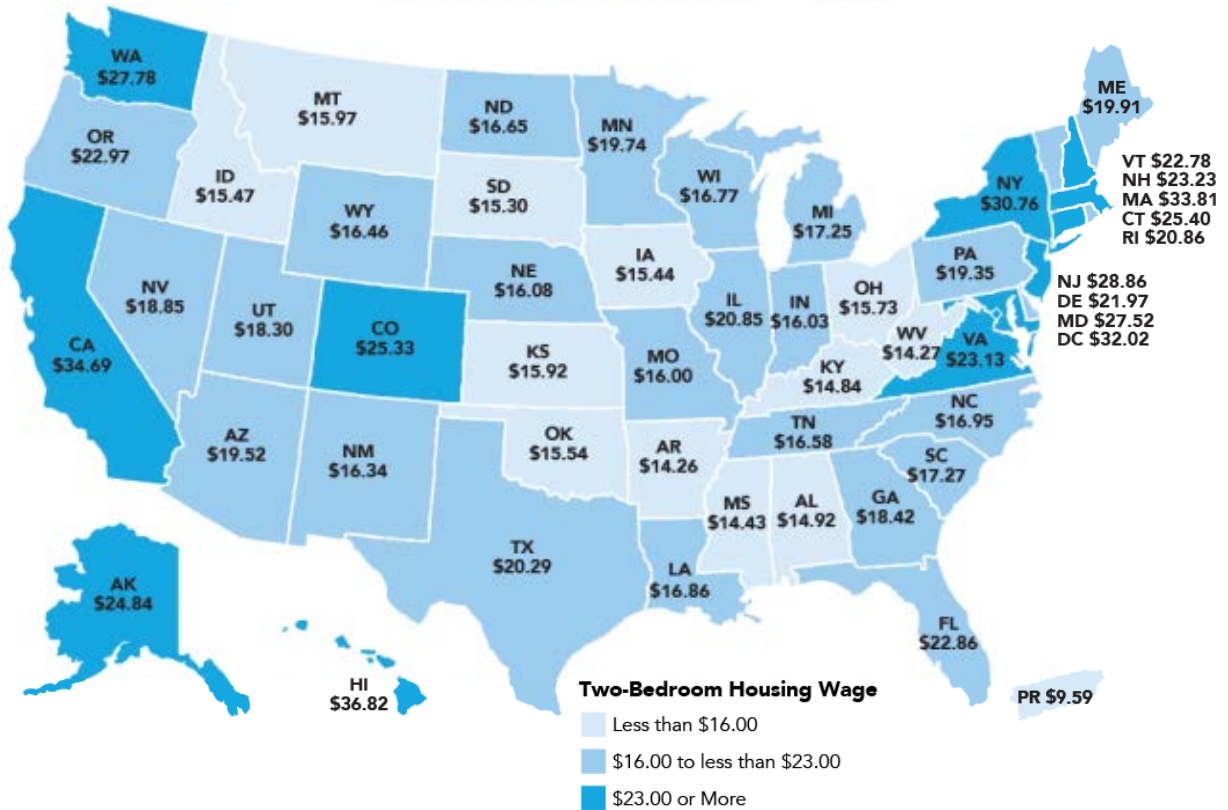
Source: U.S. Census Bureau's 2018 Annual Survey of State Government Tax Collections

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# OUT *of* REACH

## 2019 TWO-BEDROOM RENTAL HOUSING WAGES

Represents the hourly wage that a full-time worker must earn (working 40 hours a week, 52 weeks a year) in order to afford the Fair Market Rent for a **TWO-BEDROOM RENTAL HOME**, without paying more than 30% of income.



©2019 National Low Income Housing Coalition

[www.nlihc.org/oor](http://www.nlihc.org/oor)



NLIHC's report calculates a "housing wage" that estimates how much a full-time worker must make in order to afford a fair market rental without spending more than 30% of his or her income. For 2019, the housing wage is \$22.96 for a two-bedroom rental, and \$18.65 for a one-bedroom.

Americans now owe more than \$1.53 trillion in student loan debt, based on the most current figures available to Nitro. That money is not only owed by young people fresh out of college, but also by borrowers who have been out of school for a decade or more. The standard repayment timetable for federal loans is 10 years, but research suggests it actually takes four-year degree holders an average of 19.7 years to pay off their loans.

Top statistics of the student loan debt landscape in 2019:

- Current U.S. Student Loan Debt = est. \$1.53 Trillion
  - 1 in 4 Americans have student loan debt: An est. 44.7 Million people
  - Average student loan debt amount = \$37,172
  - Average student loan payment = \$393/month
- 
- Income inequality in the United States has hit its highest level since the Census Bureau started tracking it more than five decades ago.

The gulf is starkest in wealthy regions along both coasts such as New York, Connecticut, California and Washington, D.C., as well as in areas with widespread poverty, such as Puerto Rico and Louisiana. Equality was highest in Utah, Alaska and Iowa.

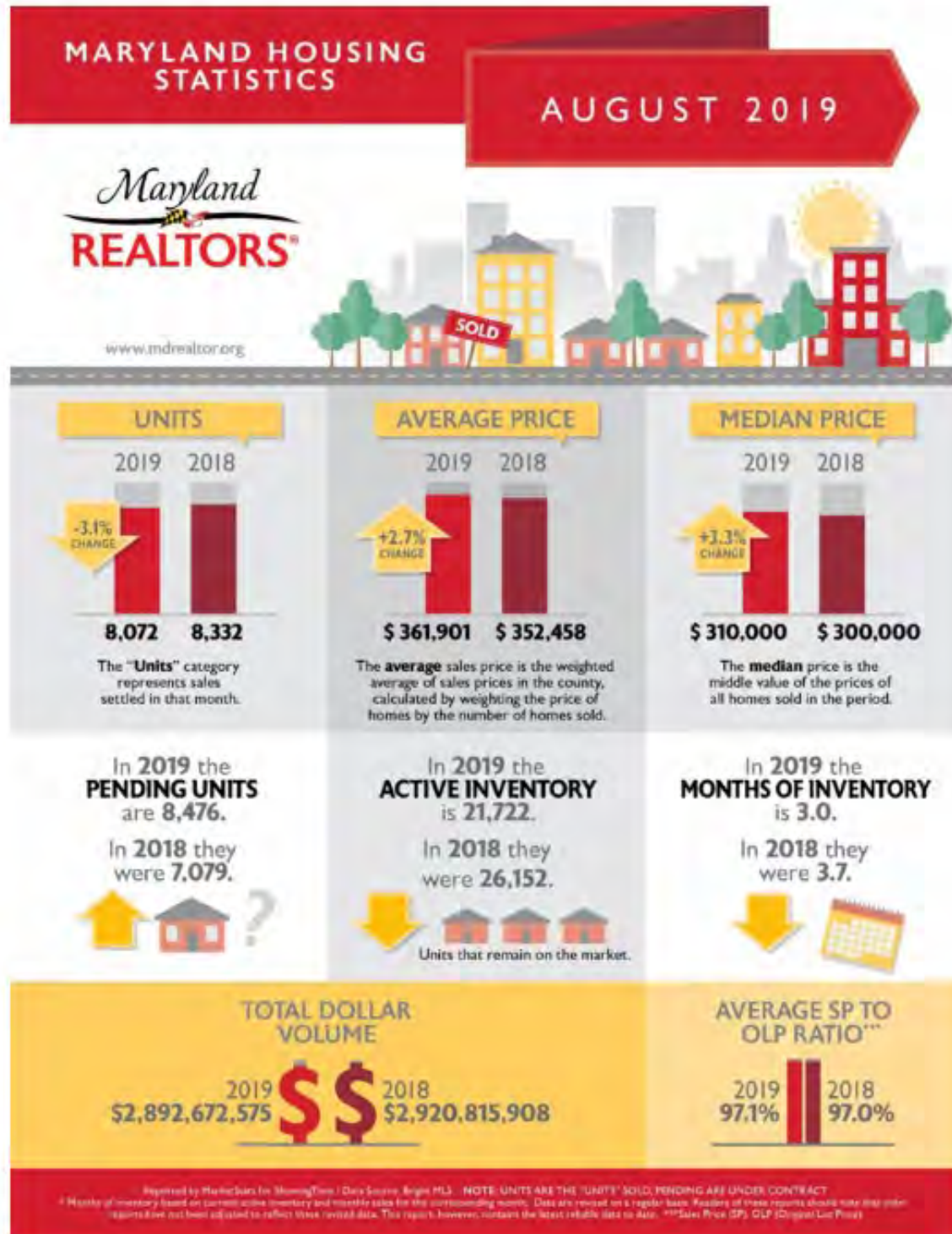
And while the nation is in the midst of its longest economic expansion, nine states saw spikes in inequality from 2017 to 2018: Alabama, Arkansas, California, Kansas, Nebraska, New Hampshire, New Mexico, Texas and Virginia.

The Gini index measures wealth distribution across a population, with zero representing total equality and 1 representing total inequality, where all wealth is concentrated in a single household. The indicator has been rising steadily for several decades. When the Census Bureau began studying income inequality in 1967, the Gini index was 0.397. In 2018, it climbed to 0.485.



**State of Maryland**

The Average Sale Price compared to Original List Price for August increased modestly from 97.0 percent to 97.1 percent in 2019.



Depending on where you live in the United States, the amount you need to make to get by and support a family can vary by a lot. While a household of two adults and two children can manage on less than \$60,000 a year in Tennessee, for example, it takes at least \$88,000 a year to make ends meet in New York.

That's according to updated data from MIT's living wage calculator, which determines the minimum amount necessary to meet basic needs without dipping into poverty or relying on outside help. The model takes into account factors such as food, housing, child care and health insurance, in addition to other regular costs, and doesn't include conveniences or luxuries such as restaurant meals, vacations or money left over for investments.

Maryland – Total required income before taxes: \$76,043  
Estimated housing costs: \$18,196  
Estimated food costs: \$8,822

Pennsylvania – Total required income before taxes: \$65,502  
Estimated housing costs: \$12,070  
Estimated food costs: \$10,245

West Virginia – Total required income before taxes: \$60,313  
Estimated housing costs: \$8,749  
Estimated food costs: \$8,822

#### Average Household Income in Maryland: \$103,845

- Median household income: \$78,916
- Median income for men: \$63,136
- Median income for women: \$53,436

The average household income in Maryland is the fourth highest of all the states, and its median household income is the highest. Men in Maryland earn the fifth-highest median pay compared to men in other states, and women in the state earn the third-highest median pay.



#### Average Household Income in Pennsylvania: \$78,192

- Median household income: \$56,951
- Median income for men: \$53,541
- Median income for women: \$42,124

The average income in Pennsylvania is slightly higher than in Oregon — the state ranks 21st for highest average household income.

#### Average Household Income in West Virginia: \$59,634

- Median household income: \$44,061
- Median income for men: \$48,971
- Median income for women: \$34,712

Only Mississippi has a lower average household income than West Virginia. West Virginia also has the third-lowest median household income in the U.S., and it has the fourth-lowest median income for women. Men fare much better, with a median income that doesn't fall in the bottom 10.

In its 2019 study on state fiscal rankings, Truth in Accounting (TIA) found that Maryland’s debts outweigh its revenues by \$33.5 billion — or \$12,500 per taxpayer, earning it a “D” grade from the non-profit government finance watchdog group.

<b>THE STATE’S BILLS EXCEED ITS ASSETS</b>	
Total assets	\$60,020,386,000
<i>Minus:</i> Capital assets	-\$38,388,453,000
Restricted assets	-\$4,262,605,000
Assets available to pay bills	\$17,369,328,000
<i>Minus:</i> Total bills	-\$50,873,003,000
Money available (needed) to pay future bills	-\$33,503,675,000
Each taxpayer’s share of this debt	-\$15,500

<b>BILLS THE STATE HAS ACCUMULATED</b>	
Bonds	\$20,815,475,000
Other liabilities	\$9,525,419,000
<i>Minus:</i> Debt related to capital assets	-\$11,631,443,000
Unfunded pension benefits	\$20,758,984,000
Unfunded retiree health care benefits	\$11,404,568,000
<b>Total bills</b>	<b>\$50,873,003,000</b>

Maryland’s fiscal condition (Truth in Accounting)

The analysis is part of the tenth annual State of the States (FSOS) report, a comprehensive study of the fiscal health of all 50 states based on FY 2018 comprehensive annual financial reports (CAFRs).

In the report, TIA divides the amount of money needed to pay bills (including pension and retiree healthcare costs), excluding capital debt, by the number of state taxpayers to come up with what it calls Taxpayer Burden™.

According to this methodology, debt among the states was \$1.5 trillion at the end of FY 2018, and 40 states did not have enough money to pay their bills.

According to the [Maryland Department of Legislative Services](#):

*While the State’s fiscal position is positive in fiscal 2019 and 2020, the outlook is less favorable in the out-years. A cash shortfall of approximately \$900 million is forecast in fiscal 2021 and is expected to grow to \$1.6 billion by fiscal 2024. Absent one-time spending, the forecast of ongoing general fund revenue and spending shows a structural deficit of nearly \$1.0 billion in fiscal 2021, growing to \$1.5 billion by fiscal 2024.*

The analysis criticizes Maryland’s reported net position, which, according to TIA, “is inflated by \$2.2 billion, largely because the state defers recognizing losses incurred when the net pension liability increases.”

## **Washington County, MD**

A diversified regional workforce of 400,000 (skilled and manufacturing-oriented) includes over 12% of the employment base in advanced manufacturing. Customized workforce and training development programs are also offered through the Western Maryland Consortium, higher learning institutions, and Washington County Public Schools Academy of Manufacturing & Engineering.

Located an hour from Washington, DC's biotech corridor and less than 30 minutes from well-known national biodefense resource Fort Detrick in Frederick, Maryland, Washington County is an affordable place to do business with close proximity to local metropolitan areas.

About 25% of Fort Detrick's employees live in Washington County, MD and the activities and related agencies at Fort Detrick generate more than \$1.7 billion in economic activity in the region.

Washington County has become a well-established crossroads and hub location for the distribution and logistics because of the intersection of I-70 and I-81.

Washington County also has a rich history in the aircraft and aviation industry dating to the 1930s with the arrival of the Fairchild Aircraft Co, a leading manufacturer of World War II military aircraft. The area is also the birthplace of Piedmont Airlines, which is part of US Airways. Hagerstown Regional Airport (HGR), today, is Maryland's second largest public use airport in terms of runway length (7,000 feet), is served by two commercial airlines, Allegiant Air and Sun Air, and is host to a number of aircraft and aviation technology and service firms.

The hospitality and tourism industry is one of Washington County's strongest sectors, supporting approximately 6,500 jobs in the County, including many jobs for those without college degrees.

## Washington County Budget

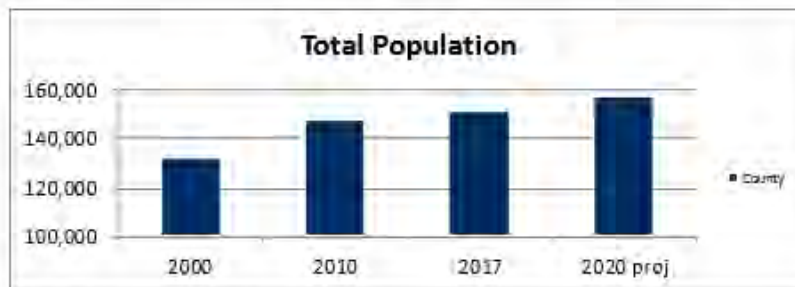
Real estate activity is an important economic indicator that greatly impacts the County's economy, planning, permits, construction, and revenue activity.

Washington County's foreclosure activity has decreased from an average of 0.10% in FY2018 to 0.08% in FY2019. Other statistical trends also indicate improvement such as the number of units sold and the average price of a home sold in Washington County which shows a year to date average for FY2019 of \$211,739.

The County's unemployment rate decreased from 5.7% in March 2016 to the current rate of 4.4% as of March 2019. The unemployment rate has shown a consistent gradual decrease. The State of Maryland unemployment rate decreased from 4.7% to 3.8% for the same time period. The 2020 Washington County operating budget totals \$298,352,420 which is \$13,558,150 or 4.76% above the 2019 approved budget.

### Demographics

Washington County is home to an estimated 150,930 residents and currently ranks 11th in population and 12th in population growth in the State of Maryland. Between 2000 and 2017, Washington County grew in total by 14.1% or by an annual average of 0.8% per year compared to the State of Maryland, which grew in total by 14.3% or an annual average of 0.8% per year.



Source: MD Department of Planning and US Census.

Between 2000 and 2015, Per Capita Personal Income for Washington County residents has increased by 23% or by an annual average of 1.5% per year. The Per Capita Personal Income is projected to increase by 2.06% annually through 2020. Per Capita Personal Income for the State of Maryland increased 22% from 2000 through 2015 or an annual average of 1.5% per year.



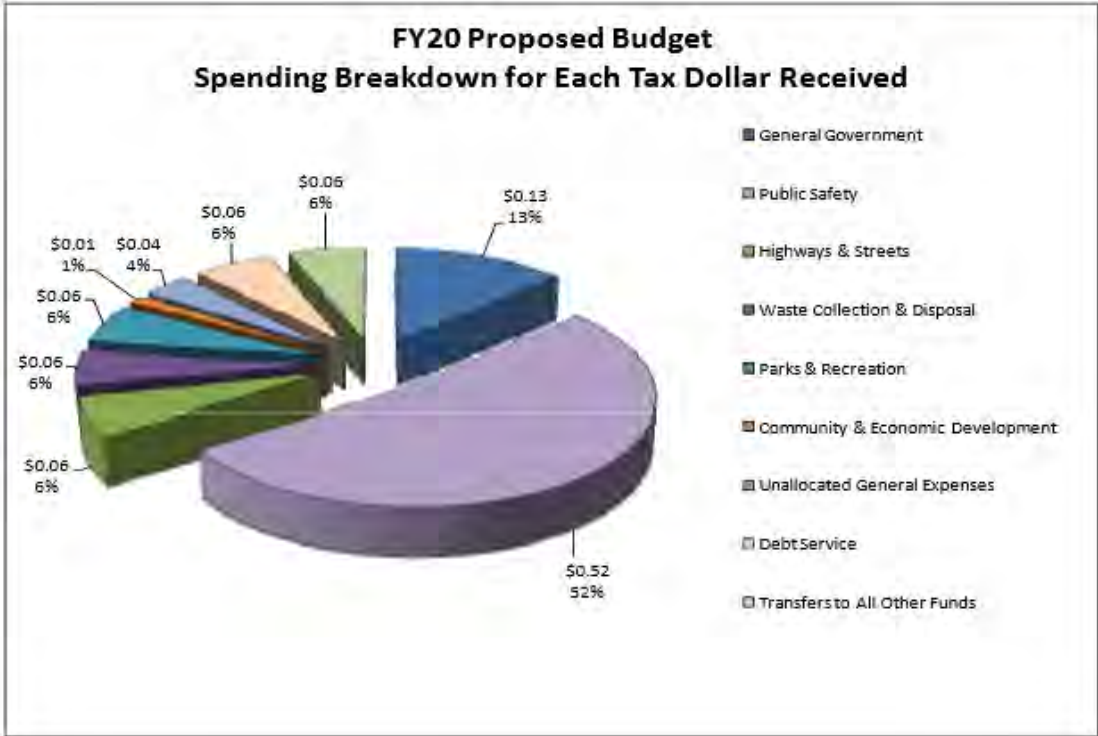
Source: MD Department of Planning.

The budget was balanced based on the following changes and objectives: • Increase in the property tax rate and assessable base • Increase in income tax rate • Increased funding to the Board of Education • Funding Phase 2 of both Fire & Rescue and EMS Staffing Plans • Transfer to Sewer • 0% rate increases for Water & Sewer • 0% rate increases for Solid Waste

- Hagerstown was named the “Hub City” back when railroading was a primary source of transportation and commerce; the name has stuck throughout the years due to the city’s unique positioning at the hub of Interstate 81 and Interstate 70. Today creative service and technology related companies are recognizing Hagerstown’s close proximity to Baltimore and the D.C. metropolitan area as an asset, and Hagerstown is seeing a trend in those companies locating in the city. Retail opportunities are expanding in the community among both big-box and small businesses throughout area shopping centers. In downtown Hagerstown, over 20 distinctive, locally-owned and operated dining options can be found within a two-block radius in each direction from the Public Square.

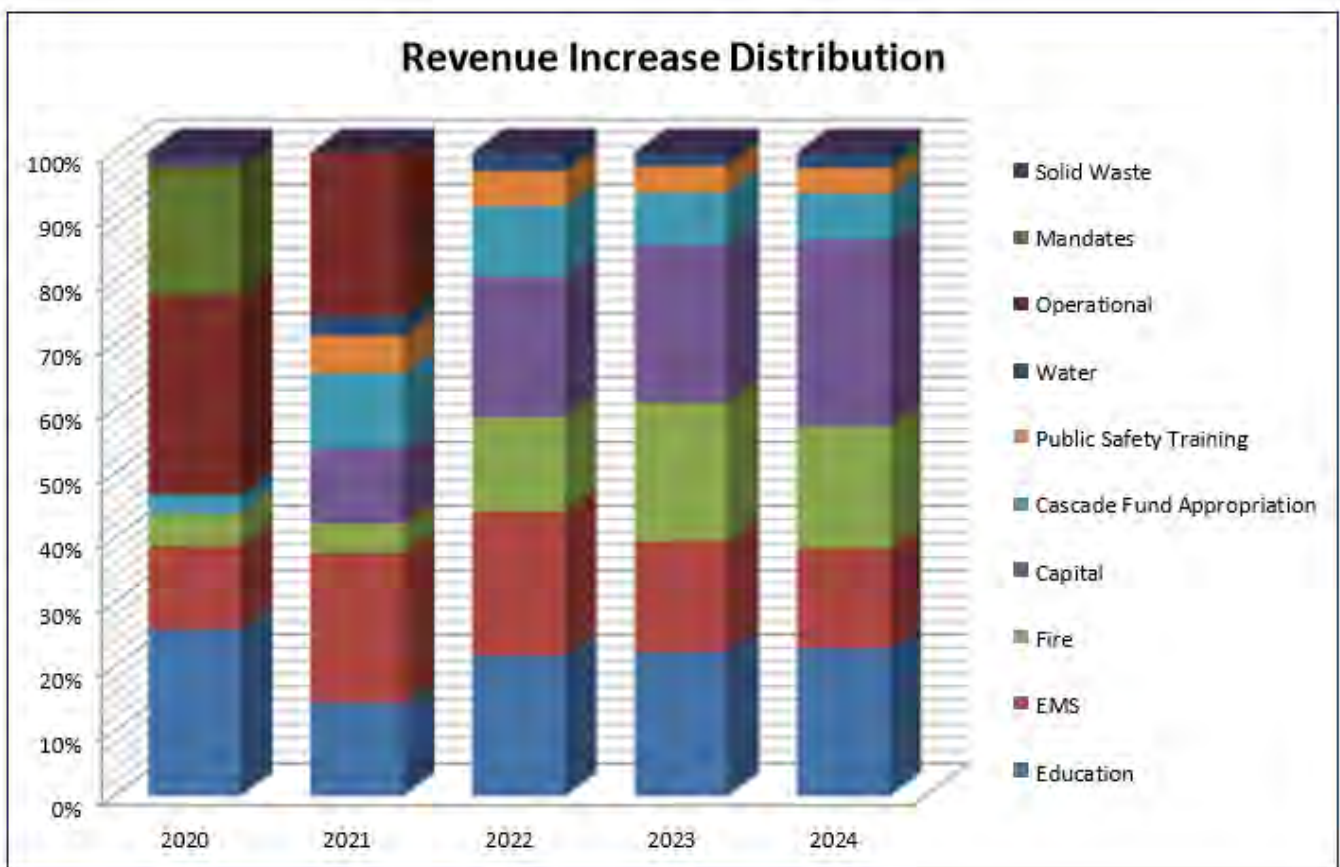
CITY OF HAGERSTOWN'S BUDGET MESSAGE  
FISCAL YEAR 2020

**HAGERSTOWN'S ASSESSABLE BASE AND PROPERTY TAX RATE (CONTINUED)**





The FY2020 proposed tax increase will serve many purposes over the next five years. Initially, it will provide for needs associated with education, EMS, fire, state mandates and contract increases. The County has applied for a SAFER grant which will assist in funding personnel costs for up to 29 firefighters by paying for 75% of costs for the first two years and 35% for the third year. The County must provide for the full cost in 2023 and beyond. In addition, the County has provided \$1 million in funding for Emergency Services to address concerns presented to the Board of County Commissioners. Throughout the next five years, increases are expected to be seen more heavily in education, Fire, EMS and for the capital plan.



## Debt and Reserve Management

The County is provided with a rating for debt issuance by three New York rating agencies. The County was upgraded in 2014 by Standard and Poor's from AA to a AA+. In addition, Moody's upgraded the County's rating from AA to a AA+ and Fitch from Aa2 to a Aa1 in 2015. These upgrades were based on several factors including financial and economic data. The County has maintained these ratings through the current year.

Washington County Bond Ratings		
Rating Agency	Rating	Rating Description
Standard and Poor's	AA+	Rating reflects the County's strong economic profile, diverse tax base, strong financial performance, and low overall debt burden.
Fitch	AA+	Rating reflects the County's strong financial profile, sound reserves, low overall debt levels, and adequate economic base.
Moody's	Aa1	Rating reflects the County's solid financial position, supported by strong fiscal policies and practices, healthy reserve levels and moderate debt burden.

## Real Gross Rent History for Washington County

<b>Date</b>	<b>US Median</b>	<b>Maryland Median</b>	<b>Washington County MD Median</b>	<b>Washington County MD Average</b>
2017	\$1,012	\$1,337	\$867	\$872
2016	\$996	\$1,334	\$864	\$837
2015	\$987	\$1,315	\$917	\$923
2014	\$956	\$1,272	\$799	\$826
2013	\$924	\$1,236	\$908	\$867
2012	\$912	\$1,207	\$877	\$925
2011	\$912	\$1,208	\$864	\$876
2010	\$927	\$1,226	\$826	\$862
2009	\$931	\$1,225	\$835	\$839
2008	\$947	\$1,234	\$887	\$943
2007	\$899	\$1,139	\$852	\$817
2006	\$909	\$1,135	\$815	\$790

Source: deptofnumbers.com

## Education

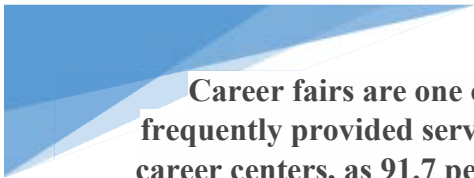
### United States – National

What is considered a “qualified higher education expense,” or QHEE, for a 529 withdrawal has changed over the years. What was once a relatively restrictive definition has become more flexible due to the extensive work of advocates and legislators.

#### Qualified expenses

There are five main categories that constitute qualified expenses:

1. Tuition, fees, books, supplies, and equipment
  2. Room and board
  3. Computers, peripheral equipment, computer software, and internet access charges
  4. If the beneficiary has a disability, certain special needs services and equipment needed for enrollment or attendance may qualify
  5. As a result of the 2017 Tax Cuts and Jobs Act, up to \$10,000 for tuition at public, private, or religious K–12 schools is now considered qualified.
- In 2016, Credential Engine set out to tally all the badges, degrees, certificates, licenses and diplomas available to denote educational attainment. So far, the Washington, D.C.-based nonprofit has found 738,428 unique credentials in the U.S. Almost half are offered by non-academic organizations.



**Career fairs are one of the most frequently provided services by college career centers, as 91.7 percent reported hosting at least one career fair in 2017-18, according to results in NACE’s *2018-19 Career Services Benchmark Survey Report for Colleges and Universities.***

- Keeping in line with recent trends over the last couple of years, spending on course materials such as textbooks decreased 14 percent in the last year, an annual survey of students finds. A separate study of internal prices of one textbook retailer found that prices had decreased 26 percent in the last year.

According to the survey of more than 20,000 students across 41 institutions conducted by the National Association of College Stores, students on average spent \$415 on course materials in the 2018-19 academic year, down from \$484 last year. Student spending has declined almost every year in the last decade -- in 2008 students spent an average of \$700 on course materials.

The survey found that the numbers on purchasing and renting have remained the same since 2014, with 83 percent saying they had purchased a textbook, 44 percent saying they had rented one and 15 percent saying they had borrowed one.

An internal survey conducted by the textbook retailer Campusbooks.com found the company's average textbook prices had fallen 26 percent in the last two years. In a news release, the company's CEO, Alex Neal, cited the proliferation of rental textbooks as the reason for the decline.



- More than 200 U.S. universities have adopted test-optional admissions policies in the past 10 years -- half of which made the change in the past three years -- bringing the total to over 1,055, according to the National Center for Fair and Open Testing. Despite recent efforts by testing companies to slow the industry's shift away from requiring high-stakes test scores, very few colleges that have adopted test-optional admissions policies appear willing to consider reversing their decision.

Long-standing, problematic correlations between test scores and family income, race and ethnicity, and gender are common reasons that universities share as motivation for eliminating test score requirements. In addition, many universities analyzing the predictive value of test scores conclude that these data points provide little to no additional, useful insight into future academic success at their institution beyond what is gained from information in students' high school transcripts.

For these same reasons, test-optional universities still using test scores to determine merit-based scholarships should consider the next frontier of the test-optional movement: scholarships.

- The U.S. needs to embrace postsecondary career and technical education (CTE) to create a robust pipeline for science and engineering jobs beyond those that require a baccalaureate — something that hasn't been happening, according to a new report.

NSB (National Science Board) gathered comments on the challenges and promising practices surrounding CTE and technical jobs through a task force, which engaged stakeholders such as the American Association of Community Colleges (AACC), several federal agencies and other organizations. It also held a "listening tour" that included visits to three community colleges and two events — the Community College Innovation Challenge and the Advanced Technological Education Principal Investigators' Conference, which are both NSF-funded and managed by AACC.

Many students who attended the listening meetings told the task force that they and their families lacked information and awareness of technical careers, which feed misperceptions and helped to discourage students from pursuing technical education and jobs, the report says. Their high schools often didn't present such careers and CTE as an option.

"As a result, a number of students described finding their preferred career opportunity required technical education after having begun or completed a four-year degree," the report says.

Despite these challenges, some recent efforts are trying to make inroads. The report notes work-based learning, such as registered and nonregistered apprenticeships, are becoming more popular, and organizations such as the American School Counselors Association are speaking more about career readiness and are developing awareness about trade and technical careers. Some high schools are even re-integrating CTE into their offerings for all students.

- There are more than 120 public community colleges in 25 states that offer more than 400 baccalaureate degree programs, according to Debra Bragg, director of Community College Research Initiatives at the University of Washington.

"The largest programs are in business, IT, computer programming, health care," says Angela M. Kersenbrock, president of the Community College Baccalaureate Association.

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## Lagging in STEM credentials

*Minority students don't even comprise half of those who are earning STEM certificates and associate degrees.*

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### Distribution of STEM certificates and associate degrees by race-ethnicity, 2016-17



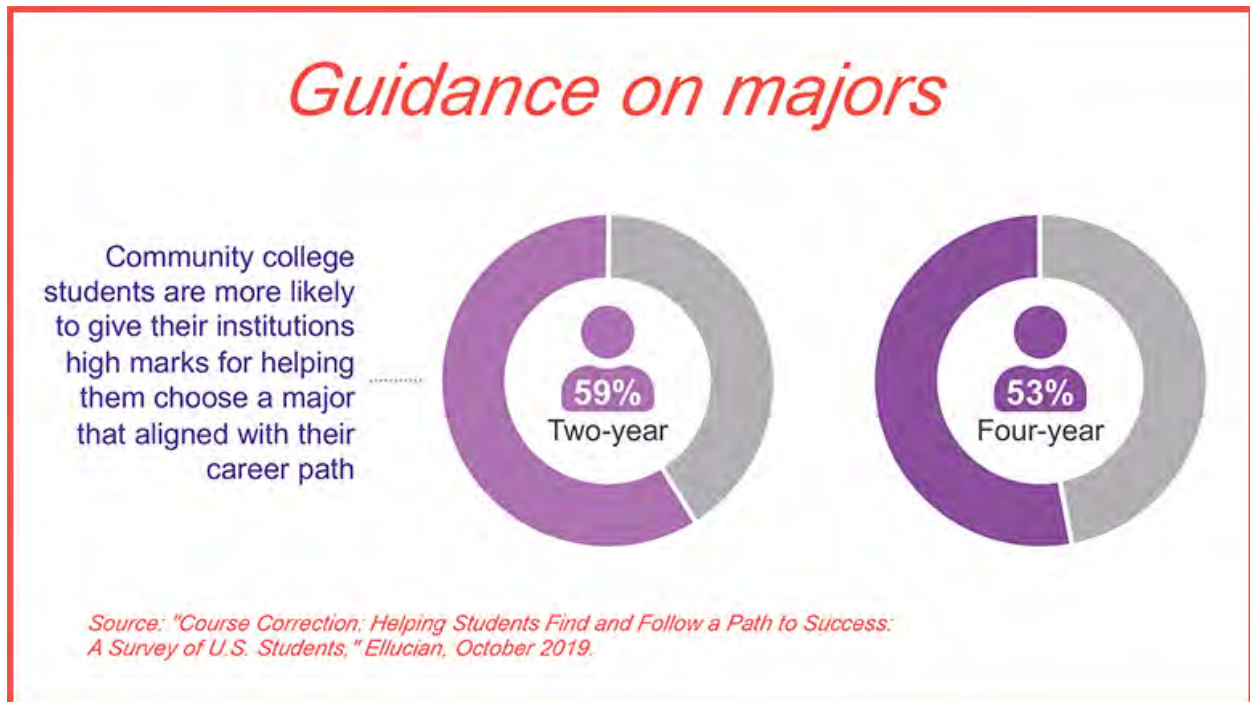
**Source:** AACC analysis of U.S. Department of Education, "Digest of Education Statistics, Number and Percentage Distribution of Science, Technology, Engineering, and Mathematics (STEM) Degrees/Certificates Conferred by Postsecondary Institutions, by Race/Ethnicity, Level of Degree/Certificate, and Sex of Students: 2016-17," June 2019.



College students value guided pathways programs in helping them to select a major and its required courses, a new survey shows.

About half (51 percent) of surveyed two- and four-year college students said they had changed their major at least once. A higher percent of two-year college students said they did so, compared to four-year students, 57 percent versus 47 percent, respectively. Overall, 18 percent of all surveyed students said their schools were less-than-moderately helpful in providing guidance on majors.

A significant number of students participating in the survey also said they needed more clarity around courses and prerequisites. One-third said major/degree course requirements were unclear, and one-quarter said the same about prerequisites, according to the survey from Ellucian, a higher education software and services provider.





- A new report from the Center for Community College Student Engagement shows that effective advising may have a larger impact on returning students and thus colleges' persistence and graduation rates. The report highlights that 78 percent of returning students reported meeting with an adviser, compared to 62 percent of entering students. According to CCCSE, that detail is significant because less than 50 percent of first-time-in-college students return to the same institution the following fall, indicating that early advising leads to increases in retention.

The report found more engagement among students who had longer advising sessions, met with their adviser more often and had an adviser who helped them develop academic and career plans.

The report also found that returning students who met with an adviser for more than 30 minutes showed more engagement than those who spent less time with an adviser, although initial advising sessions for nearly half of the students surveyed ranged from 16 to 30 minutes.

- Students Demand Responsiveness and Accessibility as They Research Programs

As students continue to gather information about prospective programs, the accessibility of relevant information remains important. Survey participants who either planned to enroll or who were currently enrolled were asked to rank the importance of a variety of contacts and communications in their program search. The factor that was named as most important was a school's responsiveness to the student's inquiries, with a mean score of 4.05, or "very important."

Other top responses to this question indicate that adult learners expect schools not only to respond quickly, but also to proactively anticipate their interest and intent by making relevant information readily available at opportune times. This is illustrated by the second-most important response, the resources available on the school's website, and the third-most important response, email communications from the school. Both contacts and communications had mean scores of "important" to "very important." Given the prevalence of stealth shopping behavior in adult learner recruitment, this data illustrates the critical need for institutions to provide high-quality, self-serve resources online and to respond promptly to inquiries.

The modern learner is beyond the traditional and non-traditional student.

Today, U.S. colleges and universities enroll more than 20 million students, compared to 12 million in 1980, thanks to adding a mix of graduate and professional programs, part-time and online degrees to traditional undergraduate programs.

Meanwhile, the outlook for enrollment growth in higher education among traditional 18-22-year-olds in the next decade is dire. Although institutions can turn to the adult market of 80 million Americans who have no college degree, or international students, most colleges have limited success in penetrating the adult market and the number of new international students at American universities is trending downward.

Based on student demographic projections for the next decade, colleges must begin the planning process for enrollment in the 2020s right now. The main imperative: institutional leaders need to think about serving students beyond the historical lens of age: traditional (18 to 22 years old) and nontraditional (everyone else). They need to further differentiate program offerings to fit the distinct needs of new sets of students rather than simply tweak what they have always offered to attract a new generation of learners.

- With the number of 18- to 24-year-olds down and expected to remain flat through at least 2035, according to the U.S. Census Bureau, older students make up an increasingly important market for universities and colleges. More than 35 million Americans over 25 have some college credits, but never got degrees, the Census Bureau says — a huge pool of potential customers.

Twenty-nine percent of undergraduate and 77 percent of graduate students are 25 or older, the U.S. Department of Education reports, belying the stereotype that every college campus is populated by 18-year-olds who live in dorms or fraternities and go to football games on Saturdays.

Among these older students, more than half are parents, according to the Institute for Women’s Policy Research. Two-thirds have low incomes, compared to 36 percent of their traditional-aged classmates. Fifty-seven percent work at least 20 hours a week, versus 39 percent of younger students. And 44 percent, compared to 19 percent of traditional undergrads, enroll part-time.

- According to a recent study, a third of first-generation college students drop out within three years. In recent years, colleges have been trying to slow that exodus by creating offices devoted to first-generation students, organizing peer groups and connecting students with tutoring and extra support. Now some institutions are coming to realize that programming for first-generation students isn’t enough to get them across the finish line — they also need to target their parents. Gear Up, which has long supported low-income families with college prep and applications, recently extended its model through the first year of college. And a handful of colleges and universities are designing outreach efforts for parents of first-generation students, and finding new ways to engage them in campus events.

**About a third of students whose parents didn’t attend college drop out, compared with 26 percent of students whose parents attended some college and 14 percent of those whose parents hold bachelor’s degrees.**

The Hechinger Report

# Traditional vs. Today

**Traditional:** College students enroll right after high school, making them 18-to 24-years-old.

**Today:** 41% of college students are 25 years-old or older, delaying post-secondary enrollment—and many lack a traditional high school diploma, often preventing them from being fully prepared for college-level courses.

**Traditional:** College students live in on-campus dorms or apartments.

**Today:** Only 13% of students live on campus—and 9% reported being homeless within the past year.

**Traditional:** Students enroll in college full-time, with school as their main focus.

**Today:** 39% of students in 2016 attended college part-time, another 58% work while in college and 26% of today's students are parents. With childcare being more expensive than tuition for many Americans, finding someone to watch the kids while tending to school proves challenging.

**Traditional:** Students' parents are college-educated, giving them an immediate resource for navigating their academic career.

**Today:** 34% of students are the first in their family to attend college, making it difficult to grasp college fees and other idiosyncrasies in the higher education experience without parental advice.

**Traditional:** Students of all backgrounds are given a fair shake to attend college through completion with their graduating class.

**Today:** Students of color may face microaggressions that can create a negative climate, impair academic performance and lower their graduation rates—in fact, Hispanic and African American college students attending four-year public institutions graduate at rates 10 to 20 percentage points lower than their white peers as a result of being stereotyped by others.

# Online College Students... Are Likely To Attend an Online Public College

Of the over 3 million students taking exclusively online classes



- 52% attend a public college
- 25% attend a private, non-profit college
- 24% attend a private, for-profit college

## Who Are Online College Students?

### GENDER

**Undergraduate**  
75% female, 25% male

**Graduate**  
64% female, 46% male

### MARITAL STATUS

**Undergraduate**  
57% single

**Graduate**  
60% married or partnered

### CHILDREN

**Undergraduate**  
45% have children

**Graduate**  
55% have children

### RACE

**Undergraduate**  
63% Caucasian  
15% African American  
10% Hispanic  
8% Asian or Pacific Islander

**Graduate**  
67% Caucasian  
11% African American  
10% Asian or Pacific Islander  
8% Hispanic

### ENROLLMENT STATUS

**Undergraduate**  
64% enroll in school full time

**Graduate**  
61% enroll in school full time

### WHERE THEY WORK

**Undergraduate**  
16% office and admin support  
12% healthcare support  
10% management  
9% personal care and service

**Graduate**  
19% education, training, and library  
16% management  
10% healthcare support  
8% office and admin support

### EMPLOYMENT

**Undergraduate**  
49% employed full time

**Graduate**  
71% employed full time

### INCOME

**Undergraduate**  
47% make less than \$39,000 a year

**Graduate**  
48% make less than \$69,999 a year

#### SOURCE URLS

Learning House: Online College Students Survey 2017  
National Center for Education Statistics - IPEDS Complete Data Files  
National Center for Education Statistics - Total Fall Enrollments 1970-2016  
Learning House: Online College Students Survey 2016

A survey of currently enrolled U.S. college students by Gallup and Strada Education Network reveals significant differences by institution size in students' likelihood to have had several key experiences indicating supportive relationships with professors and mentors. Most notably, 45% of students at colleges and universities with fewer than 5,000 students -- which often have lower student-to-faculty ratios -- strongly agree that their professors care about them as people, compared with 24% among those at institutions with 5,000 students or more.

### Students at Smaller Schools More Likely to Feel Support From Faculty, Mentors

On a five-point scale, where 5 means strongly agree and 1 means strongly disagree, please rate your level of agreement with the following items. (% Strongly agree)

	Enrollment <5,000	Enrollment 5,000+
	%	%
My professors at [Institution] care about me as a person.	45	24
I have at least one professor at [Institution] who makes me excited about learning.	66	56
I have a mentor at [Institution] who encourages me to pursue my goals and dreams.	34	23
Strongly agree with all three items	25	12

STRADA-GALLUP COLLEGE STUDENT SURVEY

- Community college and university presidents are sharply divided over whether two-year institutions should offer bachelor's degrees, a new *Inside Higher Ed* survey finds.

Two-year college presidents want to offer more bachelor's degrees because they believe such programs would help close racial, ethnic and economic gaps in degree attainment. But four-year college presidents are skeptical of the idea and have fought against proposals that would increase bachelor's degree availability at community colleges. They are concerned about the quality of a bachelor's degree from a community college and see the push as evidence of mission creep.

The survey found that 75 percent of community college presidents would like to see their campuses offer bachelor's degrees, even though only one in 10 reported offering four-year degree programs on their campuses. Only 1 percent of respondents said their college offers a wide range of four-year degree programs.

### Public community colleges...

Strongly agree | Somewhat agree | Somewhat disagree | Strongly disagree

#### are for people like me



#### are worth the cost



#### contribute to a strong American workforce



#### are institutions I am comfortable supporting with my tax dollars



#### spend money wisely



#### run efficiently



NEW AMERICA

- Colleges and universities have become increasingly involved in the development of retirement communities on or near their campuses. The extent of each college's involvement varies. Some communities merely lease land from the university and have no special connection to campus programs. Others are creating communities for their alumni with golf courses, clubhouses, and condos, houses, and assisted living facilities.



Many people today are looking for more meaning and value in retirement. College-linked retirement communities offer a return to a stimulating environment they enjoyed decades earlier. Residents audit classes and may even teach. They may also attend various cultural and sporting events on campus.

The motivation for seniors returning to campus is qualitatively different from those who choose traditional retirement communities. They hunger for something more than warm weather and a condo on the fifth green. It is fundamentally about personal growth, stimulation, the development of a more meaningful life, and a supportive intellectual and cultural climate to make it happen. They want to continue to learn and enrich themselves.

- According to a recent survey conducted by the National Association of Student Personnel Administrators, the Association for Institutional Research and EDUCAUSE, 89 percent of respondents from institutions of all sizes say they're investing in data analytics projects to boost student success.

The survey included feedback from nearly 1,000 professionals from public and private nonprofit institutions offering two- to four-year academic programs. Among the 398 colleges with data analytics studies already in progress, 96 percent of respondents said that improving student outcomes was one of the goals of their initiative, and 71 percent said they were seeking efficiencies in program and service delivery.

**88%**

The percentage of higher education respondents who said their institutions must invest in student analytics to stay competitive

Source: National Association of Student Personnel Administrators, the Association for Institutional Research and EDUCAUSE, "Institutions' Use of Data and Analytics for Student Success," April 2018



# Degrees for Seniors

Use Your Skills - Try Something New - Pursue a Dream



## Associate's

- Bookkeeper & Tax Preparer
- Child Development
- Paralegal
- Psychology & Counseling
- Real Estate



## Bachelor's

- Business & Entrepreneurship
- Computer Science
- Healthcare Administration and Management
- Veterinary Tech



## Master's & PhD

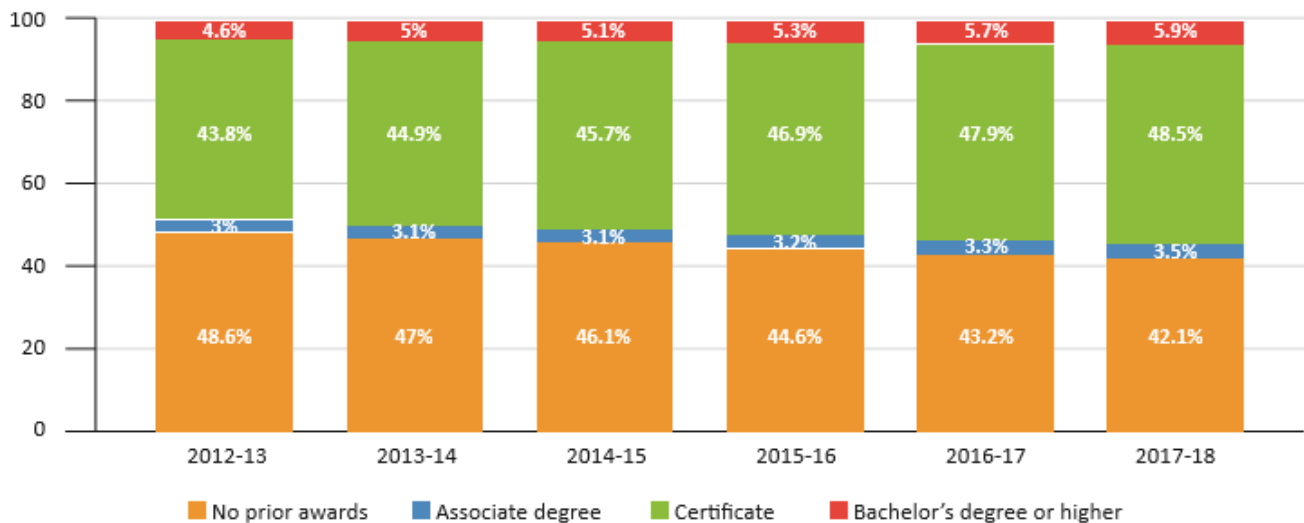
- Biology & Botany
- History & Law
- Literature & Writing
- Master of Public Health
- MBA
- MS in Nursing

collegeconsensus.com

## Going back to school

The number of first-time degree earners age 25 and older is dropping, but the number of older learners with a previous credential who earn another degree is on the rise.

Percent of bachelor's degree earners age 40 and older who had a previous credential

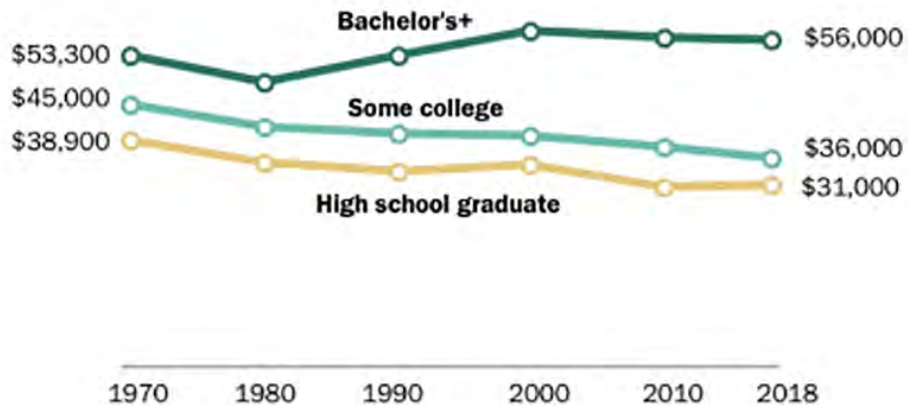


Source: National Student Clearinghouse Research Center, "Undergraduate Degree Earners Report, 2017-18," February 2019.



The public gives community colleges lower marks for job preparation than four-year colleges, a Pew Research Center study finds.

Only 12 percent of the public say a two-year degree from a community college “prepares someone very well for a well-paying job in today’s economy,” and 46 percent say it prepares a person somewhat well.



- Community college students lose a substantial amount of credits when transferring to a four- or two-year institution, which is due in part to poor coordination among the participating colleges and an inability to effectively communicate the transfer process and policies to students, according to a new U.S. Government Accountability Office (GAO) report.

Overall, transfer students among all postsecondary institutions lost an estimated average of 43 percent of credits, according to a GAO analysis of a selected cohort of students. Students moving from public two-year to public four-year colleges — the most common transfer path that accounts for 26 percent of transfer students — lost the fewest estimated credits at 22 percent.

Public two-year college students transferring to another public two-year institution — the second most common transfer path that accounts for 13 percent of transfer students — didn’t fare as well: They lost an estimated average of 69 percent of their credits.

Also, students transferring from a public four-year college to a public two-year institution — the third most common transfer path, comprising 9 percent of all transfer students — lost more than three-fourths of their credits.

Students at for-profit two-year colleges transferring to a public two-year college — which accounted for only 1 percent of transfer paths — saw the largest percentage of rejected credits at 97 percent, according to the report.

**NEARLY HALF OF** undergraduate students in the U.S. are enrolled at a community college, according to the American Association of Community Colleges.

**Geographic distribution.** The five states with the largest number of community colleges in the directory are California (185), Texas (126), Florida (86), Ohio (86), and Pennsylvania (86). The top 10 states with the largest number of community colleges had an aggregate of 888 schools, accounting for 52.5% of the total. There were three states with only two community colleges (Alaska, Delaware and Rhode Island). The District of Columbia and the U.S. territories had just one community college.

**Community environment.** Community colleges are located in many different types of locales around the U.S. Only 40.7% of the schools in the directory are in large cities or suburbs of large cities. Nearly 15% are in rural areas; 14% are in either small cities or a suburb of a small city; and nearly 14% are in either a midsize city or suburb of a midsize city.

**Enrollment size.** A majority of community colleges are small. Out of nearly 1,700 institutions in the directory, nearly 57% have enrollments of 2,500 or less, and another 15.7% have between 2,501 and 5,000 students. Only 48 community colleges, or 2.8%, have enrollments between 20,001 and 50,000, and there are only six very large community colleges (0.4%) with enrollments of 50,001 or more.

**Enrollment status.** Nearly two-thirds of community college students attending schools in the directory are enrolled part time. This is not a surprise, since community colleges emphasize educating working adults.

**Age distribution.** Nearly 41% of those enrolled at community colleges in the directory are age 25 or older. As noted above, community colleges serve adult learners who need further education or additional workplace preparation. However, 59% of the students are age 24 or younger. These students are earning credits to transfer to four-year institutions or are obtaining job skills training through an associate degree or certificate program.

**Gender distribution.** Attending community colleges is a popular option among women, who surpassed men by 14 percentage points, accounting for 56.8% of the total enrollment at community colleges in the directory.

**Ethnic distribution.** The ethnic breakdown of the community colleges in the directory doesn't reflect the U.S. population in some key areas. White students make up 45.4% of the enrollment at community colleges, while they account for around 62% of the overall U.S. population. In contrast, there is a larger percentage of Hispanic students (25.3%) and a larger percentage of black students (13.4%) enrolled at community colleges than their respective shares of the overall U.S. population.

## The Most In-Demand Degrees in 2019

The good news for the graduating class of 2019 is that the job market for college grads is hot and should continue to expand. One report on college recruiting trends noted that all economic indicators pointed to a long period of sustained job growth.

- Computer science—61 percent
- Business—56 percent
- Engineering—54 percent
- Communications (including public relations and advertising)—52 percent
- Arts, humanities, and liberal arts—47 percent
- Science—45 percent
- Data analytics—45 percent
- Education—39 percent
- Social science—36 percent
- Health science—30 percent
- Agriculture and natural resources—29 percent

## What Languages Are College Students Learning More Of?

Change in learners of selected languages at U.S. universities between 2006 and 2016\*



Languages with more than 1,000 learners only

\* Fall semesters

\*\* All Chinese languages



@StatistaCharts

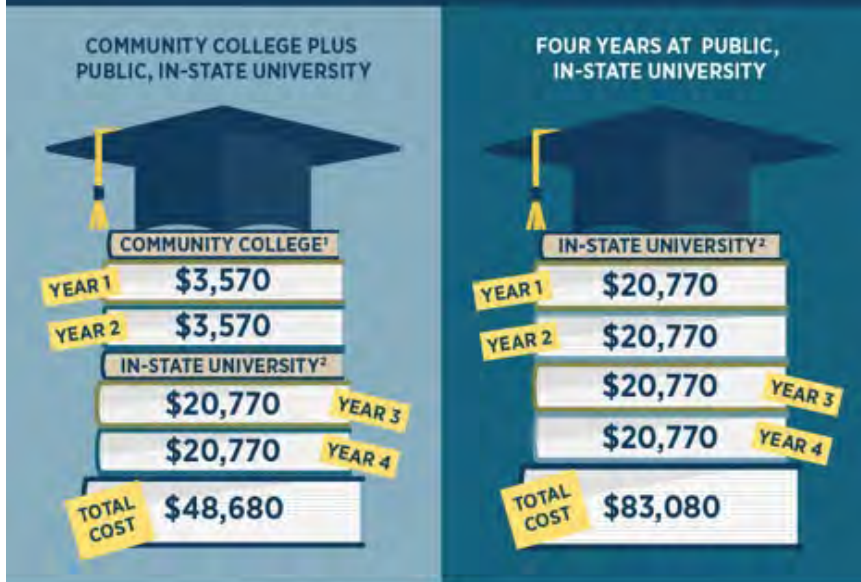
Source: Modern Language Association

statista

## EDUCATION COSTS

# COMMUNITY COLLEGE VS. UNIVERSITY

You may be able to save money on both housing and tuition by staying home and attending a community college, and then transferring to a university. Here's a look at the amount you could save by transferring after two years.



Assumptions: Estimate is based on 2017-2018 tuition and fees for community colleges and tuition, fees, room and board for public, in-state universities.  
Source: The College Board, Annual Survey of Colleges

### 8 Reasons Why Community College Might be the Better Choice after High School

1. Affordability
2. Admission Policies
3. Flexibility
4. Smaller Campus
5. Easy Transitioning
6. Hands-On Experience
7. Networking Options with Local Industries
8. Post Degree Options – Transfer or Workforce

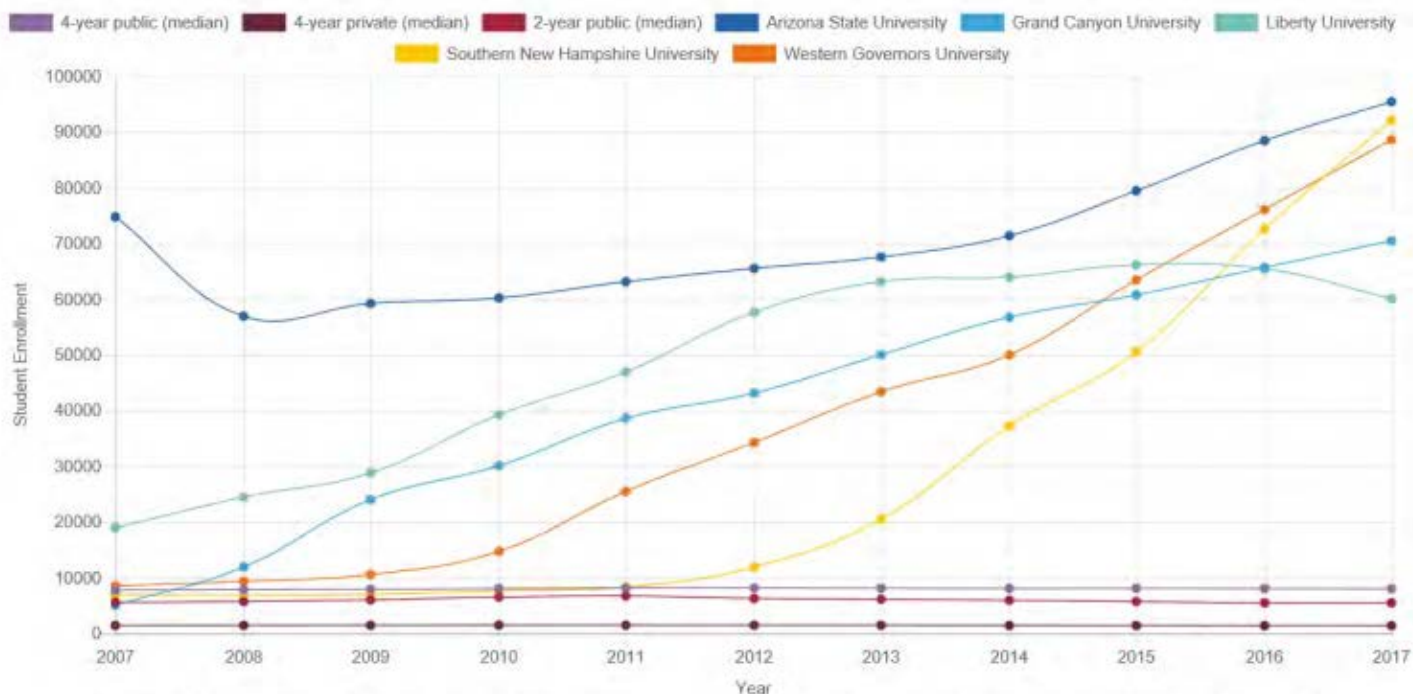
- Fifty-seven percent of lecturers say students are demanding greater availability of course materials online, 52% say students want more online and remote working opportunities, and 40% say students want more detailed feedback.
  - There are barriers to faculty adopting the technology they are provided with.
  - Eighty-seven percent of lecturers have access to a learning management system. Of these, 54 percent use an LMS regularly, 24 percent don't use one regularly, 7 percent don't use one at all, and 25-34-year-olds use one the most, with lecturers ages 35-44 coming in second.
  - Forty-five percent of lecturers don't receive IT setup support from their institutions.
  - Fifty percent don't receive online educational resources.
  - Only 40 percent receive regular professional development sessions or workshops.
  - Fifty-one percent say that more support and training would help them embrace tech in the classroom; 43 percent said offering more budget would help.

- In a recent survey from Ellucian, 85 percent of students indicated that a mobile app from their university would have helped to ease their transition to college and 73 percent believe it would have helped them become more involved on campus. Part of the success of a first-year college student lies in their involvement on campus, as participation in clubs and other extracurriculars can foster skills to help them thrive academically.

#### **Ready to launch online student organizations at your institution?**

- Survey students regularly with a brief poll after each event to determine speaker quality and areas for improvement.
- Create groups that are based on specific topics or majors, and hold events that fit into the lives of busy students.
- While the student life services department should lead or organize groups, recruit faculty and students to help facilitate and promote the groups.
- Periodically review associations and clubs to determine if they are meeting students' needs and if any should be eliminated or added.

## 12-month Undergraduate Enrollment at Various Universities



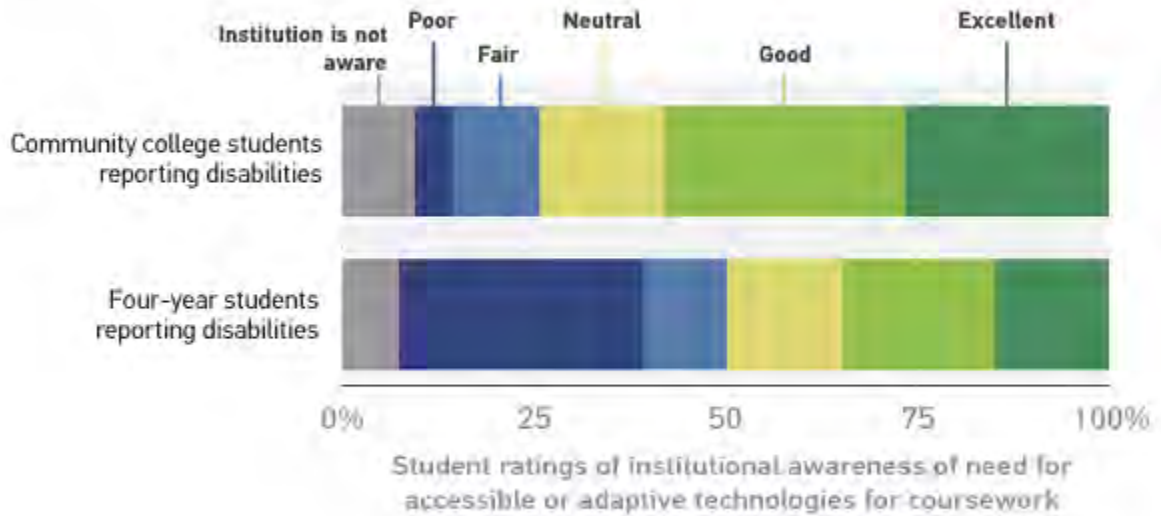
ABOUT THE DATA: The figures are from the Education Department's Integrated Postsecondary Education Data System. They represent undergraduate, full-time and part-time enrollment. The values for the 2-year public, 4-year private and 4-year public universities are the median enrollment for each of these sectors.

At a time when many colleges are struggling with shrinking enrollment and tighter budgets, Southern New Hampshire is thriving on a grand scale, and it's not alone. Liberty, Grand Canyon, and Western Governors Universities, along with a few other nonprofit institutions, have built huge online enrollments and national brands in recent years by subverting many of traditional higher education's hallmarks. Western Governors has 88,585 undergraduates, according to U.S. Education Department data, more than the top 14 universities in the annual *U.S. News & World Report* rankings combined.

While some so-called mega-universities have physical campuses, they've focused intensely on building online programs. They've emphasized recruiting working adults over fresh high-school graduates. They've embraced competency-based education, in which students earn credits from life experiences and from demonstrating proficiency in a subject. They market widely and vigorously, and lean into, rather than recoil from, some other common corporate practices and philosophies.

Two-year and AA colleges are doing a significantly better job than other institutions of meeting the needs of students with disabilities who require technology for their academics.

Figure 6: Institutional awareness of students' needs for accessible or adaptive technologies






- PayScale estimates the typical graduate with zero to five years experience makes \$48,400. The National Association of Colleges and Employers (NACE) calculates that the preliminary average starting salary for graduates from the class of 2018 is about \$50,004.

NACE data also indicates that college graduate starting salaries have recently seen a subtle dip. The organization estimates that the starting salaries of the class of 2018 were actually 2 percent lower than the average starting of the class of 2017 (\$51,022).

Despite this statistic, there are many good reasons for college graduates to be optimistic. Wages are finally beginning to budge after years of sluggish growth and recent figures from NACE indicate that employers plan to hire 16.6 percent more members of the Class of 2019 than the previous year's graduating class. That's the biggest increase among recent graduates since 2007.

- The United States Social Security Administration calculates that men with bachelor's degrees earn roughly \$900,000 more over the course of their lifetime than high school graduates, and women with bachelor's degrees earn \$630,000 more.



Children from families with a household income of less than \$25,000 per year are 10 times less likely to participate in remote learning than children from families earning more than \$100,000.

## How institutions can use technology to scale student-advisor relationships

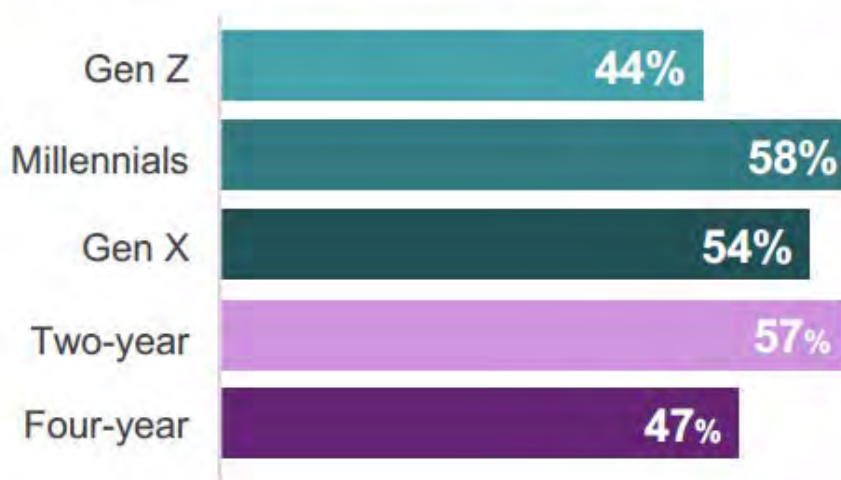
- More than half of students change their majors
  - 48% of advisor meetings were initiated solely by the student
  - 71% of students find value in learning communities and block scheduling
- Two- and four-year institutions across the country are adopting educational reforms and implementing technology solutions to get and keep students on the path to success – but what do students think about these measures?

In a recent survey of 1,000 U.S. students, two-thirds report feeling overwhelmed by the process of choosing a major and more than half changed majors at least once, resulting in delayed graduation/completion dates and increased tuition costs.

Students rely on their advisors for help but advisors are challenged to scale their efforts to meet demand. Almost half of student-advisor meetings were initiated solely by the student and on average, students met with their advisors just twice last year.

Components of guided pathway reforms are helping ease the burden. Students are finding value in meta-majors and learning communities/block scheduling. They also welcome technology solutions that help them stay on the path to success, like degree auditing tools, nudges, and virtual one-stop shops.

## Students changing majors at least once



## 7 Trends in Community Colleges

Community colleges are striving to meet new demands while continuing to fulfill their goal of making a college education accessible to all. The trends discussed in this report show that community colleges are attentive to numerous constituencies. They are reaching down to high school students, granting or assisting college students to obtain bachelor's degrees, and preparing unique curricula to attract students age 50 and over. They are also beginning to partner with the business sector to provide high-quality technical training that students need to succeed in business and industry. This is an ambitious agenda. Both the government and the private sector will be challenged to provide sufficient funding to allow community colleges to accomplish their changing missions.

1. Increased Distance Learning
2. Greater Number of Baccalaureate Degrees Awarded
3. Increased Partnerships between Community Colleges and Four-Year Institutions
4. Greater Recruiting of Baby Boomers
5. Increased Enrollment Across Different Student Groups
6. Increased Partnership with Business
7. Increased Response to Globalization

A growing number of students have started to forgo long summer breaks to cut costs and stay on track to graduation. And since many four-year institutions largely shut down between May and late August thanks to an academic calendar that predates the industrial era, many are going to community colleges.



This phenomenon has grown so much it has a name: “summer swirl.” There’s been a steady increase in summer swirlers anxious to speed up their progress to graduation, according to the National Student Clearinghouse Research Center, which tracks this. They are also more likely to graduate from their home institutions than their classmates who don’t take summer classes, the clearinghouse found.

Community colleges are happy for the extra business. Their enrollment has declined by 27 percent, or nearly two million students, since 2010, the clearinghouse reports. Many are now actively promoting their summer programs.

Community college students are juggling more responsibilities than their four-year peers.

Community college students		Four-year students
82%	Hold jobs while taking classes	66%
24%	Enrolled full time and work full time*	10%
36%	Dependent	66%
36%	Independent without dependents	23%
28%	Independent with dependents	10%
28%	Married or in a domestic partnership	13%

\*at least 30 hours per week



- Amid a global pandemic and sharp economic slowdown, students and families may be more likely to choose local and less-expensive public schools or community college rather than private universities far from home, according to Robert Franek, editor in chief of The Princeton Review and author of “The Best 385 Colleges.”

As price becomes a growing consideration, 40% of students already have said they would attend public college and 26% have said they would choose community college, according to a separate report by the College Savings Foundation, a Washington-based research group.

- Worried about having to take classes online or not sure how they’ll pay, for instance, 10 percent of high school seniors planning to attend a four-year college or university before the pandemic now say they’re going to do something else, the consulting firm SimpsonScarborough reports. About half say they will enroll at a community college.

But high school graduates who put off college often end up never going, the most recent available federal study on the subject found. And only 45 percent of people who enter community college full time earn associate degrees in even six years, according to the National Student Clearinghouse Research Center.

Some of these students say they ultimately plan to transfer from community college to a four-year university and get a bachelor’s degree.

But only 13 percent of community college students manage to achieve that goal, the Community College Research Center at Teachers College, Columbia University, says. (The Hechinger Report, which produced this story, is also housed at Teachers College.)

“For some students [community college] will be like a detour,” Renn said, “and for others it will be an off ramp.”

- Community colleges must rise to the challenge of a possible enrollment surge, according to a new report from Eduventures Research.

The report points out that community colleges did well with their enrollments in the Great Recession of 2008. But the enrollment for this coming academic year will be a "cliff-hanger" as students hold off on making decisions due to the COVID-19 pandemic.

Most likely, though, the report said community colleges will see a boost in enrollment in the fall. Adults will lean toward colleges that are affordable and have a local presence. Traditional-aged students from lower-income families will opt for two-year colleges, as they have been disproportionately affected by the pandemic. And students from four-year colleges may opt to attend a community college for a period of time if their original institutions are cavalier about reopening or provide online learning options that aren't compelling.

- Of students who have changed their education plans, 15 percent say they will reduce the number of courses or the amount of training they take, another survey, by the nonprofit Strada Education Network, found.
- Virtual apprenticeships could be a boon to the future, some experts say. They would open up opportunities for those with disabilities that make working in an office difficult, or provide greater access to those in areas with a dearth of apprenticeship options.

But virtual options could lack the important pieces of apprenticeships that make them successful, others say. Nationally, registered apprenticeships require two components: classroom learning and on-the-job training with a mentor. When the COVID-19 pandemic hit, both pieces had to scramble to move online.

"This is an area where we're working with the [U.S. Department of Labor] to show that our sector, like many other nontraditional sectors, can have different operating styles," said Jennifer Carlson, executive director and co-founder of Apprenti, a tech apprenticeship program. "This will be a great proof point to show that people are still able to do well."

None of the nearly 1,000 apprentices in the Apprenti program have been laid off or furloughed, according to Carlson. The program quickly pivoted to online education for the learning requirements, and it is working with companies to help apprentices continue their on-the-job training at home.

- In a reaction to the changes and the uncertainty of it all, high school seniors have shown increased interest in gap years and delaying their college enrollment. Some may have found the pandemic and economic downturn has affected their family's ability to pay for college. What effect delayed enrollment will have on these students' overall academic achievement remains to be seen.

Research has shown that students who delay enrollment in college are less likely to graduate and may have their long-term earnings penalized. Two 2005 studies suggested that students who delay enrollment are 64 percent less likely than their "on-time" peers to complete a bachelor's degree and 18 percent less likely to complete any college credential.

A recent polling from College Reaction/Axios in April showed that 77% of more than 800 college students surveyed said they felt distance learning is worse or much worse than in-person classes.

Here are some of the most common challenges undergraduate students are currently facing with online classes along with specific tips on how to address them:

- Technical issues.
- Distractions and time management.
- Staying motivated.
- Understanding course expectations.
- Lack of in-person interaction.
- Adapting to unfamiliar technology.
- Uncertainty about the future.

# 10 ways to students succeed at distance learning

**Believe** – Believe your university and professors want the best for you. They are issued new guidelines and protocol that will ensure your academic success.

**Attend** - Every day, show up to your computer in the same fashion that you would attend class in person. Stay on top of and ahead of assignments and projects. Plan forwards for eight more weeks. Maintain your momentum by situating yourself in front of your lap top every day.

**Momentum and motivation** - Just because a change has occurred mid-semester does not mean you have to stop your flow. Adjust your rhythm and keep moving along in your classes. Interrupting what you had going, panicking or stressing will only set you back as you try to finish the semester with success. Incorporate inner motivation, self-discipline, and guide yourself with the will to persevere.

**Self-regulate** – Self-regulatory skills are a set of skills you practice that help you rebound, persist, and recover. These are all skills that help you thrive in most life situations.

**Plan** - If you have never planned before as a college student and you've managed to "wing it," now is the time to execute your best planning faculties.

**Communicate** - Communication skills are a must for the remainder of the school year. Most college students have taken at least one online course by the time sophomore year rolls around and know how critical it is to understand the class expectations: deadlines, dialogue and dates. The 3 Ds. In addition, pay close attention to peer communication when projects are involved.

**Accountability** - Everyone is in "survival mode," simply trying to adjust to a national health crisis. Life as you know it has leveled up to a temporary position where you are one hundred percent responsible for your grades and completed assignments without the normal in person and in class reminders. This is a change that will require your attention every day. Stay aware. Yes, things have happened suddenly, but you can keep yourself accountable for eight more weeks. If you need a checks and balance system, ask for help, reminders and encouragement.

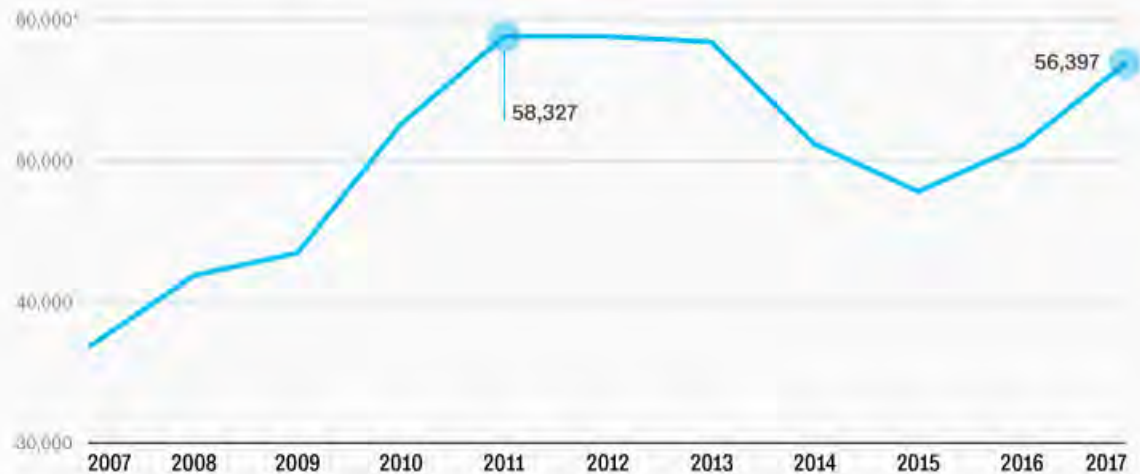
**Distractions** - Changing your work environment will be stressful mainly because your rhythm was interrupted. Now you must adjust to a new space and a new set of distractions. It is critical to your success that you keep your mental space clear of distractions. Incorporate structure now.

**Time Management** -This is perhaps the most important skill to put into practice as you shift your learning modality to online classes. Plan and accept that this is one component you have control of – how you most effectively use your time. Use a visible calendar, sticky notes, alarms, and white boards as reminders.

**Mindful completion** - Even with chaos around you, you have control of your situation and one goal: to complete the semester.



## More qualified applicants are getting turned away



SOURCE: AMERICAN ASSOCIATION OF NURSE PRACTITIONERS

\*Note: Number of qualified nursing school applications that were turned away between 2002 and 2017.

There's an acute nursing shortage in the United States, but schools are turning away thousands of qualified applicants as they struggle to expand class size and hire more teachers for nursing programs.

Nursing schools are struggling to hire more qualified teachers. "The annual national faculty vacancy rate in nursing programs is over 7%. That's pretty high," said Rosseter. "It's about two teachers per nursing school or a shortage of 1,565 teachers."

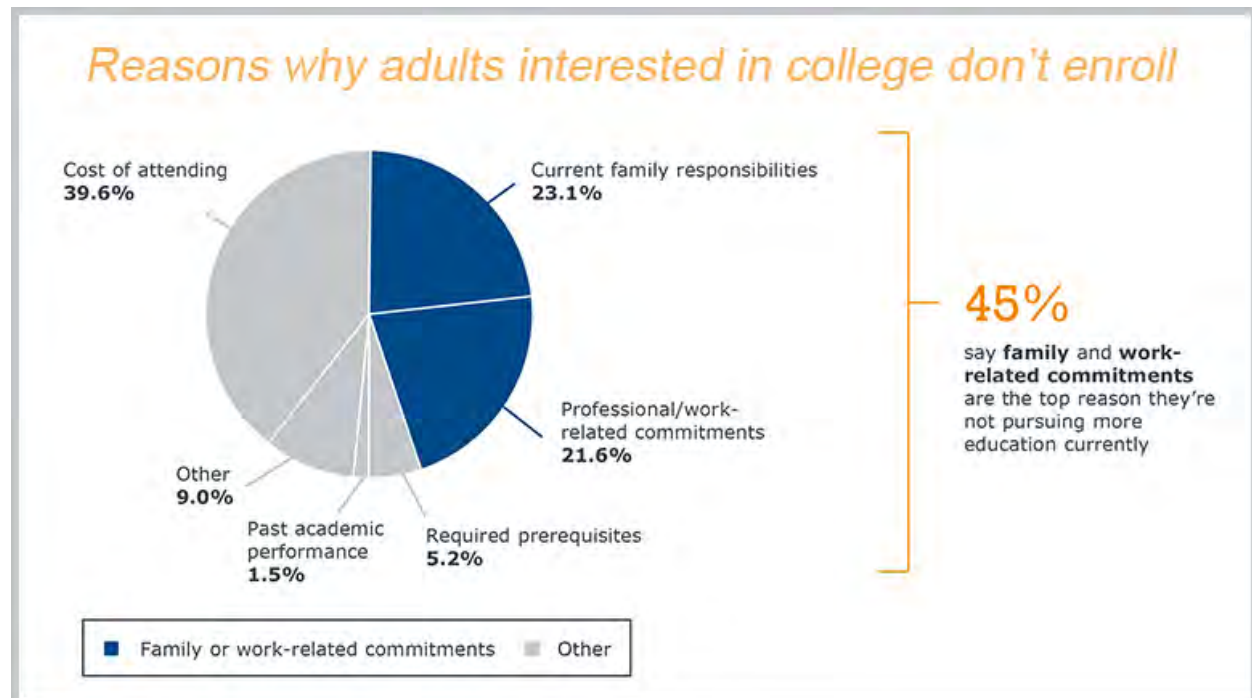
Better pay for working nurses is luring current and potential nurse educators away from teaching. The average salary of a nurse practitioner is \$97,000 compared to an average salary of \$78,575 for a nursing school assistant professor, according to the American Association of Nurse Practitioners.

A 2019 study by the Jack Kent Cooke Foundation found that students transferring from community college to a selective four-year institution go on to graduate at higher rates than those coming from four-year colleges — 73 versus 61 percent.

Private campuses like such students — and are working harder to get them.

Nearly half of the students who earn a bachelor's degree started at a community college.

The Cooke Undergraduate Transfer Scholarship is a highly selective scholarship for the nation's top community college students seeking to complete their bachelor's degrees at four-year colleges or universities. Each Cooke Scholar has access to generous financial support for two to three years, college planning support, ongoing advising, and the opportunity to connect with the thriving community of fellow scholars.



- Community colleges are two-year schools that are a popular option for international students. Almost all offer open-access admission, which means nearly all qualifying students can attend. According to data from the Institute of International Education, around 94,562 international students studied at U.S. community colleges in the 2017–2018 academic year.



- International students might decide to attend a two-year college in the U.S., sometimes called a community college, for a variety of reasons, such as more affordable tuition and available support for English-language learners. Though international student growth in the U.S. has slowed – increasing by only 1.5% in the 2017-2018 school year, the lowest rate since 2005-2006 – some community colleges still boast robust attendance numbers. These 10 colleges and college systems – classified as associate's colleges – reported the largest numbers of international students in the 2017-2018 academic year, according to data from the Institute of International Education. Community colleges are known for associate degree and certificate programs, though some do offer bachelor's degrees.

### Top 10 Study Abroad Destinations

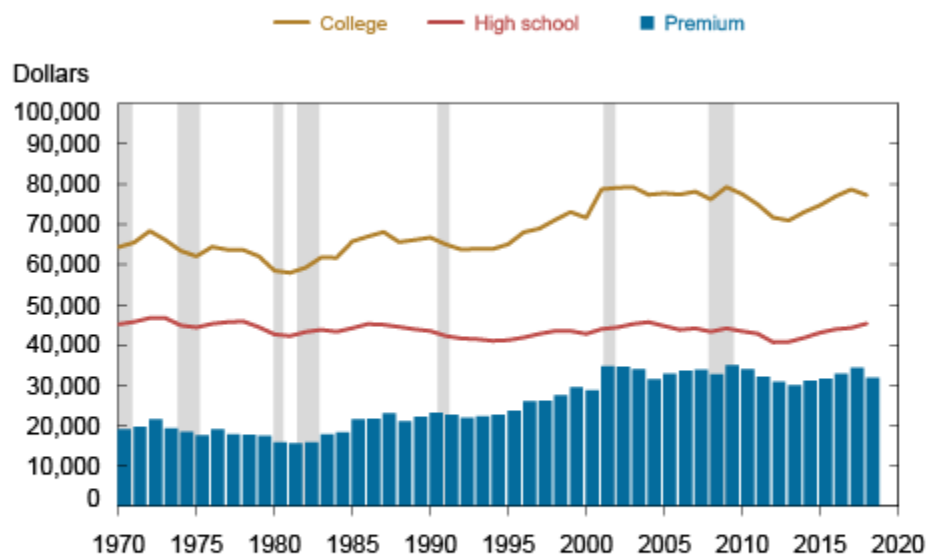
- Japan
- Costa Rica
- Australia
- Ireland
- China
- Germany
- France
- Spain
- Italy
- United Kingdom



## The Economic Benefit of a College Degree

College graduates tend to earn a substantial wage premium in the labor market. In recent years, the average college graduate with just a bachelor's degree earned about \$78,000, compared to \$45,000 for the average worker with only a high school diploma. This means a typical college graduate earns a premium of well over \$30,000, or nearly 75 percent. This "college wage premium" has fluctuated over time, as shown in the bars at the bottom of the chart. The college wage premium generally increased during the 1980s and 1990s, rising from less than \$20,000 to around \$30,000, before settling into a relatively narrow range of \$30,000 to \$35,000 after 2000.

## The College Wage Premium Remains Substantial



Sources: U.S. Census Bureau and U.S. Bureau of Labor Statistics, Current Population Survey, March Supplement; U.S. Bureau of Labor Statistics, Consumer Price Index.

Notes: Dollar figures are expressed in constant 2018 dollars. Shaded areas represent periods designated as recessions by the the NBER.

## College Is Still a Good Investment

In recent years, the rising cost of college has eroded the value of a bachelor's degree somewhat. However, the college wage premium has remained near its all-time high and the return to college now stands at around 14 percent—easily surpassing the threshold for a good investment. While the rising cost of college may be troubling, it has not yet changed the basic calculus as to whether earning a college degree is worth it. The benefits still outweigh the costs, at least for most people.

Americans spent an average of \$26,226 on college for academic year 2018 – 19. The total amount, as well as the proportion paid from various funding sources, is similar to 2017 – 18.

The top ways families planned to pay for college included saving for college (64%), researching college costs and financial aid (40%), and actively budgeting an allocation of savings, borrowing, and potential aid resources (36%). Other planning activities include the student taking Advanced Placement classes in high school or enrolling in dual high school/community college classes (18%), the family investing in the student’s skills or talents to increase chances of earning scholarships (14%), and parents setting a bottom line budget the student couldn’t exceed (8%).



### How families are paying for college

**43%**

#### family income & savings

This includes income and savings from parents and students.

**33%**

#### gift aid

This includes scholarships, grants, and gifts.

**24%**

#### borrowed money

This could be federal student loans, private student loans, credit cards, or other loans.

Cost is the topmost factor families weigh when narrowing down potential colleges. Four in five families eliminated colleges from consideration due to cost. While each family uses each paying-for college resource to a varying degree, most rely on multiple sources to achieve the task; few families can pay for college fully out-of-pocket: Only 10% did so in academic year 2018 – 19.

- In 2019, it was found that people in the United States with a Master's degree in Engineering had the highest average starting salary, at 82,589 U.S. dollars. People who held a Master's degree in Computer Science had the second highest starting salary, at 81,466 U.S. dollars.

#### An abundance of Masters

As higher education in the United States has become more common, and even expected, the number of Master's degrees awarded has increased. During the 1949-50 academic year, about 58,180 Master's degrees were awarded to students, with the vast majority being earned by male students. In the 2016-17 academic year, this figure increased to about 804,680 Master's degrees awarded, with the majority being earned by female students.

#### The right career

While engineering might have the highest starting pay for Master's degree holders, those with a Master's in Finance had the highest mid-career median pay in 2018. Engineering continues to be one of the most popular fields for those seeking their Master's degree, and STEM fields continue to dominate the field in number of Master's degrees awarded.

- Last year, President Donald Trump signed into law the Department of Defense and Labor, Health and Human Services, and Education Appropriations Act, 2019, which increased the maximum Pell Grant for the 2019-2020 award year by \$100. The maximum Pell Grant award for 2019-2020 is \$6,195 and the minimum is \$650. The maximum EFC a student can have and still qualify for a Pell Grant award is 5576.

The amount a student is awarded applies for the entire award year, from July 1 to June 30.

- More states are adding a graduation requirement for high school seniors: filling out the college financial aid form known as the FAFSA.

This summer, Texas and Illinois joined Louisiana in requiring that seniors complete the lengthy form, formally called the Free Application for Federal Student Aid, to get a diploma. California and Indiana are said to be mulling similar moves.

Why make teenagers fill out the form, which rivals an income tax return for its ability to inspire dread? Students who complete it are much more likely to continue their studies after high school, according to the National College Access Network, a nonprofit group that promotes post-high school education.

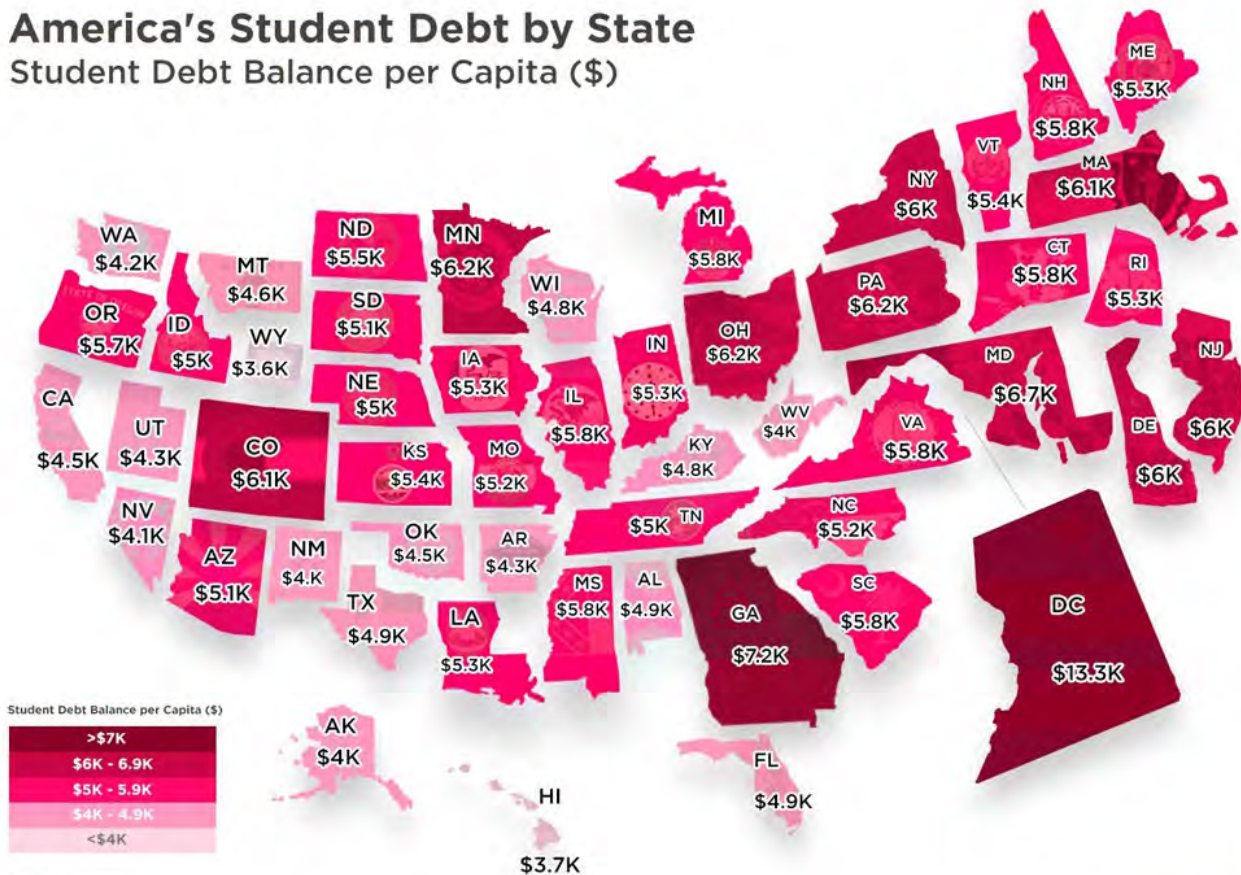
- ✓ The high school Class of 2018 missed out on \$2.6 billion in free money for college, according to NerdWallet's annual analysis of federal financial aid data. The money went unclaimed because about 661,000 of the nation's graduates who were eligible for a Pell Grant simply didn't complete their federal financial aid application.
- ✓ **More than half of U.S. high school graduates were eligible for free aid.** In the 2017-18 academic year, 52% of high school graduates (1,144,644 students) were eligible for a Pell Grant, according to federal financial aid data from the Florida College Access Network. Our calculations counted all graduates, including those who didn't start college after high school, to show the scope of students who would be eligible for federal aid if they had applied for it.
- ✓ **Over a third of 2018 high school graduates didn't complete the FAFSA.** Among all high school graduates — not just those who were eligible to receive a Pell Grant — 37% (1,266,474 students) didn't complete a FAFSA, according to NerdWallet's analysis.
- ✓ **\$2.6 billion went unclaimed for the 2018-19 academic year.** High school graduates eligible for a Pell Grant left behind \$2,582,758,067 in free aid by not applying for financial aid, according to NerdWallet's analysis.
- ✓ **Students could have received nearly \$4,000, on average.** Nationally, each student left behind an average of \$3,908 in Pell Grant aid that could have been used toward attending any college that processes federal student aid, according to NerdWallet's analysis.

# Visualizing America's Student Debt by State

Outstanding student loan debt in the U.S. has tripled over the last decade to \$1.5 trillion, surpassing auto and credit card debt and only second to housing debt. In an earlier [HowMuch article](#), we provided a state-by-state overview of this increase. Here, we look at current student loan debt burden per capita by state.

## America's Student Debt by State

### Student Debt Balance per Capita (\$)



Article & Sources:  
<https://howmuch.net/articles/americas-student-debt-by-state>  
 New York Federal Reserve - <https://newyorkfed.org>

howmuch.net

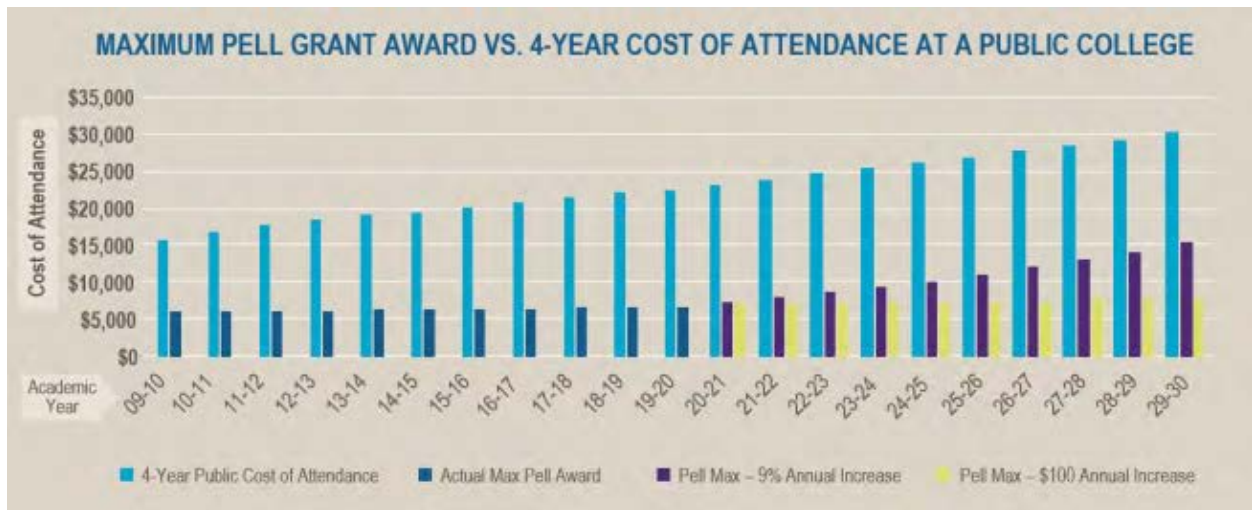
- 84% of adults report that student loans are negatively impacting the amount they are able to save for retirement
- A record \$1.5 trillion in student loans nationwide carries a wide variance of per capita debt burden across states
- The District of Columbia's student debt capital is higher than any state's at over twice the national average
- Wyoming, Hawaii and West Virginia lead the states with the lowest student loan debt per capita



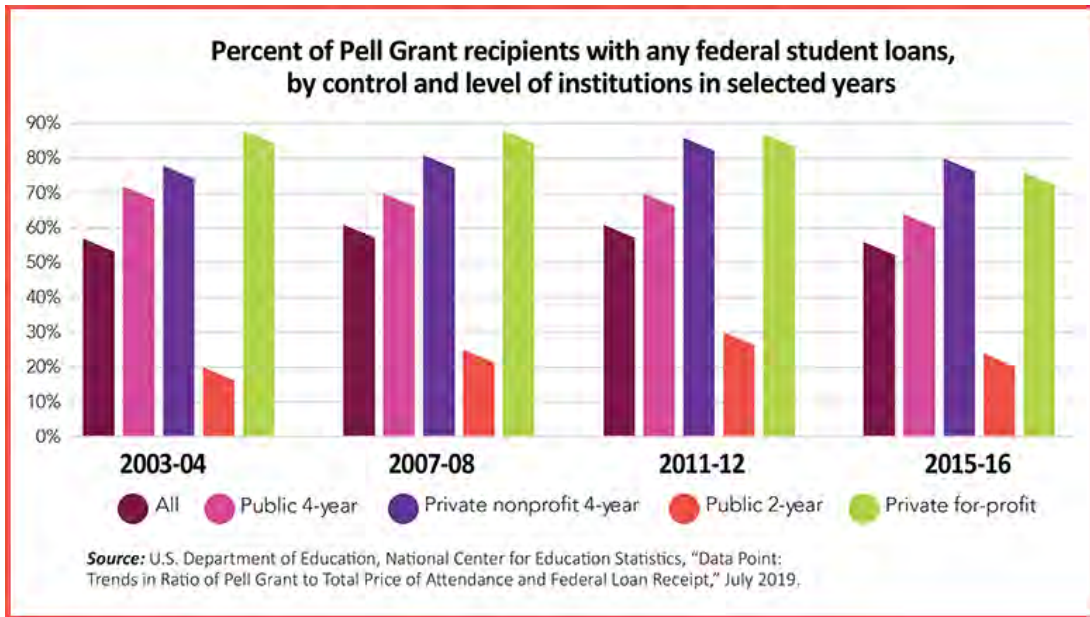
The Pell Grant has served as the cornerstone of financial aid for low-income students pursuing higher education since its creation in 1972. This need-based grant provides crucial support for 7.6 million students each year, or about [one-third of undergraduates](#).

Unfortunately, the purchasing power of the Pell Grant has continuously declined since the mid-1970s. The last time Congress made a [substantial investment](#) in the Pell Grant program was the 2009-10 stimulus package. At its peak in 1975-76, the maximum Pell award covered more than [three-fourths of the cost of attendance](#) – tuition, fees, and living expenses – at the average four-year public university.

Today, it covers less than 30 percent.



Only one-quarter of community college students who received Pell grants took on federal-loan debt in 2015-16, compared to nearly two-thirds of students at public four-year institutions.



## Many Students Rely Heavily on Financial Support from Institutions

While the strong economy and public rhetoric about student debt undoubtedly feed into concerns about enrollment cost, our research underscores the fact that program tuition and fees represent a substantial investment for adult learners and one that most couldn't afford on their own.

The majority of participants who were enrolled or who had plans to enroll indicated that they would receive financial support from institutions and/or employers:

- Financial aid/loans and grants (54.6%)
- Scholarships (39.7%)
- My employer/tuition reimbursement plan (21.7%)
- Graduate assistantships (11.5%)
- Other institutional support in the form of tuition stipends (6.2%)

Of the students who were receiving financial aid and/or scholarships from an institution, 79.4% indicated that they would need at least some financial support to continue their education.

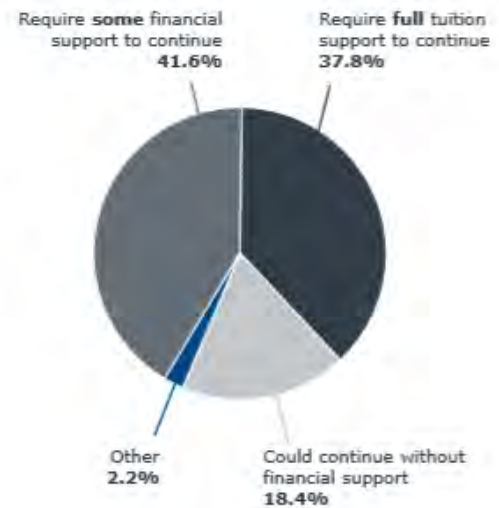
Require some financial support to continue 41.6%

Require full tuition support to continue 37.8%

Could continue without financial support 18.4%

Other 2.2%

**Figure 3: One in Three Financial Aid Recipients Requires Full Tuition Support**



Source: EAB research and analysis.

colt rrm

Source: EAB research and analysis.

The average tuition and fees at an in-state public college is about 73% less than the average sticker price at a private college, at \$10,116 for the 2019-2020 year compared with \$36,801, respectively, U.S. News data shows. Among ranked private colleges, 120 charge sticker prices of at least \$50,000 for the current academic year, according to tuition and fees data reported to U.S. News by 785 private institutions. Only a few ranked private colleges and universities – 61 – list a full rate price of less than \$20,000 for 2019-2020.

## Average Tuition & Fees

2019-2020



[WWW.USNEWS.COM/PAYINGFORCOLLEGE](http://WWW.USNEWS.COM/PAYINGFORCOLLEGE)

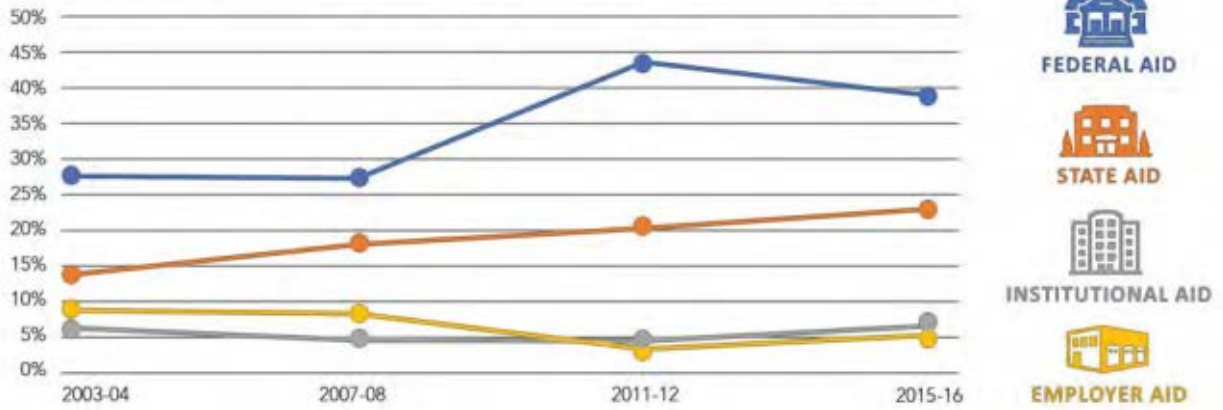
- The proportion of students on college campuses from the lowest-income families is going up, the Pew Research Center reports, while the share of students from the middle has fallen in the last two decades from 48 percent to 42 percent at private, nonprofit institutions, and from 48 percent to 40 percent at public four-year universities.

The proportion of middle-class high school graduates heading straight to college at all — meaning those from families in the middle 60 percent of income — is gradually declining, sliding from a high of 67 percent in 2010 to 62 percent in 2015. Though it rebounded to 65 percent in 2016, that number has been overtaken by the proportion of high school graduates from families at the lowest income level who enroll in college.

Middle-class high school students give a number of reasons for forgoing higher education, according to an analysis of federal data by the Georgetown Center for Education and the Workforce: 4 percent cited family obligations, 6 percent planned to take a gap year before enrolling, 8 percent said they weren't ready and 20 percent said they just didn't want to go.

Fully a quarter of middle-class high school students who don't plan on college said it was because of the expense. The inflation-adjusted published price of college tuition, fees, room and board between 1999 and this year increased 54 percent at private nonprofit and 78 percent at public universities and colleges, according to the College Board. The median income of middle-class families, when adjusted for inflation, Pew says, hardly budged during that general period of time.

### Percent of public two-year college students receiving select aid types



**Source:** Data included in recently released financial aid tables from the National Postsecondary Student Aid Study (NPSAS), which is conducted every four years.



- If Congress ended a decades-old ban on providing financial aid to prison inmates, states could save hundreds of millions of dollars in correctional costs and boost employment rates, according to a study released Wednesday by the Vera Institute of Justice and the Georgetown Center on Poverty and Inequality, both nonprofit groups.

Congress barred inmates from accessing federal Pell grants to finance college courses in 1994, arguing it was unfair for prisoners to receive a share of already limited financial aid dollars. Pell grants, a form of aid for low-income students, served as the primary source of funding for college programs in prisons. Without grant dollars, many facilities scaled back their educational offerings and few inmates could afford to pursue higher education.

Using state and federal data, authors of the report say about 463,000 prison inmates would be eligible for Pell grants if Congress repealed the ban. If half of that population took advantage of the grant, states could reduce recidivism rates and save an estimated \$366 million a year in correctional spending. Those savings would skyrocket to \$549 million a year if 75 percent of the Pell-eligible prison population tapped the grant.

In Maryland, the authors estimate the state could save \$7.6 million a year in prison expenditures, while Virginia could lower corrections spending by \$3.6 million according to the report.

# AACT FAST FACTS 2019



**TOTAL 1,051**

## HEADCOUNT ENROLLMENT (FALL 2017)<sup>2</sup>

Estimated change  
Fall 2017 - Fall 2018: -3.2%<sup>14</sup>

### CREDIT

**58%** **7.0M**

### NON CREDIT<sup>13</sup>

**42%** **5.0M**

TOTAL: 12M

## NUMBER & TYPE OF COLLEGES (2019)<sup>1</sup>

Public Tribal Independent

**941** **35** **75**

## CREDIT BY ATTENDANCE<sup>2</sup>



## GENDER<sup>2</sup>



## DEGREES AND CERTIFICATES AWARDED (2016-2017)<sup>6</sup>

ASSOCIATE DEGREES **839,855** CERTIFICATES **549,149**  
BACCALAUREATE DEGREES **23,216**

Bachelor's degrees awarded by 130 public and 53 independent colleges (\*\*, \*§)



## DEMOGRAPHICS OF STUDENTS ENROLLED FOR CREDIT<sup>2</sup>

HISPANIC.....**25%**  
BLACK .....**13%**  
WHITE.....**46%**  
ASIAN/PACIFIC ISLANDER .....**6%**  
NATIVE AMERICAN .....**1%**  
2 OR MORE RACES.....**3%**  
OTHER/UNKNOWN....**4%**  
NONRESIDENT ALIEN.....**2%**



## A BETTER MEASURE OF SUCCESS

Fall 2010 Cohort

VFA metrics are a better measure of community college student success than traditional IPEDS metrics.

**VFA**  
**59%**

VS.

**IPEDS**  
**25%**

VFA measures:  
• All entering students  
• 3 years to complete  
• 9 separate outcomes

Traditional IPEDS measures:  
• First time, Full time  
• 3 years to complete  
• Only graduates

## AGE<sup>5</sup>

**AVERAGE: 28**  
**MEDIAN: 24**

**54%**  
<22

**38%**  
22-39

**9%**  
40+

## OTHER SIGNIFICANT DEMOGRAPHICS<sup>5</sup>

First generation to attend college.....**29%**  
Single parents.....**15%**  
Non-U.S. citizens .....**9%**  
Veterans .....**5%**  
Students with disabilities...**20%**  
Students with prior bachelor's degree.....**8%**



**AVERAGE ANNUAL TUITION AND FEES (2017-2018)<sup>7</sup>**



**\$3,660**

Community Colleges  
(public, in district)

**\$10,230**

4-Year Colleges  
(public, in state)



**PUBLIC COMMUNITY COLLEGES WITH ON-CAMPUS HOUSING<sup>10</sup>**



**MEDIAN EARNING OF FULL-TIME EMPLOYEES BY EDUCATIONAL ATTAINMENT<sup>11</sup>**

Less than High School Diploma

**\$26,200**

High School

**\$36,000**

Associate Degree

**\$42,600**

Bachelor's Degree

**\$60,100**

**REPRESENTATION OF COMMUNITY COLLEGE STUDENTS AMONG UNDERGRADUATES (FALL 2017)<sup>2</sup>**

**41%**

All U.S. undergraduates

**40%**

First-time freshmen

**56%**

Native Americans

**52%**

Hispanics

**42%**

Blacks

**39%**

Asian/Pacific Islanders

**% OF FEDERAL AID RECEIVED BY COMMUNITY COLLEGE (2016-2017)<sup>3</sup>**

**34%**

Federal Grants

**18%**

Federal Work-Study

**24%**

Federal Supplemental Educational Opportunity Grants (FSEOG)

**13%**

Subsidized Federal Loans

**6%**

Unsubsidized Federal Loans



**COMMUNITY COLLEGE REVENUES BY SOURCE (2016-17)<sup>4</sup>**

Tuition \$16,919,744,855 27.8%

Federal \$6,890,649,604 11.3%

State \$19,962,607,648 32.8%

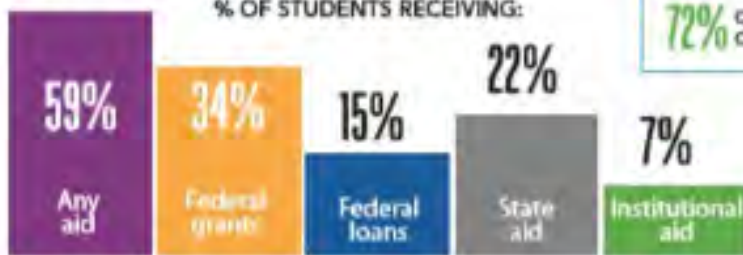
Local \$12,143,496,648 19.9%

Other \$5,032,734,883 8.3%

Total \$60,949,233,638 100%

**STUDENT FINANCIAL AID (2016-2017)<sup>5</sup>**

**% OF STUDENTS RECEIVING:**



**EMPLOYMENT STATUS (2015-16)**

**62%** OF ALL FULL-TIME STUDENTS AT COMMUNITY COLLEGES WORK



**72%** OF ALL PART-TIME STUDENTS AT COMMUNITY COLLEGES WORK



**% OF STUDENTS APPLYING (2015-2016)<sup>6</sup>**

Any aid 73%  
Federal aid 62%

**SOURCE:**

<sup>1</sup>AACC membership database, January 2019. Represents regionally accredited primarily associate degree granting colleges.  
<sup>2</sup>NCES (2018), IPEDS Fall 2017 Enrollment Survey (AACC analysis).  
<sup>3</sup>AACC membership database, 2018 (AACC analysis).  
<sup>4</sup>NCES (2018), Estimates provided on NEC (2018) Term Enrollment Estimates, Fall 2016.  
<sup>5</sup>NCES (2018), 2015-16 National Postsecondary Student Aid Study (NPSAS16) (AACC analysis).  
<sup>6</sup>College Board, (2016), Trends in Student Aid, 2016.  
<sup>7</sup>College Board, (2016), Trends in College Pricing, 2016.  
<sup>8</sup>NCES (2018), IPEDS 2017 Completion Survey (AACC analysis).  
<sup>9</sup>NCES (2018), IPEDS 2016-17 Finance Survey, Files (AACC analysis).  
<sup>10</sup>NCES, (2018), IPEDS 2017 Institutional Characteristics Survey File (AACC analysis).  
<sup>11</sup>Bureau of Labor Statistics (2018), Career Outlook: More Education, Lower Unemployment, Higher Earning.



One Dupont Circle, NW, Suite 700  
 Washington, DC 20036  
[www.aacc.edu](http://www.aacc.edu)

## 12 Trends for Lifelong Learning

Microlearning  
Virtual Conferences  
Flipped Classroom  
Neuroscience  
Social Learning  
MOOCs  
Open Education –  
allowing for  
changed content  
Content Marketing  
Alternative  
Credentialing  
Self Directed  
Learning  
Self publishing  
Big Data

## Today's College Students Aren't Who You Think They Are

So here's a snapshot of the 17 million Americans enrolled in undergraduate higher education, according to numbers culled by the National Center for Education Statistics.

1 in 5 is at least 30 years old

About half are financially independent from their parents

1 in 4 is caring for a child

47 percent go to school part time at some point

A quarter take a year off before starting school

2 out of 5 attend a two-year community college

44 percent have parents who never completed a bachelor's degree

Source: NPR

## Five Key Trends for Professional and Continuing Education Leaders in the Next Five Years

1. Rising Competition and Changing Market Demand
2. Lives Will Extend (On Average) Beyond 100 Years, Impacting Learning Needs
3. Backfilling the Soft Skills that Current Graduates Lack
4. Badging and Blockchain Credential Distribution
5. Leveraging Artificial Intelligence and Virtual and Augmented Reality

## Lifelong Learning

- There is widespread agreement among labor economists that workers need access to continuous education to stay ahead of rising automation. One frequently quoted 2013 study from Oxford University predicted that nearly half of American jobs are at risk of being taken over by computers by 2033. While experts predict that few occupations will be totally automated, most jobs are likely to have many of their basic activities performed by a computer in the future.

Half of workers already prefer to learn at the point when they need to, according to a LinkedIn survey of 4,000 human resources and learning and development executives. The changing nature of work demands that higher education use new approaches to reach workers in the new economy.

- The market for adult students remains underserved. In terms of numbers, nearly half of the adult population—74 million people—are prospective students for colleges, who continue to fish in the much smaller pond of high-school graduates, some 3.6 million students. Of the 17 million undergraduates in college, 27 percent of them are over the age of 24. On top of that, 21 percent dropped out of college before earning a degree. So

Knowing that about 26 percent of the adult population have only a high school diploma, more than 26 states have set specific goals to increase the percentage of their residents with a college credential by 2025. As a result, college officials in those states have started focusing their efforts on better serving the adult market. To date, not enough schools are serving adult learners at scale with strategies that are known to work for them: prior-learning assessments, competency-based programs, and online degrees.

Prior-learning assessments take into account what students have learned through their own experiences, allowing them to tailor their degree programs to broad areas. More than 350 institutions also now offer or are seeking to create competency-based degrees, which award credentials based on how much students know, not how much time they spend in a classroom.

And the proportion of undergraduates who are enrolled in at least one distance education course has risen from 27 percent to 30 percent since 2014, while the proportion of graduate students enrolled at least partially online has grown from 32 percent to 36 percent.

- As technology brings sweeping changes to business, healthcare, government and other fields, a similarly dramatic shift is happening in the workforce.

Many workers never envisioned a day they'd need to go back to college to stay employable. They now find themselves pursuing different degrees, certifications, boot camps and other programs to augment existing skills or jump-start an entirely new career.

Several experts believe this model of lifelong learning will become the norm. It's a trend that's certainly gaining momentum, with many institutions seeing an influx in adult learners.

Much of the technology geared for these older students, however, may be missing the mark, according to a new report from Luminary Labs.

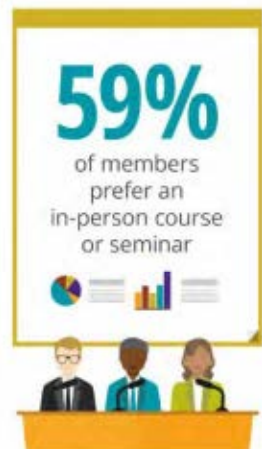
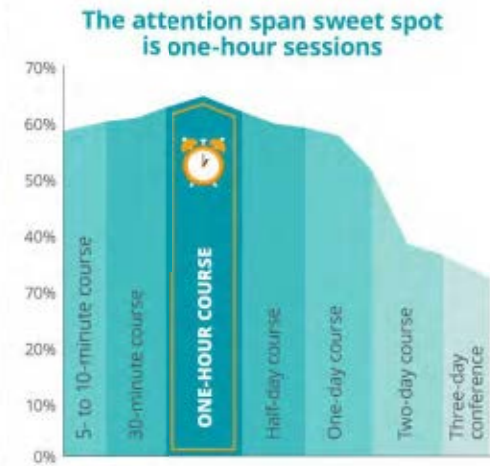
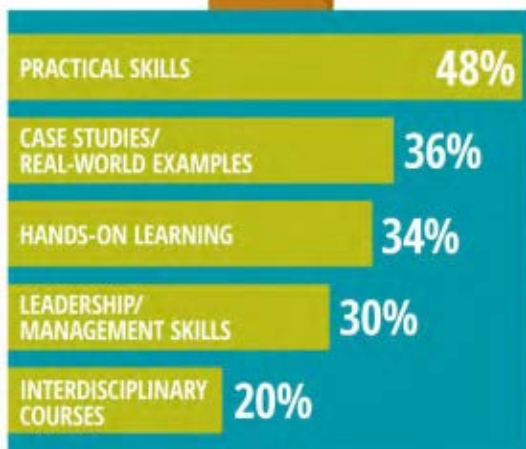
To better support adult students, Luminary researchers consider three pathways.

1. Engage with Learners About What Solutions Work for Them
2. Teach Professors to Improve Accessibility to Reach All Learners  
Identify the Problem, Then Find the Technology Solution

# CONTENT IS KEY TO CONTINUING EDUCATION

*Leverage great content to position your association ahead of the rest*

The Member Professional Development Study gives best practices for developing content that attracts and resonates with today's members across generations.



- As with classes in the past, the job offer rate for the Class of 2019 was strongly tied to internship experience and the pay status of those internships, according to results of NACE's *Class of 2019 Student Survey*.

The survey found that more than half of all graduating seniors who applied for a full-time job—53.2 percent—received at least one job offer. Within this group, 57.5 percent of students who had an internship and 43.7 percent of graduating seniors who did not have an internship received a job offer.

In terms of the average number of job offers, graduating seniors who applied for a full-time job and participated in an internship received 1.17 job offers; those who did not have an internship received a 0.98 offers.

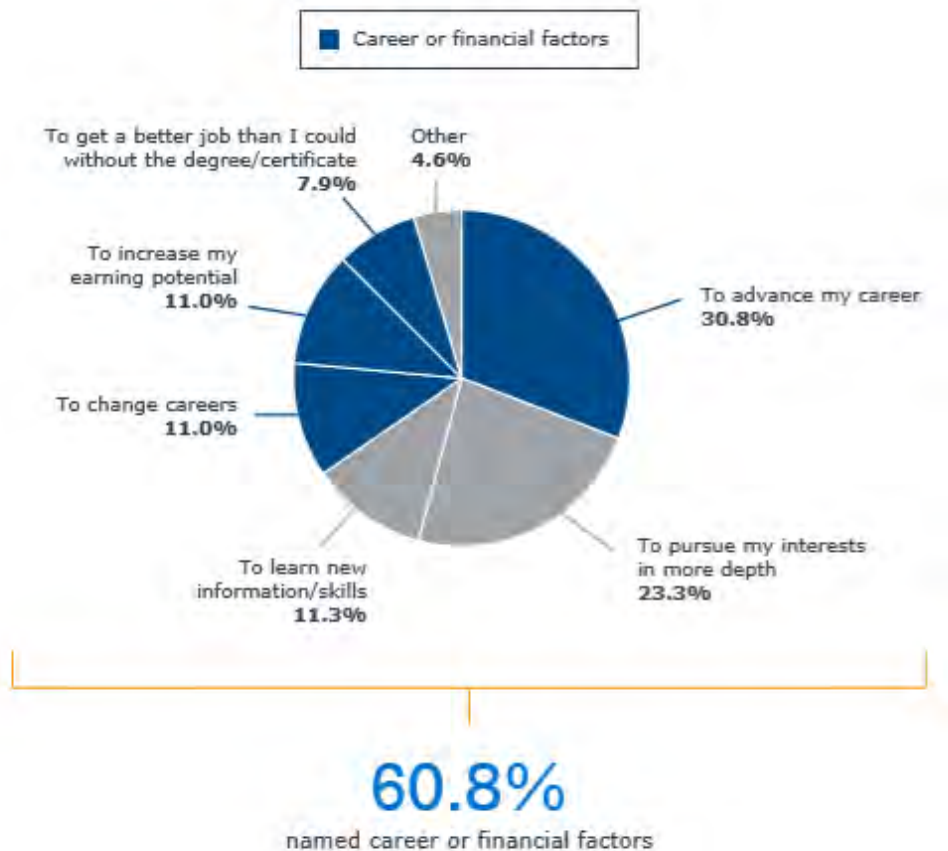
The impact of internship pay status was evident as well as 66.4 percent of Class of 2019 graduates who had a paid internship received a job offer. On the other hand, just 43.7 percent of unpaid interns were offered a job.



Only an average of  
**60%**  
of graduates  
work in a job  
related to their  
education background

## Career and Financial Growth Are the Main Drivers for Pursuing Education Further

The weight of financial factors is reflected not just in adult learners' concerns about their education but also in their motivations for enrolling and their definitions of successful post-enrollment outcomes. Of the students who were planning to enroll or were currently enrolled, 60.8% named career or financial factors as the primary reason for their interest in furthering their education, as represented in blue in Figure 4. These findings indicate a strong desire from adult learners to see a direct return on their investment in education, either in terms of career mobility or earning potential.



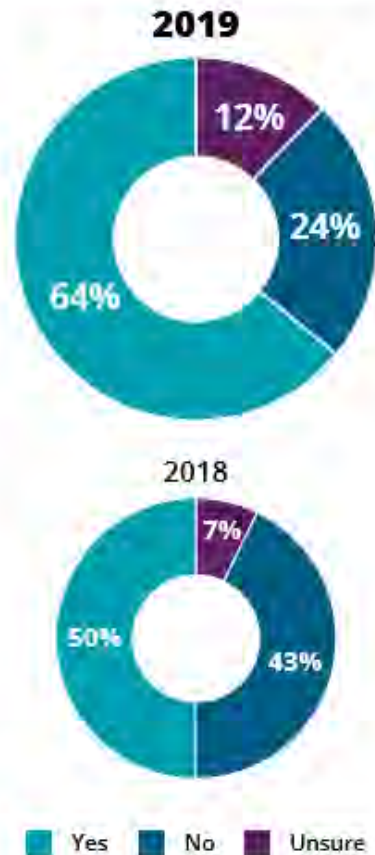
## **PARTNERSHIPS THAT ENHANCE SCHOOL CURRICULUM**

Less than half of employers (46%) believe college prepares students to join the workforce. This perceived shortcoming may explain why 64% of employers say their organization has collaborated with schools to make curriculum more responsive to workplace needs. This represents an increase of 14 percentage points since 2018.

Of the employers who collaborate with schools, 79% partner with four-year colleges and 53% partner with community colleges. A smaller share of these employers partner with vocational (30%) and for-profit schools (23%).

Some employers who do not collaborate with schools face barriers to doing so. Examples include a lack of budget (18%), internal politics (13%), uncertainty about how to collaborate with schools (13%), and weak relationships with school officials (9%). However, the leading barrier is self-imposed, as 45% of employers have not attempted a collaboration.

*In the past three years, has your organization collaborated with colleges, universities, and vocational schools to make the curriculum more responsive to workplace needs?*



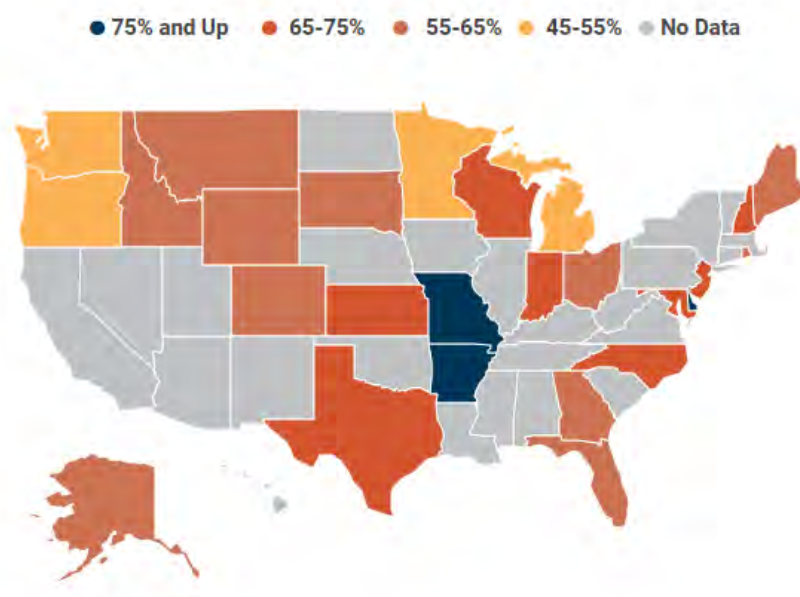


- In 2016, about 41 percent of students enrolled in grades 1 through 12 had parents who reported that public school choice was available to them. Public school choice was more common in some places than others. For example, a higher percentage of students who lived in cities (53 percent) than of students who lived in suburban areas (37 percent), towns (36 percent), and rural areas (32 percent) had parents who reported that public school choice was available. Additionally, the percentage of students whose parents reported that public school choice was available was highest for students in the West (53 percent), followed by students in the Midwest (43 percent), the South (39 percent), and the Northeast (27 percent).

## How Well Do States Graduate Homeless Students?

Nationwide, homeless students are significantly less likely to graduate high school than other students, even those in poverty. And not earning a diploma leaves these young people six times more likely to be homeless as adults, according to a new study by the Education Leads Home initiative.

However, the report also found that graduation rates for homeless students vary considerably from state to state, as the map below shows.



SOURCE: [Education Leads Home](#), Education Week

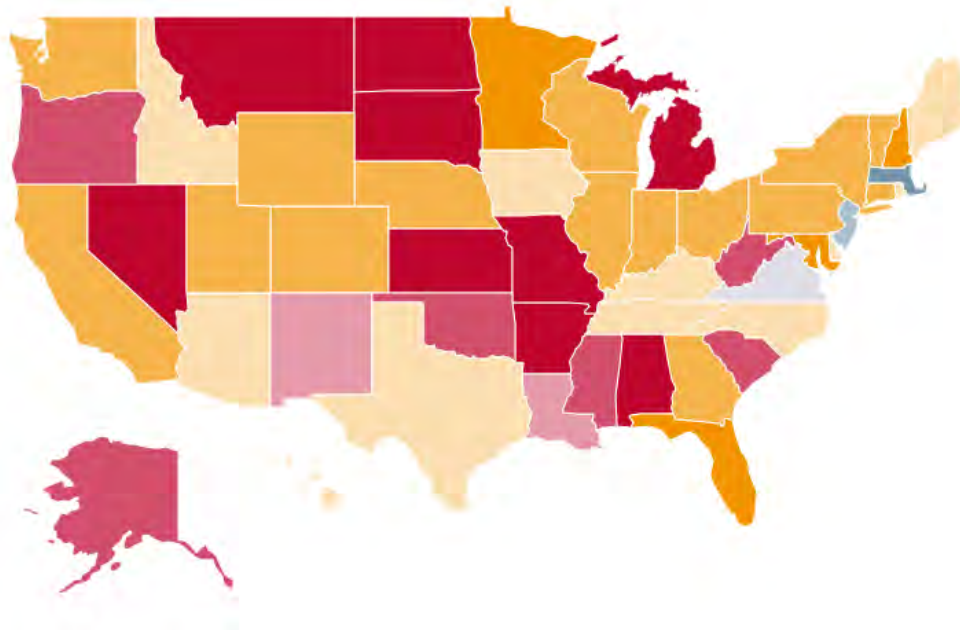
# Nation Earns a C in K-12 Achievement

Massachusetts finishes first in the nation for K-12 Achievement, with the only B-plus. New Jersey receives the only B and Virginia gets the only B-minus. On the other end of the spectrum, New Mexico and Louisiana receive the nation's lowest grades at D-minus. In all, 30 states earn grades between C-plus and C-minus.

## National score is a C (73.0)

● B+ ● B ● B- ● C+ ● C ● C- ● D+ ● D ● D-

> Hover over a state to see its overall score and results for K-12 Achievement (2019).



SOURCE: Education Week Research Center, 2019

# 2019 TEACHER CONFIDENCE INDEX

Teachers are less optimistic than they were a year ago

## By location



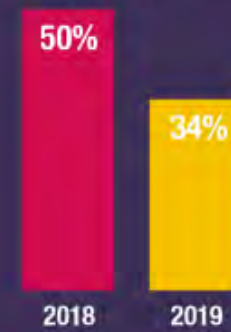
## By poverty levels



## Overall confidence



## Teacher optimism



## By grades



SOURCE: HOUGHTON MIFFLIN HARCOURT

**yahoo!**  
finance

Low salaries, troubled kids — Teacher morale has 'reached a tipping point,' Study

- In 2016, the percentage of students who were homeschooled was higher for those living in households with three or more children (4.7 percent) than for those who were the only child in the household (2.7 percent) and for those living in households with two children (2.3 percent).

In 2016, parents of homeschooled students were asked to identify the most important reason for choosing to homeschool their child. The reason for choosing homeschooling that was reported as the most important by the highest percentage of homeschooled students' parents was a concern about school environment, such as safety, drugs, or negative peer pressure (34 percent). The two other reasons for homeschooling frequently cited as most important by students' parents were dissatisfaction with the academic instruction at their schools (17 percent) and a desire to provide religious instruction (16 percent).

- No gains have been made in student preparedness for college, according to ACT data. There are still gaps in scores between white and minority students, excluding Asian American students, who have improved over the past few years.



The new ACT score results show that scores across the country are continuing to decline slightly from last year, especially in math and English. The number of graduates meeting the required benchmarks in math and English is the lowest it has been in 15 years.

The average composite score was 20.7, a tiny drop from 20.8 last year and down from 21 in 2017. The ACT test is scored on a 36-point scale.

Almost 1.8 million students, or 52 percent of the 2019 graduating class, took the ACT.

Of the Class of 2019 who took the test, 37 percent met three of the four College Readiness Benchmarks, and 36 percent did not meet any. The latter number has grown over the past few years, reports ACT. Students who took the recommended high school core curriculum stayed steady in their readiness in English and math.

## Average ACT Scores 2012-2018

Year	# of Test Takers	English	Math	Reading	Science	Writing	Composite
2012	1,666,017	20.5	21.1	21.3	20.9	7.1	<b>21.1</b>
2013	1,799,243	20.2	20.9	21.1	20.7	7	<b>20.9</b>
2014	1,845,787	20.3	20.9	21.3	20.8	7.1	<b>21.0</b>
2015	1,924,436	20.4	20.8	21.4	20.9	6.9	<b>21.0</b>
2016	2,090,342	20.1	20.6	21.3	20.8	19.3*	<b>20.8</b>
2017	2,030,038	20.3	20.7	21.4	21.0	6.5	<b>21.0</b>
2018	1,914,817	20.2	20.5	21.3	20.8	—**	<b>20.8</b>

Sources: 2012 Profile Report, 2013 Profile Report, 2014 Profile Report, 2015 Profile Report, 2016 Profile Report, 2017 Profile Report, 2018 Profile Report

\*2016 Writing results are based on ACT Writing from September 2015 to August 2016, when the test was scored on a scale of 1-36.

\*\*As of 2018 ACT seems to have opted to no longer provide information about Writing score averages (except indirectly through ELA scores).

After 2007's peak, there is a **general decline in scores across the board for nearly a decade**. In 2013, ACT, Inc. instituted changes to the ACT to better reflect national curricula, which is possibly reflected in the general stability of composites and subscores from 2013 onwards (with the exception of Math, which has steadily decreased since then).

- The average eighth grade reading score on a nationally representative test declined among public school students in more than half of the states, according to data released Wednesday by the National Center for Education Statistics, the research arm of the Education Department.

The dismal results were part of the release of the National Assessment of Educational Progress, known as the “nation’s report card.” The test assesses a sample of fourth and eighth grade students — more than 290,000 in each subject in 2019 — every other year.

“Over the past decade, there has been no progress in either mathematics or reading performance, and the lowest-performing students are doing worse,” Peggy Carr, the associate commissioner of the center, said in a statement.

### **How many students attend public schools?**

In America's public schools there are **almost 50.8 million students**, based on **federal projections** for the fall of 2019.

### **How many students attend charter schools?**

According to **data from three years earlier**, **3 million** public school students, or 6 percent, are in charter schools.

### **How many students attend private schools? What are the religious affiliations of those schools?**

In total, **5,750,520 students** attend private schools, according to **NCES 2015-16** data.

- 36.2% of those in Catholic schools
- 24.3% in nonsectarian (non-religious) schools
- 16.0% in un-affiliated religious schools
- 13.2% in conservative Christian schools
- 10.2% in other religiously affiliated schools

### **How many students are homeschooled?**

There are **1,689,726 homeschooled students**. That's 3.3 percent of all students, **according to NCES 2015-16** data. After doubling between 1999 and 2012, the number of homeschooled students in the United States appears to have leveled off. So who are the nation's homeschoolers? **This overview of homeschooling** includes more information on the topic.

The enrollment data confirm what most college officials who've been paying attention already know: that the number of people enrolled in U.S. colleges has tumbled since the recession, dropping from a total head-count peak of 29.5 million in 2010-11 to 26.4 million in 2017-18.

The overall decline of more than 10 percent has been fueled by drops of 47 percent and 23 percent in total head-count enrollments in for-profit and community colleges in that seven-year period, and despite increases in enrollment at public four-year colleges (12.2 percent) and four-year private nonprofit colleges (5.2 percent) during that time.

Those enrollment trends have been fairly well documented, both by federal data and those reported regularly by the National Student Clearinghouse.

**Number of U.S. Postsecondary Institutions Awarding Federal Aid, by Sector**

Academic Year	All Institutions	Public 4-year	Private nonprofit 4-year	Private for-profit 4-year	Public 2-year	Private nonprofit 2-year	Private for-profit 2-year	Public < 2-year	Private nonprofit < 2-year	Private for-profit, < 2-year
2002-03	6,354	632	1,558	300	1,155	251	764	264	112	1,318
2003-04	6,412	635	1,564	351	1,162	233	783	250	116	1,318
2004-05	6,383	640	1,543	370	1,143	225	793	244	107	1,318
2005-06	6,463	641	1,551	408	1,154	219	821	218	96	1,355
2006-07	6,536	644	1,548	453	1,148	211	844	217	89	1,382
2007-08	6,551	654	1,547	490	1,132	181	857	218	87	1,385
2008-09	6,632	653	1,551	530	1,127	183	893	217	75	1,403
2009-10	6,742	673	1,553	564	1,094	176	963	222	80	1,417
2010-11	7,021	679	1,556	650	1,083	174	1,018	253	82	1,526
2011-12	7,234	683	1,566	734	1,072	185	1,048	256	79	1,611
2012-13	7,253	690	1,566	782	1,035	176	1,030	256	78	1,640
2013-14	7,236	692	1,597	761	1,028	162	1,019	260	75	1,642
2014-15	7,151	701	1,596	726	1,020	158	954	243	73	1,680
2015-16	7,021	710	1,602	700	1,007	171	881	248	86	1,616
2016-17	6,606	737	1,588	514	981	158	830	240	77	1,481
2017-18	6,502	751	1,597	488	969	154	782	235	75	1,451
2018-19	6,138	769	1,583	358	955	138	612	228	59	1,436

Student loan borrowers now graduate with an average of **\$37,172** in student loan debt.

*That's about the same as ...*



A 20% down payment  
on a **\$185,000** home



A 10% down payment  
on a **\$370,000** home



A brand new  
Audi A4  
**(\$36,000)**



Tesla Model 3  
**(\$35,000)**



Ford F-250  
**(\$35,550)**



A wedding  
**(\$35,329)**



A swimming pool  
**(\$34,971)**



Startup costs  
for a business  
**(\$30,000)**

**SOURCES:** [usstudentloansolutioncenter.com](http://usstudentloansolutioncenter.com); [motortrend.com](http://motortrend.com); [sba.gov](http://sba.gov); [theknot.com](http://theknot.com); [homeadvisor.com](http://homeadvisor.com)



## Apprentices and Participation Trends

- In FY 2018, more than 238,000 individuals nationwide entered the apprenticeship system.
- Nationwide, there are over 585,000 apprentices currently obtaining the skills they need to succeed while earning the wages they need to build financial security.

71,700 participants graduated from the apprenticeship system in FY 2018.

- There are over 47,000 veterans nationwide currently participating in an apprenticeship program.

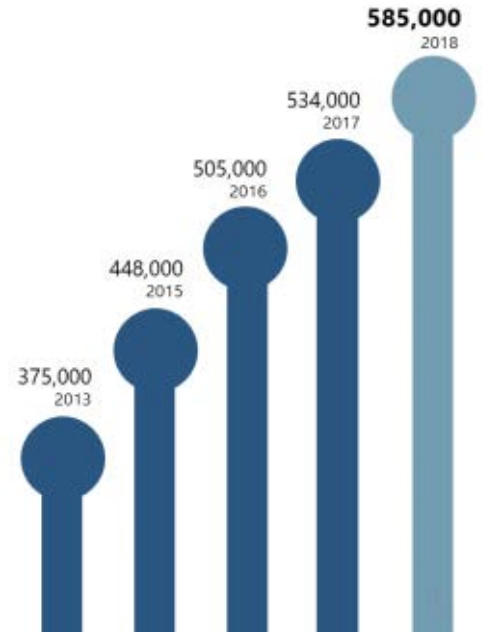
## Our Apprenticeship Numbers Continue to Show Strong Growth in FY 2018

# 56%

GROWTH SINCE 2013

### Key Facts

- Over 282,000 participants graduated in the last five years.
- Over 10,800 new programs were created in the last five years.

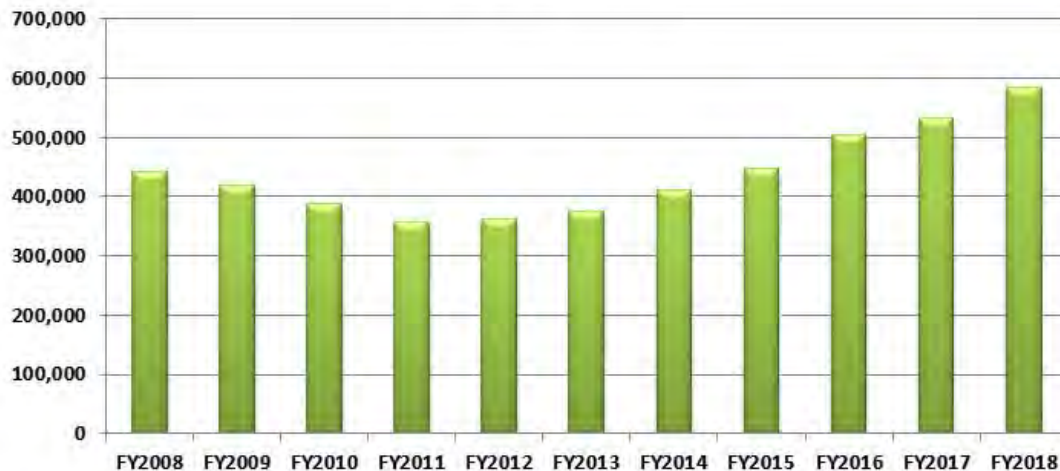


## Apprenticeship Sponsors and Trends

- There are more than 23,400 registered apprenticeship programs across the nation.
- 3,229 new apprenticeship programs were established nationwide in FY 2018.

## National Apprenticeship Data

### Active Apprentices



### National Registered Apprenticeship Results

Fiscal Year	Active Apprentices	New Apprentices	Total Completers	Active Programs	New Programs
2008	442,386	132,782	51,386	24,285	1,525
2009	420,140	110,707	50,493	26,622	1,456
2010	387,720	109,989	51,212	25,961	1,807
2011	357,692	130,391	55,178	24,967	1,409
2012	362,123	147,487	59,783	21,279	1,750
2013	375,425	164,746	52,542	19,431	1,540
2014	410,375	170,544	44,417	19,260	1,623
2015	447,929	197,535	52,717	20,910	1,898
2016	505,371	206,020	49,354	21,339	1,701
2017	533,607	191,563	64,021	22,488	2,369
2018	585,026	238,549	71,789	23,441	3,229

## AACC

Community colleges provide a pathway to educational and career success for millions of students. That pathway is recognized as a key component to increasing the number of skilled workers in the United States. The American Association of Community Colleges (AACC) has partnered with the U.S. Department of Labor to launch a major initiative to dramatically increase the number of apprentices entering the workforce.

The Virtual Apprenticeship Network (VAN) will drastically increase the number of apprentices across the country by providing resources to America's community colleges and employers to create 16,000 new apprenticeships. "These are not apprentices in name only," said Walter G. Bumphus, AACC's president and CEO. "These are industry-relevant apprenticeship programs that are recognized and/or registered and will result in thousands of students that are job-ready and a newly imagined network of apprenticeships that will serve industry employers needs for decades to come."

The program will expand registered apprenticeship programs, create a Virtual Apprenticeship Network that connects community colleges and employees looking for training opportunities, and fund 80 community colleges that exhibit the ability to support the rapid expansion of local partnerships to garner 12,000 new apprentices in three years. In addition, AACC will work with four globally recognized companies and their local community colleges to implement registered apprenticeship programs designed to ensure their specific needs for qualified and trained employees are met. These partners will each commit to training 1,000 apprentices within the three year timeframe.

"We are so proud to partner with the Department of Labor on this critical work," Bumphus said. "It is imperative that we continue to advance student success in all of its forms. Creating new and better ways at the intersection of students and employers just makes sense and we are excited to build something that will have a lasting impact for students, employers, and for the American economy."

- After schools switched from physical instruction to remote learning in the wake of the coronavirus pandemic, districts and state leaders assured families they would get devices for students and the technology resources needed to do schoolwork at home. But more than two months after the switch to distance learning, many students still don't have what they need.

Students who haven't had access to technology since mid-March could face significant problems, said Karen Cator, CEO of Digital Promise, a nonprofit that works for innovation in schools.

- Only 24 percent of public school teachers reported that all of their students had access to a computer or tablet to use for school work, according to a nationally representative survey of 600 public school teachers conducted in early May by Educators for Excellence (E4E).

Kids in low-income families were most likely to be left out of remote learning. A survey of more than 1,500 parents by ParentsTogether Action, a parent-led nonprofit, revealed that children from families with a household income of less than \$25,000 per year are 10 times less likely to participate in remote learning than children from families earning more than \$100,000. Children from low-income homes were also three times more likely to lack consistent access to a device (32 percent vs. 10 percent).

## State of Maryland

Maryland schools spent \$18 million on local food served in schools according to the USDA Farm to School Census. Maryland was the first state in the nation to have every public school system participate in the Maryland Homegrown School Lunch, an element of the Maryland Farm to School program.

In Maryland, there are more than 2 million acres in farmland and more than 12,000 farms. More than 70 million lunches and 24 million breakfasts are served in Maryland schools annually. Maryland Farm to School is *not* the federally funded Childhood Nutrition Programs but locally sourced Maryland foods can be a part of the Breakfast, School Lunch, Fresh Fruit and Vegetable Program, Summer Meals, Maryland Meals for Achievement, etc.



- There is a program of Teaching Fellows for Maryland scholarships that are awarded under this subtitle for students who pledge to work as public school or public prekindergarten teachers in the State upon completion of their studies at schools that have at least 50% of the students in the school eligible for free or reduced price meals (FRPM).

A recipient must sign and return a promissory note agreeing to begin fulfillment of the service obligation as follows:

- ❖ A recipient of the Teaching Fellows scholarship must teach in a public school or public prekindergarten program that has at least 50% of its students eligible for FRPM for the periods specified below:
- ❖ For a recipient who receives a scholarship as an undergraduate student, the service obligation is 1 year for each year that the recipient receives a scholarship.
- ❖ For a student who receives a scholarship as a graduate student, the service obligation is 2 years for each year that the recipient receives a scholarship.

## Community College Promise Scholarship

The Maryland Community College Promise Scholarship is a last dollar award, available to students that plan to enroll in credit-bearing coursework leading to a vocational certificate, certificate, or an Associate's Degree; or in a sequence of credit or non-credit courses that leads to licensure or certification; or in a registered apprenticeship program at a Maryland community college for the 2020-2021 academic year.

An individual may be eligible for a Promise Scholarship if the applicant:

Graduated from high school or successfully completed a GED in Maryland within two years (on or after January 1, 2019) of applying for the scholarship; and enrolls in a public community college as a candidate in a credit-bearing vocational certificate, a credit-bearing certificate, or an associate degree program; or in a sequence of credit or non-credit courses that leads to licensure or certification; or in a registered apprenticeship program.

## 2019 Undergraduate Tuition & Fees

In Maryland State, 91 schools offer undergraduate program. The average undergraduate tuition fees of Maryland colleges in 2019 is \$6,434 for Maryland residents and \$13,336 for students from other States. The tuition & fees rose 89.92% from last year. Next table and chart describes the 2019 undergraduate tuition & fees and compares to last 5 years.

[Table](#) [Chart](#)

	Public Schools				Private Schools	
	4 Years or High		2-4 Years		4 Years or High	2-4 Years
	In-State	Out-of-State	In-State	Out-of-State		
2015	\$8,600	\$20,223	\$5,839	\$7,933	\$24,939	\$13,810
2016	\$9,024	\$20,939	\$5,839	\$7,933	\$25,662	\$13,810
2017	\$9,237	\$21,493	\$6,269	\$8,469	\$29,341	\$13,722
2018	\$9,437	\$22,379	\$6,432	\$8,699	\$30,141	\$13,722
2019	\$9,650	\$21,866	\$4,022	\$6,939	\$30,999	\$14,911

Table. 2019 Average Undergraduate Tuition & Fees for Maryland Universities and Colleges

## Near Completer Grant

The Maryland Higher Education Commission (MHEC) is offering an opportunity for Maryland residents, who started a degree but did not finish, a financial incentive to complete their degree by having the state help pay for tuition. The Maryland Higher Education Commission is currently working to encourage near completers to re-enroll in an institution of higher education to earn a degree.

### Near-completer Grant Highlights

#### Implementation Highlights

- Program starts 2019-2020 academic year.
- Program open to students of both 2-year and 4-year institutions.
- Near-completer grants are available to academic students only.
- Grants are to be distributed on a first-come, first-served basis.
- Eligible near-completers will have:
  - GPA of 2.0 on a scale of 4.0, and
  - 45 credit hours from a community college, or
  - 90 credit hours from a 4-year institution.

#### Financial Highlights

- Grant funds are for tuition only, and do not include fees or expenses related to attending the higher education institution.
- An eligible near-completer enrolling in a community college will be allocated up to one-third of the in-county resident tuition rate.
- An eligible near-completer enrolling in a 4-year institution will be allocated up to one-third of the in-state resident undergraduate tuition.

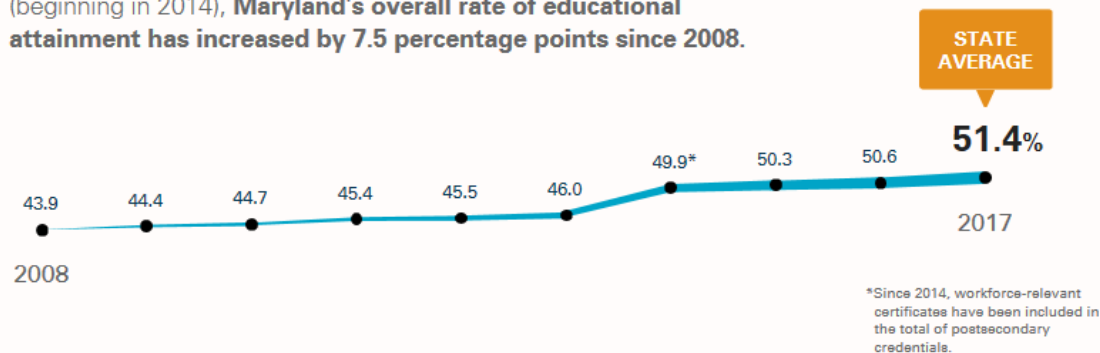
## How Maryland compares to the nation

Educational attainment in Maryland exceeds the national average, but work remains before it reaches 60 percent.



## Maryland's progress

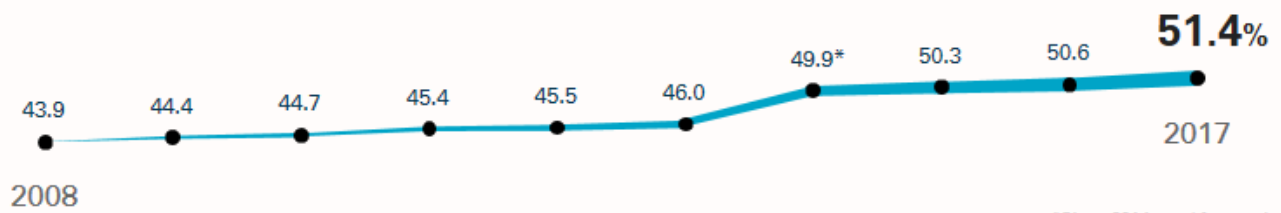
To reach state goals, the state will not only have to maintain current rates of attainment but also significantly increase the number of people who enroll in programs and earn all types of credentials beyond high school. With the inclusion of workforce certificates (beginning in 2014), **Maryland's overall rate of educational attainment has increased by 7.5 percentage points since 2008.**



The nation faces an urgent and growing need for talent. To meet that need, many more people must earn college degrees, workforce certificates, industry certifications and other high-quality credentials. That's why Lumina Foundation works to ensure that, by 2025, **60 percent of Americans hold a credential beyond high school – a quality credential that prepares people for informed citizenship and economic success.**

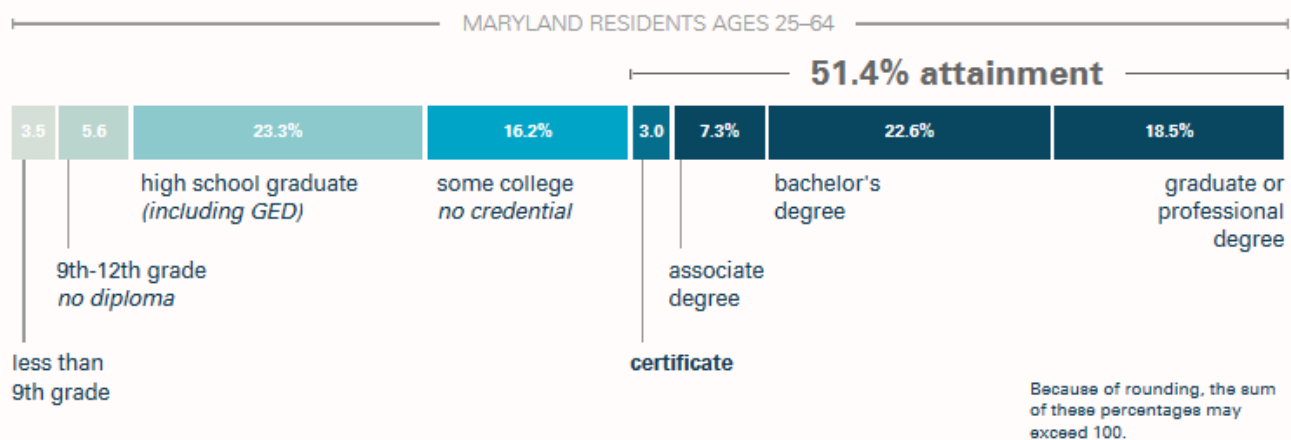
By 2025, 60 percent of Americans will need some type of high-quality credential beyond high school. To count toward this important goal, any credential must have clear and transparent learning outcomes that lead to further education and employment. **Maryland's attainment rate is 51 percent, and the state is working toward its attainment goal of 55 percent by 2025.**





\*Since 2014, workforce-relevant certificates have been included the total of postsecondary credentials.

## Maryland education levels

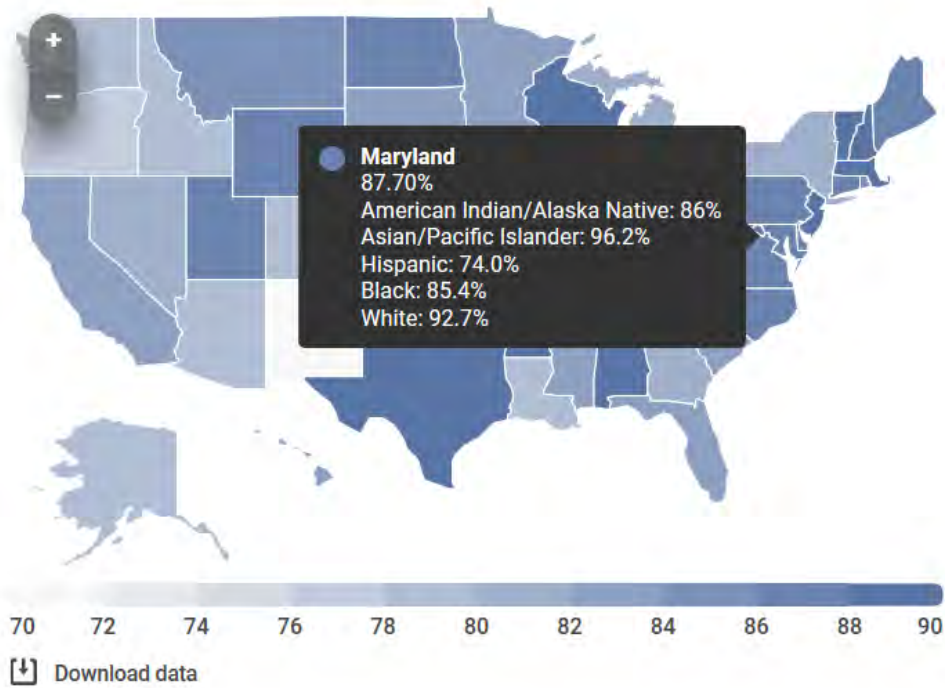


Exploring educational attainment at the local level can be especially helpful to local leaders as they work on talent development. For example, by pinpointing counties or regions where attainment lags, resources can be targeted where they're needed most. Conversely, in areas of high attainment, other regions may find practices or processes they can emulate.

Washington County, MD has a 31.5 attainment rate  
 Frederick County, MD has a 51.5 attainment rate  
 Allegany County, MD has a 30.7 attainment rate

## How many students graduate in my state?

Hover over a state in this interactive map to see its graduation rate, broken down by demographic groups:



District of Columbia's graduation rate is 73.2%; Asian/Pacific Islander: 78%; Hispanic: 72%; Black: 72.4%; White: 85%

SOURCE: Education Week Research Center analysis of NCES data, 2019

- Maryland's foray into tuition-free public higher education is off to a rocky start, with far fewer students than expected taking advantage of the state's community college scholarship after a hurried rollout of the program.

Last month, the state awarded its first round of Maryland College Promise scholarships to 1,278 students. Nearly 1,700 other students could receive money if they submit information missing from their applications. Still, that's a sliver of the roughly 13,000 students the Maryland Association of Community Colleges projected could benefit.

Maryland is one of 19 states that cover tuition at community colleges, part of a growing movement to use higher education to strengthen the local economy. College Promise programs, as tuition-free initiatives are commonly known, have captured the attention of some Democratic presidential candidates who have pledged to make them universal.

The state programs that have emerged in recent years have faced their share of growing pains, with complex eligibility criteria, confusing messaging and application timelines that can undermine their reach, advocacy groups say. Maryland's program is no exception.

- The average SAT score dipped for this year's high school graduates

The class of 2019 scored an average of 531 on evidence-based reading and writing and 528 on math. Their combined 1059, out of a maximum 1600, was 9 points lower than what the previous class posted. But fluctuations in results are common when the population of test-takers is also in flux.

That has been especially true for the SAT since a redesigned version of the three-hour exam was launched in 2016. The College Board, which owns the test, has expanded its market share through contracts with states and school systems that enable students to take the SAT free.

The ACT competes with the College Board for those contracts. Some states offer only the SAT in school, others only the ACT. Some provide no funds for testing in school, and some leave the choice up to local schools.

Maryland does not fund statewide SAT testing. But school-day testing is available in 16 school systems, including those in Montgomery, Prince George's, Anne Arundel and Baltimore counties and the city of Baltimore.

Those programs have fueled a sharp rise in SAT participation. About 82 percent of Maryland's Class of 2019, public and private, took the SAT, up from 76 percent the year before. This year's average was 1058 (535 in reading-writing and 523 in math), down from 1080 in 2018.

# Quality Counts 2019: Achievement

The K-12 Achievement Index scores states based on 18 distinct achievement measures related to reading and math performance, high school graduation rates, and the results of Advanced Placement exams.

Those indicators fall into three subsections: current performance, change, and poverty gaps.

State	4 <sup>th</sup> Grade Math Percent Proficient (2017)	8 <sup>th</sup> Grade Math percent Proficient (2017)	4 <sup>th</sup> Grade Reading Percent Proficient (2017)	8 <sup>th</sup> Grade Reading Percent Proficient (2017)	8 <sup>th</sup> Grade Math Percent Advanced (2017)	ACGR Graduation Rates (2016-2017)	High AP Test scores (2017)
Pennsylvania	43.6	38.1	40.5	40.0	11.6	86.6	29.1
Virginia	50.2	40.3	42.8	37.2	12.9	86.9	49.3
West Virginia	35.0	23.9	32.4	27.8	4.8	89.4	14.4
Maryland	42.3	32.6	40.2	37.6	10.7	87.7	58.3

Maryland Community Colleges' outreach includes:

- ✦ Providing licensure and certification training in over 130 occupations for 56,000 participants
- ✦ Serving 1,200 businesses and organizations statewide with a 97% satisfaction rate
- ✦ Offering hundreds of courses to meet the professional and personal needs of Maryland's citizens
- ✦ Reaching more than 500,000 of residents through its courses and activities



### WorkSmart

WorkSmart is a partnership between Maryland Department of Commerce and Maryland's 16 Community Colleges. An innovative approach to serving the workforce training needs of the Maryland business community, WorkSmart is a single point of contact for the business community and workforce stakeholders to connect with the WorkSmart network.

WorkSmart's network of colleges are responsive, accessible and an affordable partner to help businesses address workforce issues and close skill gaps. WorkSmart centers are a valuable resource for Maryland businesses, located at each of the community colleges, across the state.

Maryland's community colleges have already contracted with approximately 1,200 employers across the state.

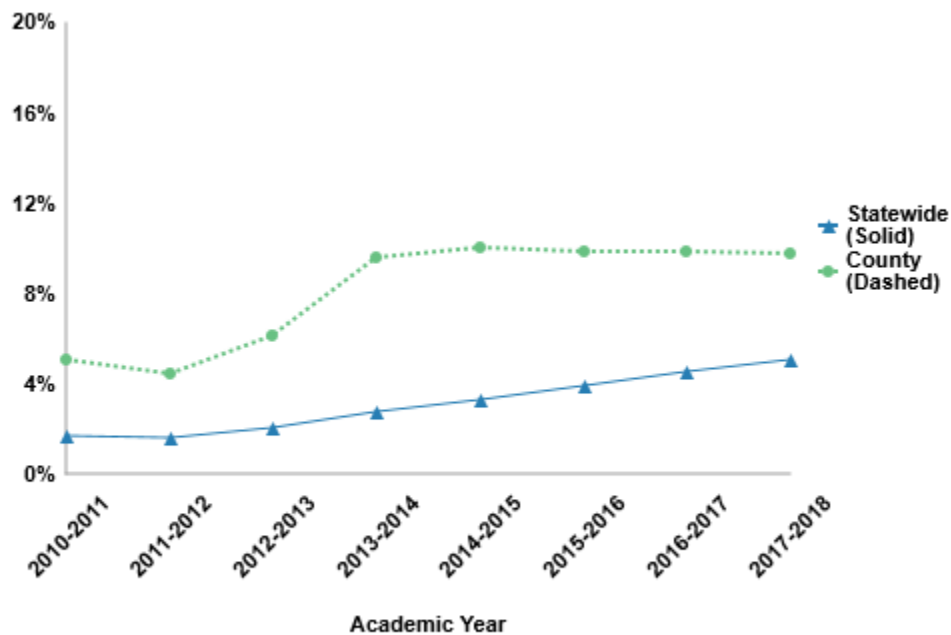
## Washington County, MD

- The teacher turnover rate for Washington County Public Schools was roughly the same during the last year compared to previous years, according to school officials.

Between Oct. 1, 2018, and Sept. 30, 2019, WCPS lost 130 teachers, around the same as the year before.

The 2018-19 school year brought 89 resignations/terminations, 30 retirements and 11 non-renewals.

- **Research suggests** students that are dually enrolled may be more likely to enroll in and graduate from college as well as experience higher academic achievement while in college. Monitoring demographic trends for dual enrollment at the county level can help policymakers develop targeted policies that help increase dual enrollment for specific counties. Increasing dual enrollment rates for counties with low participation rates may also help increase college enrollment rates for those counties.



- Contrary to the results of a new statewide poll, many of Washington County's elected leaders do not believe local residents would embrace tax increases in the name of efforts to improve public education.

According to poll results released Monday by Goucher College in Towson, Md., 74% of state residents said they were willing to pay more in taxes to improve public education and 26% were opposed. How much they would be willing to pay was not indicated in the survey conducted from Sept. 13 to 18 by the Sarah T. Hughes Field Politics Center.

Of the 763 people polled, only 8% were from Western Maryland, which includes Washington, Allegany, Garrett and Frederick counties.

The overall cost for the Kirwan Commission's plan is estimated to reach an additional \$3.8 billion annually by fiscal year 2030.

Recommendations include free, full-day prekindergarten for low-income 3- and 4-year olds and addressing the changing workforce needs and the impact of technology.

- Washington County Public Schools (WCPS) is looking towards the future as they introduce a new program aimed at preparing students for a 21st century workforce.

"Artificial intelligence as it applies to networking, as it applies to data and analyzing data," said Dr. Peggy Pugh, associate superintendent for curriculum and instruction.

And so WCPS is bringing courses on AI and Cloud computing to the classrooms of Washington County Technical High School in 2020.




The ACT WorkKeys National Career Readiness Certificate (ACT WorkKeys NCRC®) is an assessment-based credential issued at four levels. The NCRC measures and certifies the essential work skills needed for success in jobs across industries and occupations.

The credential is awarded in four levels and verifies skills proficiency in:

- Problem solving
- Critical thinking
- Reading and using work-related text
- Applying information from workplace documents to solve problems
- Applying mathematical reasoning to work-related problems
- Setting up and performing work-related mathematical calculations
- Locating, synthesizing, and applying information that is presented graphically
- Comparing, summarizing, and analyzing information presented in multiple related graphics

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EMPLOYERS IN WASHINGTON COUNTY RECOGNIZE OR RECOMMEND THE ACT WORKKEYS NCRC 

- |   |   |
|---|---|
| ▪ Bowman Group  | ▪ Bowman Group  |
| ▪ Bowman Development Corp   | ▪ Blue Goose Market LLC   |
| ▪ ABC Cumberland Valley Manpower Education Resource Improvement and Training                    | ▪ Associated Builders and Contractors Cumberland Valley Chapter |
| ▪ Toothman Orthodontics   | ▪ Allegany Dental Care  |
| ▪ State Farm  | ▪ Columbia Machine Inc. (Office)                                |
| ▪ The Holzapfel Investment Group  | ▪ Vertical Technology Services LLC                              |
| ▪ R Bruce Carson Ltd  | ▪ Antietam Tree & Turf  |
| ▪ Hagerstown Neighborhood Development   | ▪ ConAgra Brands  |
| ▪ Bloom Medicinals  | ▪ Douglas A. Fiery Funeral Home                                 |
| ▪ Western Maryland Consortium   | ▪ Housing Authority of the City of Hagerstown                   |
| ▪ Callas Contractors Inc  | ▪ McIntire HVAC & Electric                                      |
| ▪ BJs Embroidery  | ▪ Community Free Clinic Inc.                                    |
| ▪ Pittsburgh Institute of Aeronautics (PIA) Hagerstown Campus - School for Aviation Maintenance |   |



# Workforce and Economic Development

## United States – National

### Self-Employment in America 2019

1 in 20 small business owners without a college degree has never had a traditional full time job

Last year 27 million American workers said they were considering a shift to self-employment by 2020. However, it's estimated fewer than 2 million Americans took the leap full-time in 2018

What's truly driving the next wave of self- employed professionals – 22% Control, 14% Family, 12% Change, 22% Fulfillment, 4% negative Work Environment, 20% Finances and 6% Health.

### Top skills require for small business success

- Communication – 54%
- Problem Solving – 53%
- Time Management – 48%
- Adaptability 39%
- Creativity – 26%
- Technology Acumen – 18%
- Managing People – 14%
- Analytic Skills – 12%
- Negotiation – 11%
- Persuasion – 6%

### **Small businesses (and their owners) are getting younger**

Where two years ago the 'typical' self-employed professional was a tail-end Baby Boomer, we're fast approaching the point where Millennials become the dominant generation. This is not simply due to inevitably changing demographics, but also because entrepreneurs are choosing independence earlier in their careers.

	2017	2018	2019
<b>Mean Owner Age</b>	45	41	41
<b>Mean Age of Business</b>	7	6	6
<b>Owner Age at Inception</b>	38	35	34



- The marijuana industry is booming in the United States.

From the \$52 billion in sales the industry posted to the 76% increase in cannabis jobs this year, there are plenty of statistics to show marijuana's startling contributions to the US economy.

Marijuana initiatives have swept through state legislatures in recent years. Recreational marijuana use is legal in 10 US states, while medicinal marijuana is legal in 33.

Marijuana Business Factbook estimates the legal-marijuana industry's economic impact in the US was between \$20 billion and \$23 billion in 2017. It estimates the economic impact could reach as high as \$77 billion by 2022.

New Frontier Data, a cannabis market-research and data-analysis firm, estimates that the US cannabis industry employs at least 250,000 people. And those are just the jobs that are directly involved with handling marijuana plants

The median salary in the marijuana industry salary was \$58,511 in 2018, while the median salary for US workers as a whole was \$52,863, according to Glassdoor data. That's a difference of 10.7%.

- Women are flocking to an industry you might not expect: trucking. According to the American Trucking Associations, there were 234,234 female truckers counted in 2018. That is a 68% increase since 2010. Part of the reason for the dramatic increase is equal pay for female truckers.



- The U.S. is facing an unprecedented trucker shortage. According to the American Trucking Associations, America will be short 175,000 drivers by 2026.
- More than 68% of freight is moved on American highways. The shortage has increased driver pay due to higher demand, and that cost is passed on to the consumer through higher prices.

- Women are pursuing military service in unprecedented numbers. Currently, women make up 17% of the U.S. military, and their service often equips them with vocational skills in high demand across the civilian labor market, including in fields like data analytics, cyber security and a variety of STEM occupations. Moreover, women veterans possess tested leadership ability, are resilient, and demonstrate calm and confidence in high-pressure environments.

However, despite these compelling strengths, many female veterans cite persistent barriers to educational and networking resources necessary to bridge military-learned skills and experiences to civilian jobs and careers.

At the same time, 93% of the nation's military spouses are women and, despite being highly educated, are unemployed at a rate nearly three times higher than their non-military spouse peers. Those who do manage to find work typically earn, on average, 38% less than their civilian peers. Like most American families, the majority of military families depend on two incomes to make ends meet. Consequently, the chronic unemployment and under-employment experienced by military spouses puts their families at great risk, and directly undercuts military retention and readiness.

- About 1,300 military service members, spouses and children transition into civilian communities every day, according to the Department of Defense. And just one in four veterans said they had a job lined up after discharge, while others have said it can take up to a year to find employment. What's worse, more than 800,000 veterans are unemployed.

A number of veteran transition assistance programs are designed to help veterans develop skills like writing a resume, interview for potential jobs, write cover letters and enroll in college or educational programs once they're ready to rejoin the workforce

- PayScale compiled a list of the highest-paying jobs based on information veterans provided in an employment survey. Management consultant topped the list, with a median annual salary of \$98,100, and IT project manager with a median annual salary of \$81,000.

What's more, military members say their service has helped them with managing money. Indeed, a recent study from the Pew Research Center found that 68 percent of post-9/11 veterans with combat experience said their service helped them financially, versus 30 percent of pre-9/11 combat veterans.

- In recent years, businesses increasingly have offered remote work arrangements to keep employees happy and productive. Now, a new study has quantified just how appreciative remote workers really are--and how much your company stands to benefit.

Video conferencing company Owl Labs surveyed 1,200 U.S. workers between the ages of 22 and 65 for its 2019 State of Remote Work report, and found that employees who regularly work remotely are happier and stay with their companies longer than on-site employees. Of the more than 1,200 people surveyed, 62 percent work remotely at least part of the time.

- In a recent study, researchers from Ball State University in Muncie, Ind., analyzed data from the National Health Interview Survey. They looked at self-reports of sleep duration among 150,000 adults working in different occupations from 2010 to 2018. Researchers found the prevalence of inadequate sleep, defined as seven hours or less, increased from 30.9% in 2010 to 35.6% in 2018.

But it was worse for police officers and health care workers. Around half of respondents in these professions reported not getting seven hours a night. For many, the norm was six or even just five hours.

- Out of every 100 people who want to work, more than 96 of them have jobs. This is what economists consider full employment.

The economy has grown for almost 10 years, making it one of the longest economic expansions in U.S. history. And over that time, the job market has come back. It grew slowly at first, then steadily, finally reaching a point at which there are many more openings than job seekers.

Unemployment has reached a nearly 50-year low. The jobless rate for Hispanics has never been lower; the past two years have been the best job market ever for African Americans. Wages are starting to rise — and, more significantly, for the lowest-paid workers. That may not endure, but it's a reversal of the long-term trend where the most highly paid workers were also the best rewarded. The job market today is so hot that groups that were sort of on the margins also are finding opportunities — including people with disabilities or a prison record.

- Police agencies across the country are having trouble keeping and hiring police officers, according to a new survey obtained by ABC News.

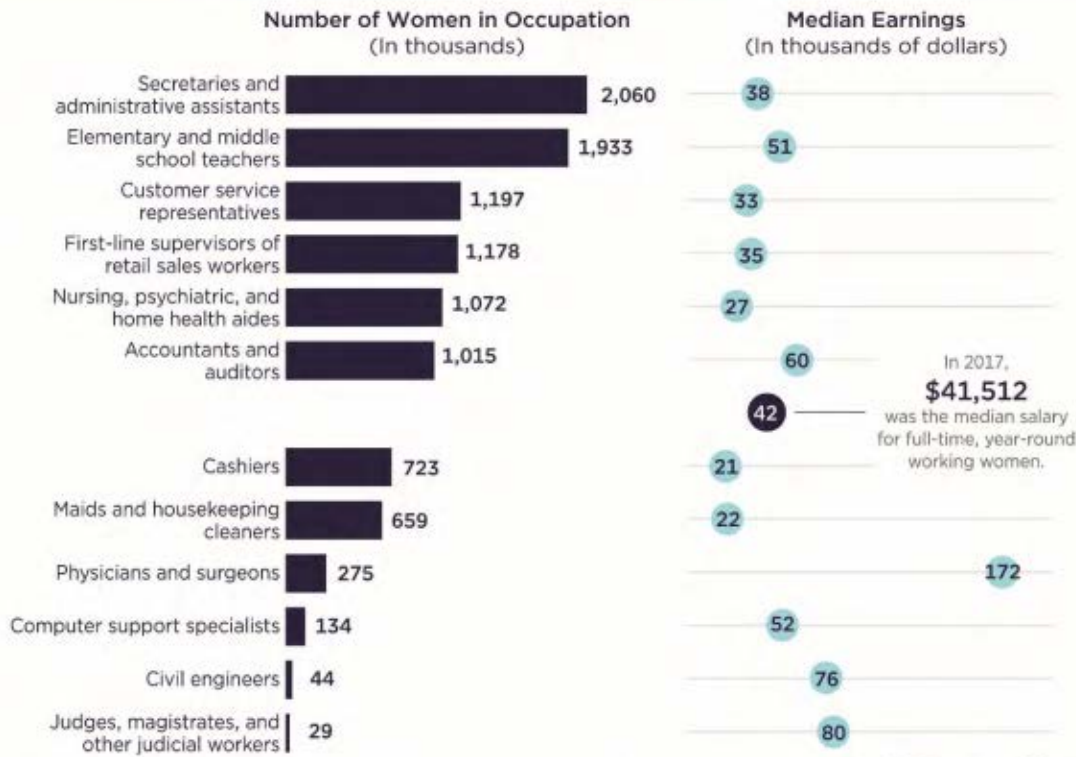
Produced by the Police Executive Research Forum, the survey shows a "triple threat" for police departments: there is a decrease in applications, early exits and higher rates of retirement.

Agencies participating in the survey reported that there has been a 63% decrease in applying to become a police officer. Departments are also having trouble hiring non-white/minority applicants the most, followed by female officers, according to the survey.

- Over the next decade, a skills gap in manufacturing may leave an estimated 2.4 million jobs unfilled in the United States. This is not only a major problem for American businesses and the economy, but also a tragic loss of opportunity. The manufacturing industry offers immense benefits and the satisfaction that a stable, well-paying job can provide. But there's a big problem. Manufacturing faces a perception issue and fewer students are pursuing these careers because many simply aren't aware of what opportunities lie ahead. The good news is this is fixable. Among the solutions are an increased emphasis on technical education programs where students graduate with the skills necessary to fill jobs, changing the public perception of manufacturing jobs to reflect their status as high-tech professions, and encouraging companies to invest and prioritize job training and continuing education for their employees.

# Women at Work

Employment and Median Earnings by Selected Occupations of Full-Time, Year-Round Female Workers



In 2017, **\$41,512** was the median salary for full-time, year-round working women.

In 2017, **47,118,487** women worked full-time, year-round.

United States  
**Census**  
Bureau

U.S. Department of Commerce  
Economics and Statistics Administration  
U.S. CENSUS BUREAU  
[census.gov](http://census.gov)

Source: 2017 American Community Survey, 1-Year Estimates  
[www.census.gov/programs-surveys/acs/](http://www.census.gov/programs-surveys/acs/)  
The data shown are a special tabulation in honor of Women's History Month.

## 9 mind-blowing facts about the US farming industry

- Agriculture's \$1.053 trillion contribution to the US economy is higher than the GDP of Indonesia
- While there are more than 2 million farms across the US, farmers and ranchers make up just 1.3% of the labor force
- The local food market in the US is expected to hit \$20.2 billion, nearly doubling from 2014 to 2019
- Soybeans account for 60% of the US's \$23 billion worth of agricultural exports to China
- Extreme weather is the cause of 90% of the crop losses in the US
- Over 50,000 jobs in agriculture are available per year in the US, yet there aren't enough qualified graduates to fill the spots
- In the near future, you'll be able to scan the sticker on an apple and trace its history
- 41% of the contiguous US is used to feed livestock. That's 800 million acres, roughly the size of India  
Once a place to talk shop, #AgTwitter has helped curb depression among farmers

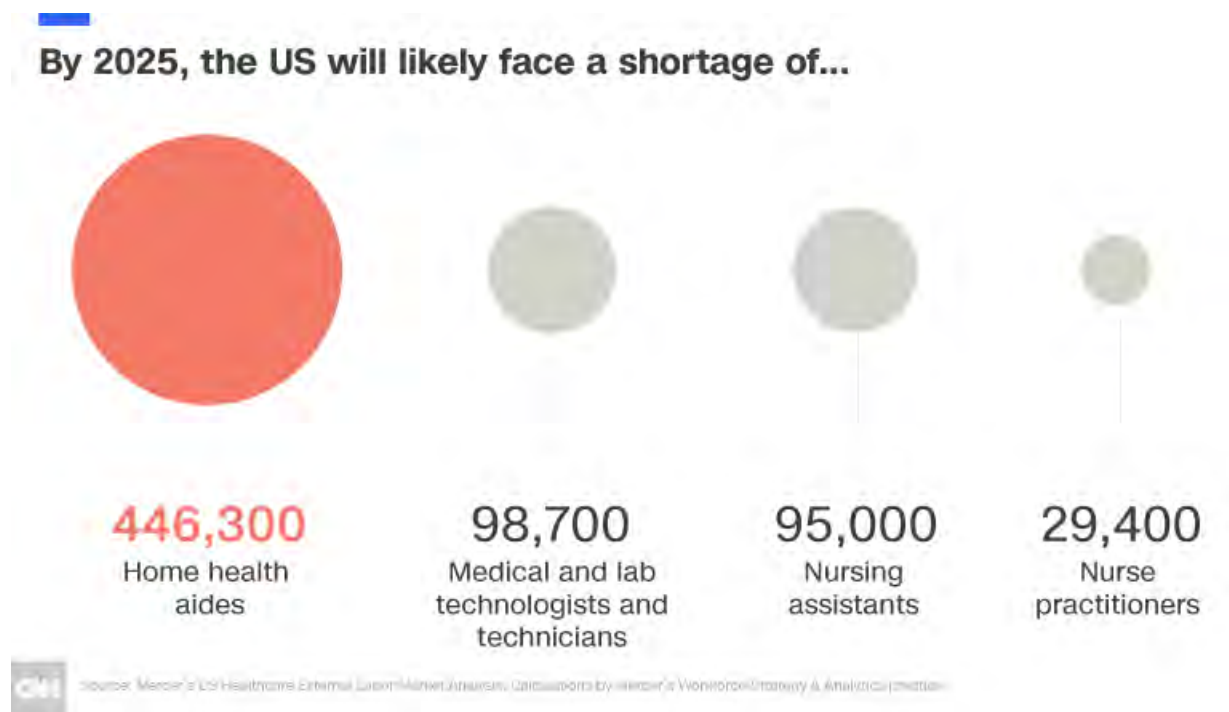
### Attracting Millennials into Farming In Order To Accelerate Technology Adoption in AG

One of the biggest factors that will determine how well the agriculture industry will cope with and adopt the newest AgTech applications related to food production, will be young farmers. The industry is facing a problem with ensuring effective food production due to the fact that most farms are run by older demographics that can range from 40 years old and above. If this persists happening and if we will not be able to figure out methods of raising the interest of farming and agriculture to Millennials, the pace at which new technology will be adopted will be hindered, as well as the progress of finding new solutions to current problems in the industry will be slowed down tremendously as well.

The US will need to hire 2.3 million new health care workers by 2025 in order to adequately take care of its aging population, a new report finds.

But a persistent shortage of skilled workers -- from nurses to physicians to lab technicians -- will mean hundreds of thousands of positions will remain unfilled, according to research by global health care staffing consultancy Mercer.

The largest number of new job openings -- about 423,200 -- will be for home health aides, the report found.



Becoming a home health aide requires less education and training than other health care jobs. Typically, an entry-level position requires a high school diploma, for example. However, aides don't earn much, with median pay of about \$11 an hour, or \$23,130 a year, according to the Labor Department.

That low pay makes it hard to attract new talent to the field. And with more workers retiring, Mercer projects there will be a shortage of 446,300 home health aides by 2025. Nurses will also be in hot demand.

Mercer estimated that there will be 400,000 new nursing assistant positions and nearly 51,500 new nurse practitioner openings, but there will not be nearly enough skilled workers to fill those roles.



- Business demand for investment in America's workforce: Fifty three percent of jobs require more than high school education and less than a four year degree, but only 43 percent of workers are trained at that level. Of businesses that anticipate hiring 20 or more workers this year, 80 percent say it's difficult for them to find skilled workers. Almost two thirds of businesses in the Association of Equipment Distributors say they haven't been able to fill customer orders because they cannot find workers with necessary skills. The Manufacturing Institute and Deloitte found that there will be 2.4 million unfilled manufacturing jobs by 2028. And a recent survey by Comptia found that eight out of ten tech companies are concerned about finding skilled workers.
  - The Workforce Innovation and Opportunity Act (WIOA) helps workers, especially those with barriers to employment, access training and supports necessary to find jobs and connects business and industry with workers necessary to meet demands. In Federal Year 2019, the federal government invested about \$2.8 billion to fund states' and local areas' workforce programming and another \$700 million in national programs that target needs of populations of workers or regions of the country.
  - The Strengthening Career and Technical Education for the 21st Century Act (Perkins V) supports programs offered at the secondary and postsecondary level that combine academic instruction and occupational skills training to prepare individuals for transition to higher education and the workplace. The federal government invested about \$1.26 billion in FY2019 to fund this work.
  - The Adult Education and Family Literacy Act (AEFLA), Title II of WIOA, supports access to literacy and numeracy education for adults and immigrant learners. Adult basic education (ABE) programs that are linked to employment or postsecondary education can help low-skilled adult learners advance along a career path and improve their employment and earnings. The U.S. invested about \$650 million in FY2019 in adult basic education.

The U.S. underinvests in workforce compared to international peers The U.S. invests just .1 percent of GDP on active labor market policies, less than any other industrialized country except for Mexico. Australia invests twenty-four times that amount, and Ireland invests forty-eight times that amount. At the same time, the U.S. has the largest economy in the world and more than 160 million workers in the workforce.

## IN-DEMAND SKILLS AND CAREER PREPARATION

While organizations can invest in AI to close skills gaps, employers continue to value certain skills that workers provide. The most in-demand hard skills are strategic thinking and analytical skills (48%), computer skills (46%), and project management (32%). On the soft skills side, employers most desire leadership (39%), adaptability (36%), and communication (36%). With respect to academic study, the most desired college majors are computers and IT (44%), business (42%), and STEM (32%), business (42%), and STEM (32%).

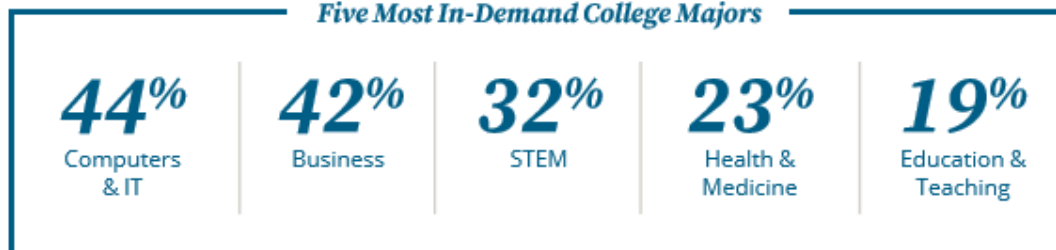
### Five Most In-Demand Hard Skills



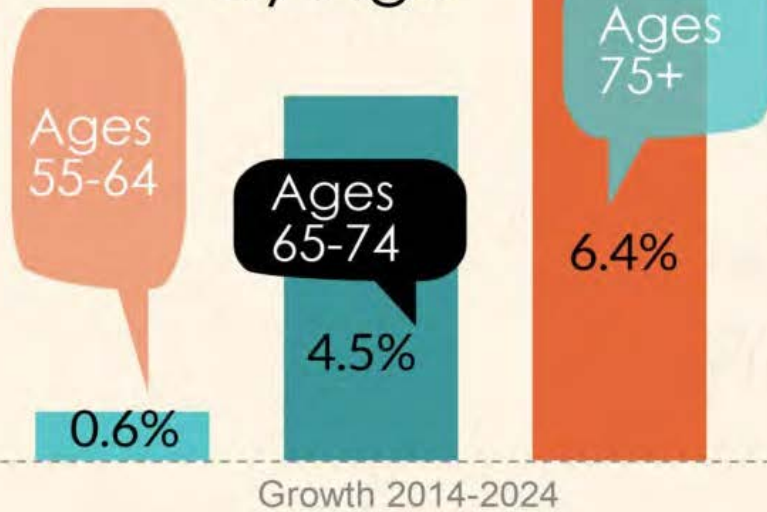
### Five Most In-Demand Soft Skills



### Five Most In-Demand College Majors



# Growth of Seniors in the Workforce: By Age



## Benefits of Working as a Senior



Baby Boomers never sat still for long - thousands of older adults can't even imagine retiring. What are the benefits of continuing to work or changing your career?



Cognitive Functioning



Social Interaction



Exchange Knowledge

[collegeconsensus.com](http://collegeconsensus.com)

## What's Trending in Workforce?

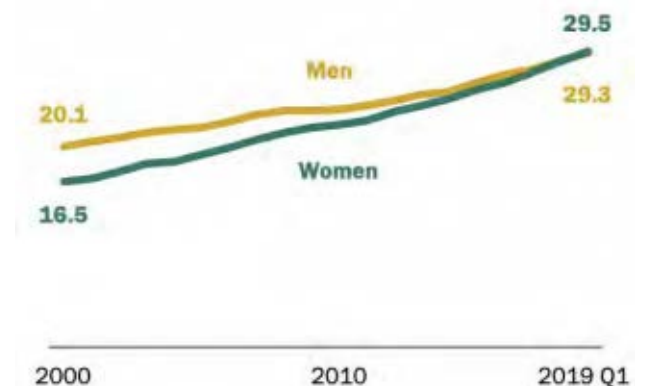
- Upskilling
- Economic Development
- Talent Retention
- Work-Based Learning
- Corrections
- Apprenticeships

Women are approaching a milestone in gender parity. 2019 will likely be the first year in which they are a majority of the college-educated labor force. As of the first quarter of 2019, 29.5 million women in the labor force had at least a bachelor's degree, effectively matching the number of college-educated men in the workforce (29.3 million), according to a new Pew Research Center analysis of data from the U.S. Bureau of Labor Statistics.

This milestone matters for women because educational attainment is highly correlated with income. Women now comprise 50.2% of the college-educated labor force, up from 45.1% in 2000. They remain less than half (46.7%) of the overall workforce ages 25 and older.

## Women are now half of the U.S. college-educated labor force

Labor force ages 25 and older with at least a bachelor's degree (in millions)



Note: Labor force consists of people working or looking for work. First quarter, 2019 estimate not seasonally adjusted. Source: Bureau of Labor Statistics, based on 2000-2019 Current Population Survey.

PEW RESEARCH CENTER

- Employment of dental assistants and hygienists is projected to balloon 20 percent over the next decade, a trend the Bureau of Labor Statistics attributes to an aging population coupled with research connecting oral health to overall health.

Community colleges are staying abreast of this growing movement via programming for both the front and back of the office, whether it's cleaning teeth, taking X-rays or scheduling appointments. Dental accreditations and degrees are currently available at two-year colleges nationwide — including the farthest reaches of Alaska — pointing to an industry very much in demand.

Because a growing number of large employers — including [Amazon](#), [Target](#) and [McDonald's](#) — and some states have raised minimum wages up to \$15 per hour, or are attempting to, there is increased competition for low-paid workers, more so considering the tight labor market. Meanwhile, federal and state governments set fixed reimbursement rates for Medicare and Medicaid recipients, effectively capping workers' wages, and there's little political will to raise rates. Plus, part-time workers seldom receive overtime pay, health insurance or other benefits, making the profession even less attractive.

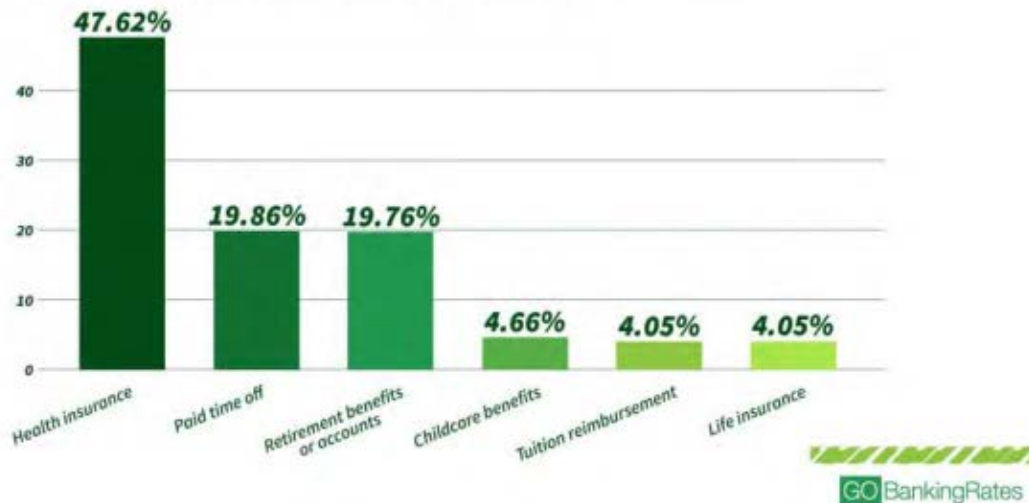
According to the [Paraprofessional Healthcare Institute](#), a New York-based organization that studies the home health industry nationwide, 46 percent of this workforce is ages 45 to 64, 87 percent are women, 60 percent are people of color, and 29 percent are immigrants, though how many are undocumented is unknown.

Every state legislates its own hiring and training rules and regulations for home health workers, but typically the job requires a high school diploma or equivalent and no related experience. If the employer is reimbursed by [Medicare](#) or [Medicaid](#), federal law requires aides to receive 75 hours of training, including 16 hours of on-the-job instruction. States can then choose whether to mandate additional training. Private agencies that do not accept Medicare or Medicaid, as well as families and individuals who opt to hire aides at their own expense, are not subject to certification requirements.

## Health Insurance Is the No. 1 Work Benefit

To get a better sense of Americans' ideals when it comes to their careers and retirement, GOBankingRates asked, "Of the following, what is your No. 1 ideal work benefit?" Respondents could choose one of the following answers: childcare benefits, health insurance, life insurance, paid time off, retirement benefits or accounts, or tuition reimbursement.

### What Is Your Ideal Work Benefit?



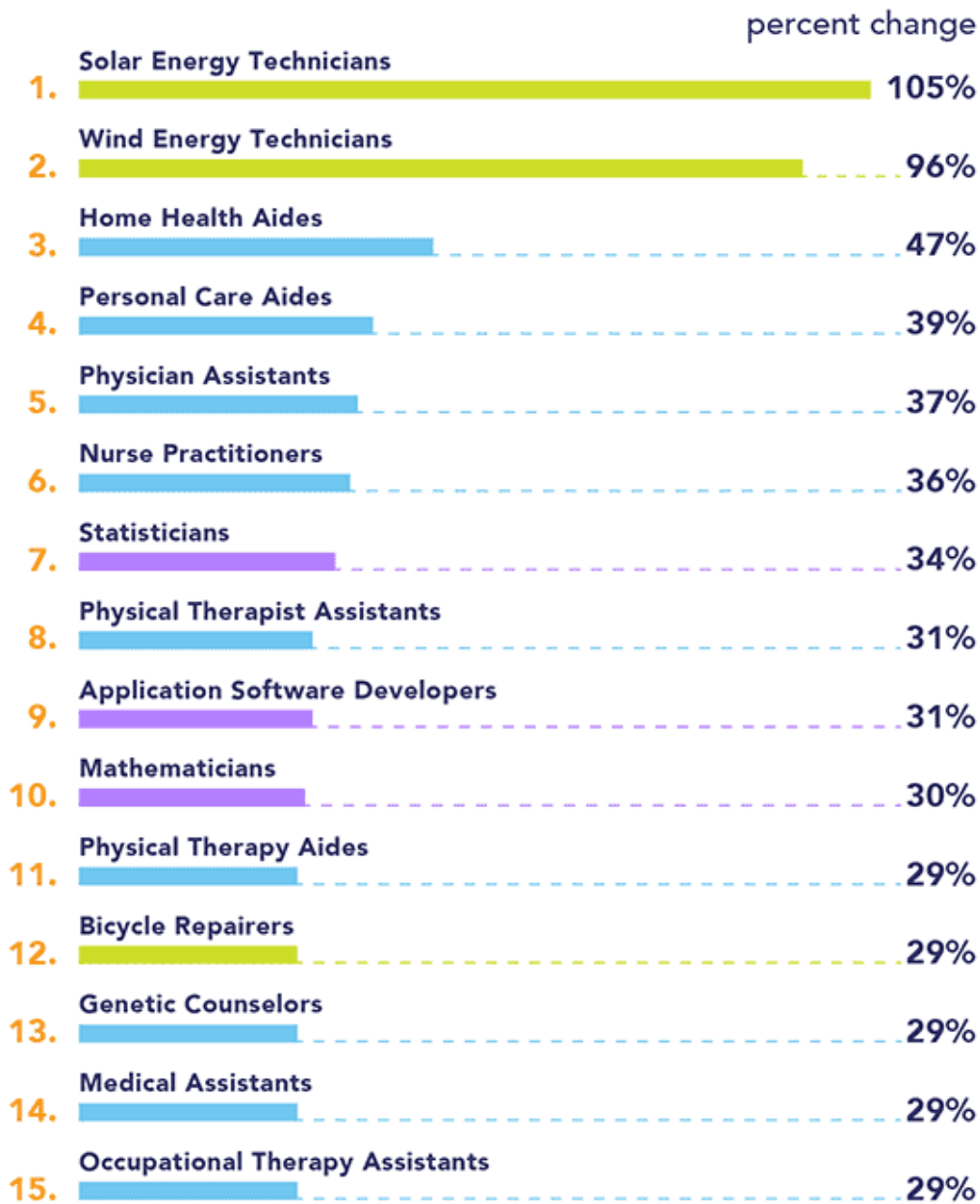
©GOBankingRates

Health insurance was the most popular response by far, with nearly 48 percent of respondents naming it as their ideal benefit. The other two most popular benefits were paid time off and retirement benefits or accounts, with 19.86 percent and 19.76 percent of responses, respectively.

- The percentage of U.S. companies that allow employees to wear casual dress every day has rapidly increased, jumping from 32% to 50% in just five years. What's more, almost two-thirds (62%) of companies now allow for casual clothing at least one day per week.

# 15

## Fastest-Growing Occupations From 2016 to 2026



Source: U.S. Bureau of Labor Statistics, Employment Projections, 2016–2026.

## **Top 10 Jobs in Demand Overall**

The most in-demand jobs run the gamut from health-related jobs to service positions to computer science careers. What they all have in common is a huge number of openings that need to be filled. The top jobs in demand in 2019 include:

- Personal care aide
- Fast food preparation and serving worker
- Registered nurse (RN)
- Home health aide
- Applications software developer
- Janitor
- General Manager
- Material mover
- Waiter or Waitress
- Medical Assistant

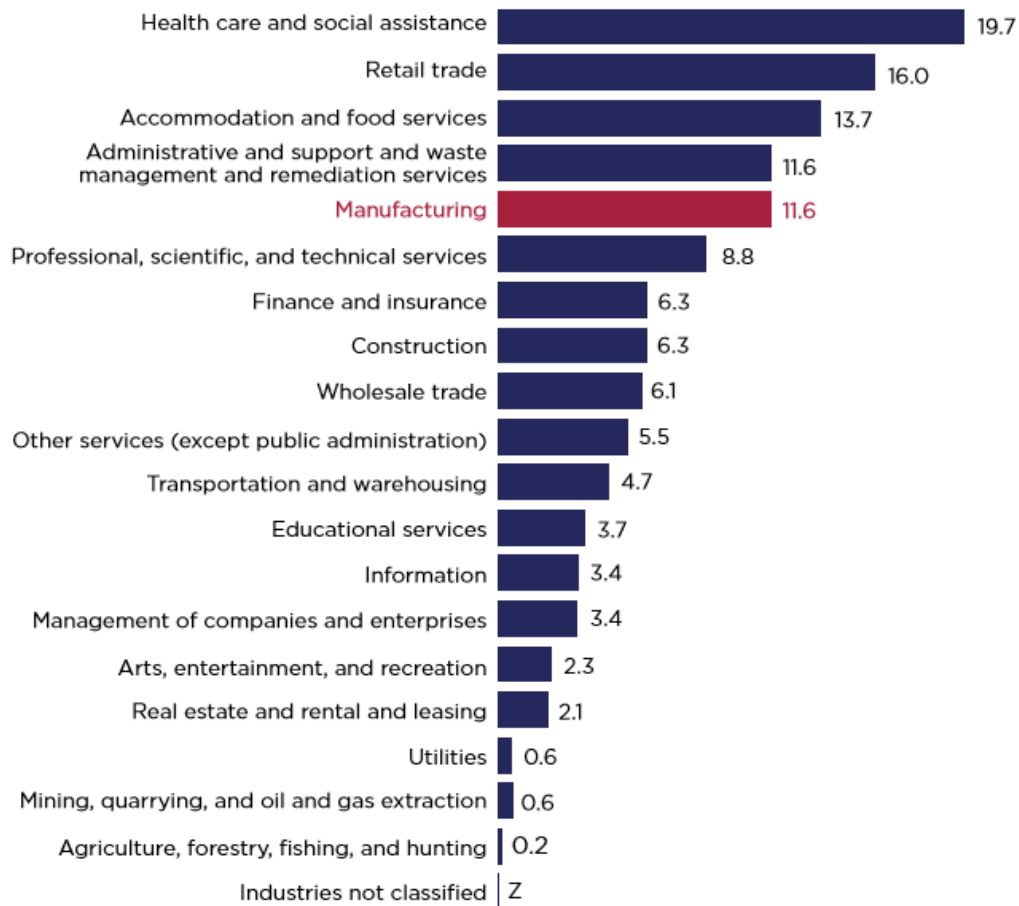
## **Skilled Trade Jobs in High Demand**

The skilled trades are a critical part of the nation's workforce. A huge number of tradespeople are approaching retirement age even as the economy improves and industries like construction and maintenance show more strength—which means there is a big need for new workers in the skilled trades. In-demand jobs in this sector include:

1. Heavy Truck Driver
2. Carpenter
3. Plumber
4. Electrician

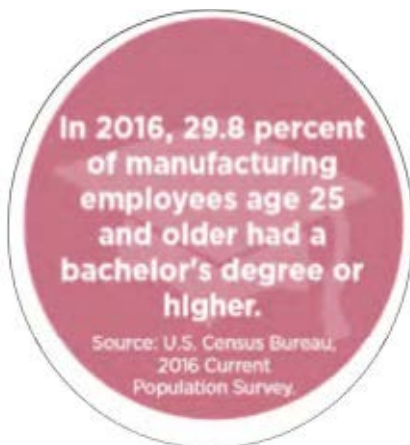


## Manufacturing Is the Fifth-Largest Employer (Millions of employees)

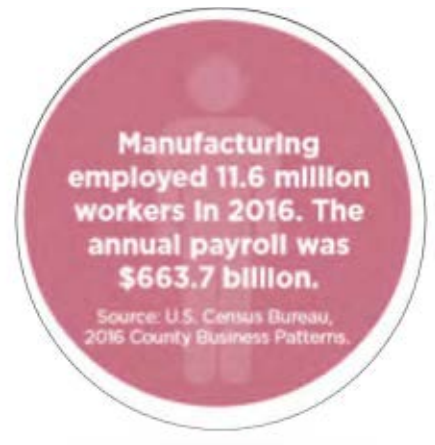


Z Rounds to zero.

Note: Rankings may vary slightly due to nonsampling error and disclosure methods used to protect the confidentiality of the data.  
Source: U.S. Census Bureau, 2016 County Business Patterns, <[www.census.gov/programs-surveys/cbp/](http://www.census.gov/programs-surveys/cbp/)>.



Nearly 6 in 10 US Export Dollars come from manufacturers



“The 50 Best Careers of 2020” was published on January 07, 2020 by US News and World Report, which includes job growth through 2028, stress level, typical education requirements (although they vary), and the national median salary for 2018.

<http://money.usnews.com/careers/best-jobs/rankings/the-100-best-jobs>

<b>US NEWS &amp; WORLD REPORTS 50 BEST CAREERS FOR 2020</b>				
	<b>Outlook - % of Job Growth 2018 – 2028</b>	<b>Stress Level</b>	<b>Education &amp; Prep</b>	<b>National Median Pay 2018</b>
<b>Technology</b>				
Software Developer	25.6%	Average	Bachelors	\$103,620
Database Administrator	9%	Above Avg.	Bachelors	\$90,070
Information Security Analyst	31.6%	Above Avg.	Bachelors	\$98,350
IT Manager	11.3%	High	Bachelors	\$142,530
Web Developer	13%	Below Avg.	Associates	\$69,430
<b>Healthcare</b>				
Dentist	7.6%	Average	Doctorate	\$151,850
Nurse Practitioner	28.2%	Above Avg.	Masters	\$107,030
Occupational Therapist	17.9%	Average	Masters	\$84,270
Dental Hygienist	10.8%	Average	Associates	\$74,820
Physician	3.7%	High	Doctorate	\$194,500
Diagnostic Medical Sonographer	19.5%	Above Avg	Associates	\$72,510
Orthodontist	7.3%	Below Avg	Doctorate	\$208,000
Anesthesiologist	4.5%	High	Doctorate	\$208,000
Registered Nurse	12.1%	Above Avg.	Bachelors	\$71,730 \$68,450
Physician Assistant	31.1%	Above Avg.	Bachelors	\$108,610
Psychiatrist	15.8%	Above Avg.	Doctorate	\$208,000

Pediatrician	2.2%	Above Avg	Doctorate	\$170,560
School Psychologist	14.7%	Above Avg	Bachelors	\$76,990
Speech Language Pathologist	27.3%	Above Avg.	Masters	\$77,510
Psychologist	11.6%	Above Avg.	Masters	\$100,770
Respiratory Therapist	20.8%	Above Avg.	Associates	\$60,280
OB/GYN	2.3%	Above Avg.	Doctorate	\$208,000
Oral Surgeon	7.4%	Above Avg.	Doctorate	\$208,000
Optometrist	9.5%	Average	Doctorate	111,790
Nurse Anesthetist	17%	Above Avg.	Masters	\$167,950
Physical Therapist	21.9%	Above Avg.	Doctorate	\$87,930
Podiatrist	6%	Avg.	Doctorate	\$129,550
Surgeon	1.2%	High	Doctorate	\$208,000
Physical Therapy Assistant	31%	Average	Associates	\$58,040
Medical Services Manager	17.6%	Above Avg.	Bachelors	\$99,730
Home Health Aide	36.6%	Above Avg.	High School	\$24,200
Genetic Counselor	27%	Average	Masters	\$80,370
Industrial Psychologist	12.8%	Average	Masters	\$97,260
Veterinarian	18.4%	Above Avg.	Doctorate	\$93,830
<b>Engineering</b>				
Civil Engineer	6.3%	Average	Bachelors	\$86,640
Environmental Engineer	5.1%	Average	Bachelors	\$87,260
Mechanical Engineer	4.1%	Average	Bachelors	\$87,370
<b>Business</b>				
Mathematician	26%	Average	Masters	\$101,900
Operations Research Analyst	25.6%	Above Avg	Bachelors	\$83,390
Accountant	6.4%	Average	Bachelors	\$70,500
Financial Manager	16%	High	Bachelors	\$127,990
Statistician	30.7%	Below Avg.	Masters	\$87,780

Financial Advisor	7%	Above Avg.	Bachelors	\$88,890
Marketing Manager	8.1%	Above Avg.	Bachelors	\$134,290
Market Research Analyst	20.4%	Above Avg.	Bachelors	\$63,120
Business Op . Manager	6.9%	Above Avg.	Bachelors	\$100,930
<b>Social Services</b>				
Lawyer	6.1%	High	Doctorate	\$120,910
Pilot	5.6%	Above Avg.	Bachelor	\$115,670
Social/Community Services Manager	13%	Above Avg.	Bachelors	\$65,320
Substance Abuse Counselor	22.5%	Above Avg.	Bachelors	\$44,630

# MILLENNIALS & PROFESSIONAL DEVELOPMENT

Millennials share their thoughts on the landscape of today's professional development programs.

## How do Millennials choose professional development?



**85%**

Want documents to read and review, post online course

**83%**

Want to participate in a live webinar

Podcasts scored lowest with Millennials at

**60%**



Millennials are hungry for very practical, just-in-time development that provides real-world situational experience.

## Attracting Millennials to education and training

**61%** of association pros say their top challenge is attracting young members to education and training

**48%**

of Millennials want to learn practical skills they can use immediately



**80%**

of Millennials surveyed are in an industry that requires continuing education



**ONLY 12%**

of Millennials are willing to pay per use for continuing education



## Key driver of education



Learn a new skill



Career advancement



Required by employer



Company culture encourages professional development

Think of the subscription models Millennials consume for movies and music. It can work for your organization, too.



Learn more about this study at [Abila.com/Professional-Development-Study](http://Abila.com/Professional-Development-Study)

**abila**



# SMALL BUSINESS TRENDS: 2019

Guidant Financial and LendingClub teamed up to survey more than 2,700 current and aspiring small business owners nationwide. Find out who's driving today's small businesses, the hottest business industries, and what's holding back aspiring entrepreneurs.

### CONFIDENCE IN POLITICAL CLIMATE



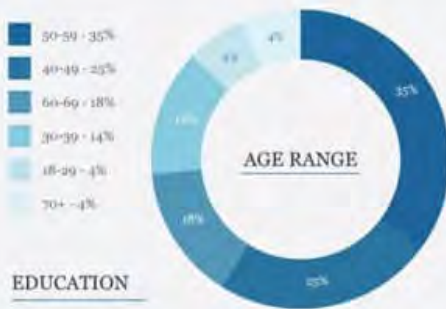
### TOP CHALLENGES FOR SMALL BUSINESS OWNERS



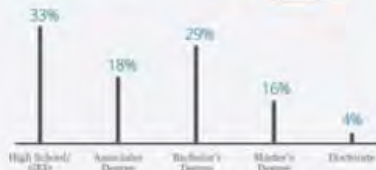
### MOTIVATION FOR OPENING A BUSINESS



### HAPPINESS LEVEL



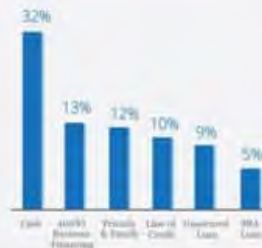
### EDUCATION



### TOP 5 SMALL BUSINESS INDUSTRIES



### MOST POPULAR FINANCING METHODS



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## Fastest-growing low-wage jobs in the US

### LOW WAGE CHART

LOW WAGE	2018 JOBS	2023 JOBS	JOBS ADDED 2018 TO 2023	2018 TO 2023 % CHANGE	MEDIAN HOURLY EARNINGS
HOME HEALTH AIDES	926,500	1,134,232	207,732	22.42%	\$11.17
WAITERS AND WAITRESSES	2,666,275	2,812,556	146,281	5.49%	\$10.01
RETAIL SALESPERSONS	4,574,115	4,682,344	108,229	2.37%	\$11.29
COOKS, RESTAURANT	1,349,883	1,450,547	100,664	7.46%	\$12.06
NURSING ASSISTANTS	1,522,723	1,619,107	96,384	6.33%	\$13.23
SECURITY GUARDS	1,210,962	1,272,926	61,964	5.12%	\$12.97
RECEPTIONISTS AND INFORMATION CLERKS	1,104,928	1,174,389	69,461	6.29%	\$13.70

## State of Maryland

### **Maryland**

Maryland claims to have the world's largest government-trained cyber workforce, with approximately 110,000 cyber-related engineering and data science jobs, as reported in [U.S. News & World Report](#). Fort Meade, which lies roughly equidistant between Baltimore and Annapolis, is headquarters to the National Security Agency (NSA). The state has more than 40 government agencies with strong cybersecurity programs, including the Department of Defense Cyber Crime Center north of Baltimore.

Of the 2018 Cybersecurity 500 list, [15 companies](#) are based in Maryland, including Lockheed Martin (Bethesda), IronNet Cybersecurity (Fulton), Terbium Labs (Baltimore) and Dragos, Inc. (Hanover). In 2017, Israeli-owned ELTA North America, a defense manufacturer, opened a Cyber Innovation Center in Annapolis. The center focuses on "adapting technology and intellectual property from Israel for use by ELTA's commercial customers in the United States" with an emphasis on cybersecurity, [The Baltimore Sun](#) reported. Also in 2017, the [Baltimore Cyber Range](#) opened downtown. It's a facility to train cybersecurity professionals using threat simulations. And in 2018, Port Covington was rebranded "[CyberTown, USA](#)," a hub for cybersecurity and data science in a 235-acre waterfront redevelopment project due to open in late 2020.



- Maryland's growing reputation as a center of innovation makes it the home of more and more high-tech businesses and the highly educated workforce they need. In fact, CNBC placed Maryland sixth in its list of states winning the war for talent (2018).

That workforce boasts the second highest percentage of professional and technical workers in the nation, as well as the **highest proportion of employed PhDs in science and engineering**. Highly educated workers enable Maryland's advanced manufacturing companies to innovate, develop, and produce heavily engineered high-tech products.

While busy inventing the future, Maryland also carries on its long history of traditional manufacturing and agriculture. The state is home to more than 12,250 family farms that grow corn, soybeans, and acres of other important agricultural products—not to mention the riches of the Chesapeake Bay, harvested by over 6,000 watermen.

- Maryland leads the world in adult stem cell production and vaccine research and development. In fact, fully 20 percent of the world's top influencers in vaccine development are right here in Maryland. And healthcare expertise and an innovative culture have made the state a leader in health IT and medical device development.

The state is home to one of the largest life sciences clusters in the nation, with 500+ biotech firms, 2,700 life sciences companies, the NIH, the FDA, Johns Hopkins University, and the University of Maryland. This is no accident. The state government is a key player in a host of initiatives to drive growth in biohealth and life sciences.

- Maryland's construction industry has had an increased outlook over the past couple of years. Over 90 percent of contractors are feeling more optimistic about their company's future compared to the previous year, according to the Maryland Construction Network 2018 survey. The three main focuses of the industry moving forward are: finding and retaining qualified talent, higher profits, and finding new business.



<b>Maryland Rankings</b>	
1 <sup>st</sup>	Percentage of PhDs and Engineers in Vaccine Development
5 <sup>th</sup>	Most Innovative State
2 <sup>nd</sup>	Best State for Opportunity
2 <sup>nd</sup>	Most Educated State
1 <sup>st</sup>	Federal Obligations for R&D (per capita basis)
20 <sup>th</sup>	Military Facilities
60 <sup>th</sup>	Federal Civilian Agencies
74 <sup>th</sup>	Federal Labs – Twice as Many as any Other State
1 <sup>st</sup>	Concentration of Computer Scientists
2 <sup>nd</sup>	Percentage of Professional & Technical Workers
3 <sup>rd</sup>	Concentration of Aerospace Engineers
15 <sup>th</sup>	Top 20 Aerospace & Defense Companies
7 <sup>th</sup>	State Energy Scorecard
8 <sup>th</sup>	State Economies
9 <sup>th</sup>	Best State for Business
2 <sup>nd</sup>	Maryland Generosity Index
7 <sup>th</sup>	Best State to Live In
1 <sup>st</sup>	Employment for Women
4 <sup>th</sup>	Safest State to Raise Children
7 <sup>th</sup>	Most Diverse State

The IT and cybersecurity talent is in Maryland and will continue to be for a long time, thanks to an education system that’s continuously producing tech talent. Home to 16 Centers of Academic Excellence in cybersecurity and many workforce training programs, there’s cyber training happening everywhere you look in Maryland. Maryland ranks first in the percentage of bachelor’s degrees in computers, mathematics, and statistics, and Maryland’s universities produce thousands of cybersecurity graduates every year. It’s no surprise that Maryland has the highest concentration of STEM professionals among the states.

## Washington County, MD



Since the announcement of the Maryland Chamber Federation in January 2019, 17 local and county chambers have joined the Maryland Chamber program. Today we are pleased to add the Washington County Chamber of Commerce to this esteemed list of partners.

Created to empower small businesses and grow the voice of businesses at the local, state and federal levels with minimal investment and maximum impact, it's no wonder the Federation is now 19 members strong.

Under the terms of the Maryland Chamber Federation, any business with 10 or fewer full-time employees that is a current paid member of a participating local, county or regional chamber, will receive free Federation membership with the Maryland Chamber. Federation members gain a host of benefits through this partnership, including increased influence in the state legislature and access to relevant and timely information. The Maryland Chamber also looks to gain exposure to areas of the state in which we didn't previously have members. The more we know about Maryland job creators, the more effective we will be in advocating for businesses of all sizes.

The vision of the Washington County Chamber of Commerce is to be the preferred advocate and recognized voice of business for Washington County, Maryland. By partnering with the Maryland Chamber Commerce and its Federation program, the Washington County Chamber and its small business members will have a stronger voice in the state legislature, as well as access to timely information, opportunities and resources available from the Maryland Chamber of Commerce. This partnership is designed to empower small businesses and grow the voice of business at the local, state and federal levels. Paul Frey, president and CEO of the Washington County Chamber of Commerce, said, "We look forward to our new partnership with the Maryland Chamber Federation, and enhancing the voice of small business on issues that are critical to their success."

CSOOnline.com

## Area Profile for Washington County, MD

### Industry Employment Distribution Table

The table below shows the industries with the highest number of employees in Washington County, MD for the 1st Quarter, 2019.

Rank	Industry Sector	Number of Establishments	Number of Employees
1	Total, All Industries	3,503	64,485
2	Health Care and Social Assistance	414	10,663
3	Retail Trade	578	10,026
4	Manufacturing	142	6,529
5	Accommodation and Food Services	334	5,362
6	Educational Services	88	4,889
7	Transportation and Warehousing	177	4,791
8	Finance and Insurance	192	3,950
9	Public Administration	41	3,406
10	Administrative and Support and Waste Manageme	209	3,369

Labor Market Statistics, Covered Employment and Wages Program  
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## Washington County Employee Statistics

Civilian Labor Force	76,194
Employed	72,670
Unemployed	3,524
Unemployment Rate	4.63%
State Average	4.14%

Source: MD Dept of Labor, Licensing and Regulations 2018

### Workforce Breakdown for Washington County, MD

■ Blue Collar - 46.21%
 ■ White Collar - 53.79%



# Brief Economic Facts WASHINGTON COUNTY, MARYLAND

## LABOR AVAILABILITY<sup>2,4,5</sup> (BY PLACE OF RESIDENCE)

Civilian Labor Force (2018 avg.)	Labor Mkt.	
	County	Area*
Total civilian labor force	74,742	339,213
Employment	71,493	326,208
Unemployment	3,249	13,005
Unemployment rate	4.3%	3.8%

Residents commuting outside the county to work (2013-2017)	Number	Percent
	22,368	33.8%

### Employment in selected occupations (2013-2017)

Occupation	Number	Percent
Management, business, science and arts	22,360	33.2%
Service	13,033	19.3%
Sales and office	15,885	23.6%
Production, transp. and material moving	9,227	13.7%

\* Washington and Frederick counties, MD, Franklin Co., PA and Berkeley Co., WV

## MAJOR EMPLOYERS<sup>6,7</sup> (2018-2019)

Employer	Product/Service	Employment
Meritus Health	Medical services	2,740
Citi	Credit card processing	2,300
First Data	Credit card processing	2,185
Volvo Group	Diesel engines, transmissions	1,300
FedEx Ground	Mail and package delivery	900
The Bowman Group	Hotels management, and logistics	745
Hagerstown Comm. College	Higher education	545
Merkle Response Management Group.	Data entry and fulfillment	545
Arc of Washington County	Medical and social services	500
Direct Mail Processors	Data entry and fulfillment	500
Brook Lane Health Services	Medical services	485
Dot Foods	Food distribution	440
Staples	Office supplies retail, distrib.	390
A.C. & T.	Convenience stores, gas stations	350
Lehigh Phoenix	Printed book covers	335
Sierra Nevada	Aircraft maintenance	335
JLG Industries	Aerial work platforms	300
ThompsonGas	Propane gas prod. and svcs.	275
UPS	Mail and package delivery	275
CertainTeed	Roofing products	255
Tempur Sealy International	Mattresses	225
Home Depot	Home improvement products distribution	195

Excludes post offices, state and local governments, national retail and national foodservice; includes higher education

## EMPLOYMENT<sup>1</sup> (2018, BY PLACE OF WORK)

Industry	Estab-lishments	Annual Avg. Empl.	Emp. %	Avg. Wkly. Wage
Federal government	32	455	0.7	\$1,301
State government	12	1,994	3.0	1,071
Local government	65	5,938	9.0	874
Private sector	3,397	57,320	87.2	823
Natural resources and mining	24	224	0.3	1,004
Construction	342	2,894	4.4	928
Manufacturing	138	6,533	9.9	1,173
Trade, transportation and utilities	928	17,260	26.3	714
Information	40	671	1.0	936
Financial activities	324	5,043	7.7	1,110
Professional and business services	485	5,580	8.5	886
Education and health services	442	10,950	16.7	910
Leisure and hospitality	378	6,421	9.8	325
Other services	291	1,742	2.7	590
<b>Total</b>	<b>3,507</b>	<b>65,707</b>	<b>100.0</b>	<b>838</b>

Includes civilian employment only

## HOURLY WAGE RATES<sup>4</sup> (2018)

Selected Occupations	Median	Entry	Experienced
Accountants	\$26.50	\$17.82	\$36.06
Bookkeeping/accounting clerks	17.55	12.00	20.57
Computer systems analysts	31.58	19.60	42.19
Customer service representatives	14.04	10.96	16.91
Electrical engineers	47.37	29.34	56.14
Electronics engineering technicians	31.12	22.26	37.02
Freight, stock and material movers hand	15.30	11.74	18.05
Industrial truck operators	17.91	14.17	21.88
Inspectors, testers, sorters	20.00	13.69	22.70
Machinists	19.77	13.82	24.64
Maintenance workers, machinery	24.35	17.73	27.88
Network support specialists	22.26	13.45	29.06
Packaging/filling machine operators	17.41	12.84	22.29
Secretaries	16.48	11.27	19.74
Shipping/receiving clerks	16.08	11.89	19.59
Stock clerks and order fillers	11.72	10.26	14.61
Team assemblers	13.40	10.87	16.34

Wages are an estimate of what workers might expect to receive in Western Maryland (Allegany, Garrett and Washington counties) and may vary by industry, employer and locality

## Technology

### Cyber Security Trends 2020: What to Expect in the Coming Year

#### The growing impact of AI and ML on cyber security

Three-quarters of surveyed executives reported that AI helps their organizations respond more quickly to breaches, and 69% of the organizations reported that AI is necessary to respond to cyber attacks. This could be in part because there are many advantages — as well as some disadvantages — to integrating artificial intelligence (AI) with your cyber security solutions: AI-based cyber security solutions are designed to work around the clock. AI can respond in milliseconds to cyber attacks that would take minutes, hours, days, or even months for humans to identify. AI simplifies the process of data collection and analysis. AI systems can be integrated for enhanced threat and malicious activity detection through predictive analytics. Greater access to valuable data helps cyber security professionals make better and more informed decisions. AI are helping create better and more accurate biometric-based login techniques.

#### Cyber attacks on utilities and public infrastructure will continue to increase

Utilities are essential to a modern economy and also make excellent targets for cyber attacks. They provide critical infrastructure for millions of people and governments around the world, yet they often operate using old, outdated technology. But trying to upgrade their cyber defenses and fix cyber security flaws can lead to service interruptions and downtime. Add to that the fact that much of their infrastructure is controlled by private corporations — many of which are not prepared to deal with major cyber security threats — and you have a situation that is ripe for exploitation by hackers.

## 15 Cyber Security Facts and Stats

1. 95% of breached records came from only three industries in 2016 – government, retail and technology
2. There is a hacker attack every 39 seconds
3. 43% of cyber attacks target small business
4. The average cost of a data breach in 2020 will exceed \$150 million
5. In 2018 hackers stole half a billion personal records
6. Over 75% of healthcare industry has been infected with malware over last year
7. Large scale DDos attacks increase in size by 500%
8. By approximately \$6 trillion is expected to be spent globally on cybersecurity by 2021
9. By 2020 there will be roughly 20 billion connected devices
10. Unfilled cybersecurity jobs worldwide will reach 3.5 million by 2021
11. 95% of cybersecurity breaches are due to human error
12. More than 77% of organizations do not have a Cyber Security Incident Response plan
13. Most companies take nearly 6 months to detect a data breach, even major ones
14. 46% of all Bitcoin transactions involved illegal online activity
15. Total cost for cybercrime committed globally has added up to over \$1 trillion dollars in 2018

Cybintsolutions

## Top Paying U.S. Cybersecurity Jobs

Rank	Job Title	Average Salary
1	Application Security Engineer	\$128,128
2	Director Of Information Security	\$127,855
3	Senior Security Consultant	\$126,628
4	Cloud Engineer	\$126,365
5	Software Architect	\$117,633
6	Penetration Tester	\$114,431
7	Risk Manager	\$108,465
8	Chief Information Officer	\$103,690
9	Security Engineer	\$101,808
10	Information Manager	\$ 99,930



## Cybersecurity - Maryland

### Federal Agencies

Critical security agencies, including the U.S. Cyber Command, NSA, DISA and NIST call Maryland home. Naturally, these institutions attract the nation's best cybersecurity practitioners with specialized skills. And when those practitioners decide to transition to the corporate world? They turn to the local private IT and cybersecurity sector, or forge their own path with a startup.

### A Talent Pipeline

The IT and cybersecurity talent is in Maryland and will continue to be for a long time, thanks to an education system that's continuously producing tech talent. Home to 16 Centers of Academic Excellence in cybersecurity and many workforce training programs, there's cyber training happening everywhere you look in Maryland. Maryland ranks first in the percentage of bachelor's degrees in computers, mathematics, and statistics, and Maryland's universities produce thousands of cybersecurity graduates every year. It's no surprise that Maryland has the highest concentration of STEM professionals among the states.

### A High Quality of Life

Affordability matters when it comes to attracting and retaining talent. Maryland offers affordable living, without sacrificing a high quality of life. Here, you'll find top-ranked schools, a diverse workforce population, a physically diverse environment and outstanding healthcare. This great quality of life comes at a cost of living that's 50 percent of New York City's and 64 percent of San Francisco's.



- The trucking industry and its supply chain rank fifth among all businesses at risk of cybersecurity attacks as the number of possible threats against the transportation sector has grown 100-fold in just four years.

## 10 Social Media Statistics You Need to Know

1. Social media statistics from 2019 show that there are 3.2 billion social media users worldwide, and this number is only growing. That equates to about 42% of the current population (Emarsys, 2019).
2. Roughly two-thirds of U.S. adults (68%) now report that they are Facebook users
3. Social media usage has been broken down by Emarketer and the results by generation are interesting, to say the least. To break down it down, 90.4% of Millennials, 77.5% of Generation X, and 48.2% of Baby Boomers are active social media users (Emarketer, 2019). (Pewinternet, 2018).
4. This social media statistic uncovers that an average of 2 hours and 22 minutes are spent per day per person on social networks and messaging (Globalwebindex, 2018).
5. 73% of marketers believe that their efforts through social media marketing have been “somewhat effective” or “very effective” for their business (Buffer, 2019).
6. 54% of social browsers use social media to research products (GlobalWebIndex, 2018).
7. 71% of consumers who have had a positive experience with a brand on social media are likely to recommend the brand to their friends and family (Lyfemarketing, 2018).
8. 49% of consumers claim that they depend on influencer recommendations on social media to inform their purchasing decision (Fourcommunications, 2018).
9. The following social media statistic shows us the number of daily active Instagram Stories users, which has increased from 150 million in January 2017 to 500 million in January 2019 (Statista, 2019).
10. 91% of all social media users access social channels via mobile devices. Likewise, almost 80% of total time spent on social media sites occurs on mobile platforms (Lyfemarketing, 2018).

## **Advances in game-based learning and AI**

There are eight primary drivers, each one impacting the rest, that are impacting the global educational game market. These catalysts include:

1. AI alters the competitive landscape
2. Mixed reality learning games in high demand across the planet
3. Historic levels of private investment flowing to game-based learning companies across the planet
4. Large scale global distribution agreements between serious game developers and global distributors
5. Intense mergers and acquisitions activity as large companies acquire game-based learning firms validating the market
6. The booming global consumer demand for mobile serious games
7. The rapid uptake of game-based learning in the corporate segments across the globe
8. The availability of inexpensive easy-to-use rapid development tools and the proliferation of online marketplaces selling premade digital 3D models, VR environments, and pre-trained AI models

There are also secondary catalysts spurring game-based learning's rapid growth, such as the global rollouts of very fast 5G networks and the impending implementation of the Internet of Things. There are also potential secondary catalysts like block chain that could impact the industry in the next five years.

The growth rate for serious games in the higher education and tertiary segment is a healthy 15.4 percent, according to the report. Business simulation games that incorporate role playing are now common in sales, finance, business, and marketing programs in higher education institutions across the planet. The demand for business simulation games is quite high, which could encourage both the use of game-based learning in higher education and prompt students to pursue majors leading them to careers in business simulation game development.

Based on our research and years of experience working with major clients to grow their talent, we see seven ways 5G and XR will change the nature of work:

- The notion of the workplace will become increasingly fuzzy
- Specialists—and even executives—may work for multiple employers
- Working virtually could be as good as or better than being there
- Companies that train their people to use—and be augmented by—technology will perform better
- Companies will have to figure out how to maintain virtual cultures
- Companies that figure out how to create the best value propositions for workers will win
- Burnout and abusive work environments could multiply

- More than 70 percent of schools are considering starting an esports program, citing an opportunity to improve the campus experience for students and foster STEM learning, according to a survey from Extreme Networks and eCampus News.

The report, which surveyed 281 technical and administrative leaders across K-12 and higher education, found that 1 in 5 schools already have an esports program, and 71 percent are considering or might consider adding a program in the future.

Five important things to know about esports in education

1. Esports improves overall campus experience, drives recruitment, and diversifies learning:
  2. League of Legends and Overwatch reign supreme:
  3. Schools are using scholarships to attract esports talent
  4. Fears of high program costs are misguided
  5. Designated esports facilities are on the rise, and the network is key
- Esports, like traditional athletic programs, can open doors for students through financial aid. Higher education institutions now offer nearly \$15 million per year in scholarships for competitive gamers, Wired reports.
  - It is estimated that esports will outpace traditional sports by the year 2022. Scholarships, academic majors, studios, arenas, competitions, and broadcast opportunities are appearing on an increasing number of college campuses.

# VARSITY ESPORTS

## THE NEXT FRONTIER

# 475+

higher ed institutions offer club esports, a sizable springboard for the growing number of varsity teams.<sup>1</sup>

# 100+

institutions (and countries) belong to the National Association of Collegiate Esports.<sup>2</sup>



# 50

colleges and universities support players with thousands of dollars in esports scholarships.<sup>3</sup>

# 589

## MILLION PEOPLE

will watch esports by 2020, by one estimate, many on live-streaming platforms such as Twitch and YouTube.<sup>4</sup>

### GAMING ERGONOMICS



In the heat of competition, gamers may sit for hours. Racing-style chairs, with a higher backrest and customizable features such as armrests and lumbar support, are designed for long-term comfort. Special materials support muscles and regulate body temperature during play.

With esports poised to become a multibillion-dollar industry, colleges are investing in high-tech gaming facilities, scholarships and the next generation of gaming talent. What does it take to build a winning team?

# 1

## GIGABIT PER SECOND

Fast gaming demands fast networking and plenty of bandwidth, whether facilities have a dedicated internet pipe or take advantage of a campuswide upgrade.

### GAMING SYSTEMS

All games have different requirements, but systems like the Dell Alienware Aurora R7 deliver the speed and power gamers need to win, such as an Intel 8th Generation Core i7-8700K processor, 32GB of RAM, a 512GB solid-state drive and a 2TB hard drive. Virtual reality and 4K capability rounds things out, while the Alienware Command Center app lets players monitor and customize their rigs.



### GAMING MONITORS

Realistic detail and sophisticated visuals deliver an immersive experience that draws players in. Specs like a 165Hz refresh rate, 1-millisecond response time and QHD resolution with 3.68 million pixels keep things smooth, while tools like NVIDIA G-Sync eliminate glitches between the monitor and graphics card.



### GAMING PERIPHERALS

Keyboards are all about customization for that extra edge: programmable macro functions with on-the-fly recording, ergonomic design and tactile keys. Players can calibrate preferences and carry these to events. Gaming mice offer faster response, increased accuracy and more programmable buttons than regular mice.

- Workers and companies face an unprecedented acceleration of workplace technologies, with broad implications for the “future of work” in America. By most estimates, at least 60 percent of today’s jobs will be impacted by digitalization, automation, and/or artificial intelligence. That means over ninety million working Americans may have to acquire new skills just to stay in their jobs, let alone to advance in their industries. An additional 10-20 percent of jobs are likely to be eliminated and replaced with new types of higher-skilled positions, requiring broad-based reskilling support for millions of impacted workers as they develop new careers.
- In a recent survey, 54 percent of faculty respondents said they believe adding more technology to their classroom would definitely increase student engagement. And another 35 percent felt adding more tech could possibly do so. The survey, conducted by Censuswide on behalf of learning management company D2L, polled 500 university professors across the United States on their use of technology, students' expectations, institutional support for tech and more.

The biggest thing university administration can do to get faculty to embrace tech in the classroom, respondents said, is offer more support and training for educators (cited by 52 percent of respondents). Other popular suggestions included offering more budget (44 percent), offering more support and training for students (41 percent) and setting aside time to get the technology set up (34 percent).

*Inside Higher Ed's 2019 Survey of Faculty Attitudes on Technology*, conducted with Gallup, shows a continuing uptick in the proportion of faculty members who have taught an online course, to 46 percent from 44 percent last year. That figure stood at 30 percent in 2013, meaning that the number has increased by half in six years.

Among the new survey's other findings:

- Nearly four in 10 instructors (39 percent) say they fully support the increased use of educational technologies, up from 32 percent in 2018 and 29 percent in 2017.
- Neither faculty members nor digital learning administrators believe online learning is less expensive to offer than its on-ground alternative -- unless colleges reduce spending on instruction or student support.
- Majorities of professors and digital learning leaders alike generally oppose colleges' use of external vendors to deliver online academic programs, except for marketing to students.
- Professors believe textbooks are too expensive and support use of open educational resources as an alternative -- but they are reluctant to put price ahead of quality or to give up control over selection of instructional materials.
- Six in 10 faculty members believe academic fraud is more common in online courses than in face-to-face courses, while the rest believe fraud occurs equally in both settings.

A survey of university professors reveals higher-ed tech adoption is one of their biggest sources of stress—a majority say they've experienced anxiety and both personal and professional tension.

The survey points to the alarming notion that college and university faculty aren't ready for technologically savvy students who have never known a world without the internet or smartphones.

Related: The secret to edtech adoption? Make it easy

Male professors believe they are ahead of the curve when it comes to higher-ed tech adoption in the classroom, but they actually lag behind their female counterparts.

Overall, less than one-third of surveyed professors say they are prepared to equip Generation Z students for the modern-day workplace.

The survey of 500 U.S. professors was conducted by Censuswide and commissioned by D2L.

Key survey findings include:

- Women instructors reported using technology slightly more than men for communicating with students, sharing course materials, grading essays and plagiarism detection (64 percent vs. 60 percent). Men were ahead in one category related to classroom technology: using gamification to engage with students (42 percent vs. 33 percent).
- More than half of early-career educators (51 percent) say students want more detailed feedback and one-on-one interaction than do older professors (41 percent), with only 34 percent of instructors ages 45-54 saying students want more engagement.
- Instructors said additional support and training would help them embrace tech in the classroom (52 percent); 43 percent said more budget from academic institutions would help with proper implementation of learning technologies.
- Faculty ages 25 to 34 say they feel the most prepared to equip Gen Z students for the modern-day workplace.

Rather than relieving stress, tech adoption is actually a key pressure point for lecturers.

- Sixty percent of lecturers say they have experienced stress based on institutional pressure to use technology, including anxiety (25 percent), sleepless nights (20 percent), tension in their personal life (18 percent), tension with colleagues (17 percent) and arguments with students (16 percent).
- Instructors ages 55+ were much less likely than professors ages 25-34 to say pressure from students to use technology causes them stress.

### Top Ten Wireless Trends

- Wifi
- 5G Cellular
- Vehicle to Everything (V2X) wireless
- Long-Range Wireless Power
- Low-Power Wide-Area (LPWA) Networks
- Wireless Sensing
- Enhanced Wireless Location Tracking
- Millimeter Wave Wireless
- Backscatter Networking
- Software-Defined Radio (SDR)

### Mobile Internet Statistics and Facts 2019

By 2019, 63.4 percent of all mobile phone users will access the Internet from their mobile phone.

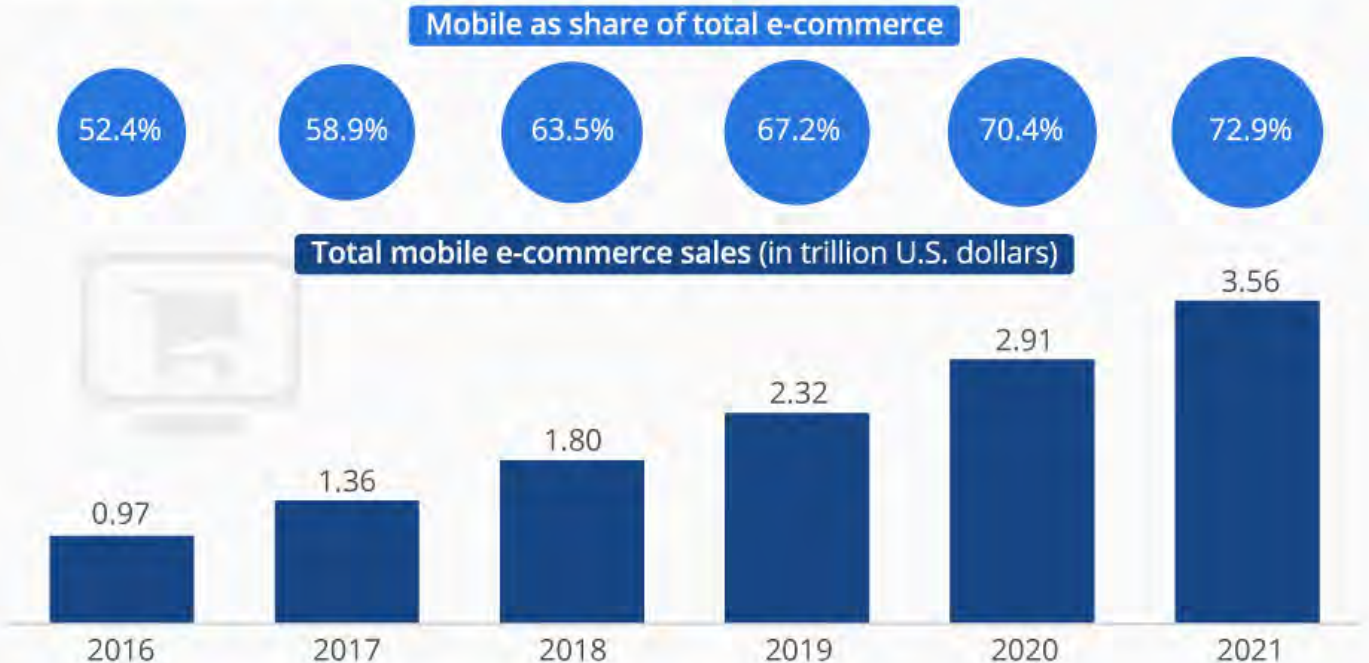
There are 3.7 billion global mobile Internet users as at January 2018.

Mobile e-commerce will be responsible for \$2.32 trillion — or about 67.2 percent — of e-commerce sales by 2021.

Mobile commerce revenue in the U.S. is projected to be \$693.36 billion by 2019.

## Mobile E-Commerce is up and Poised for Further Growth

Estimated mobile e-commerce sales worldwide



Includes products or services purchased via mobile devices (including tablets) regardless of the method of payment or fulfillment; excludes travel and event tickets

As of January 2018

Source: eMarketer



@StatistaCharts



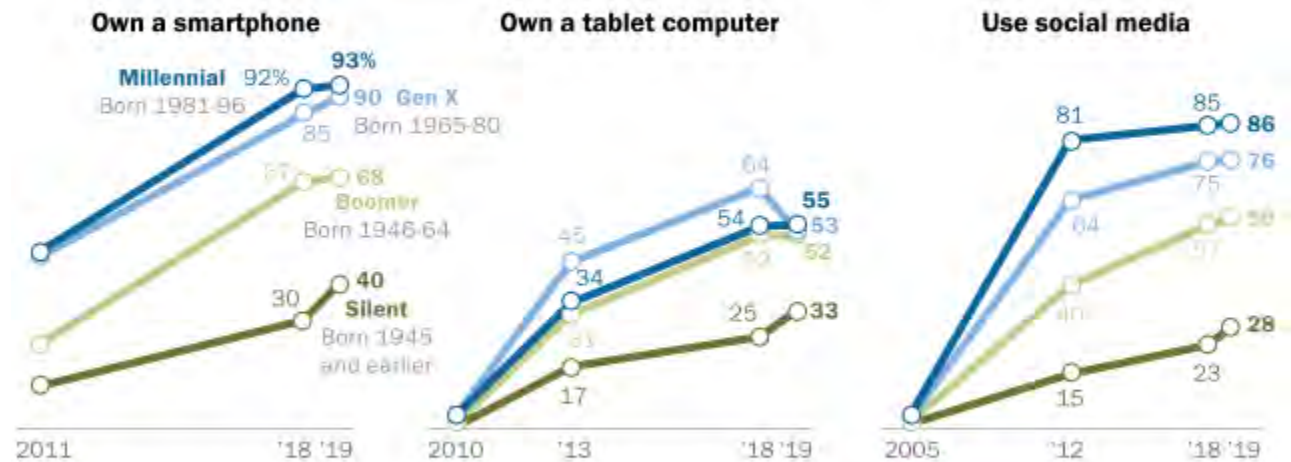


- Millennials have often led older Americans in their adoption and use of technology, and this largely holds true today. But there has been significant growth in tech adoption since 2012 among older generations – particularly Gen Xers and Baby Boomers.

More than nine-in-ten Millennials (93% of those who turn ages 23 to 38 this year) own smartphones, compared with 90% of Gen Xers (those ages 39 to 54 this year), 68% of Baby Boomers (ages 55 to 73) and 40% of the Silent Generation (74 to 91), according to a new analysis of a Pew Research Center survey of U.S. adults conducted in early 2019.

### Millennials lead on some technology adoption measures, but Boomers and Gen Xers are also heavy adopters

*% of U.S. adults in each generation who say they ...*



Note: Those who did not give an answer are not shown.  
Source: Survey conducted Jan. 8 - Feb. 7, 2019.

PEW RESEARCH CENTER

- In a 2018 study from CityLab, a transportation and infrastructure design website owned by the Atlantic Monthly Group, the team looked at energy production and consumption by state in order to convert vehicle miles traveled into electricity requirements based on the efficiency of today's EVs. They found that if the trend of purchasing electric vehicles for personal use experienced a rapid increase in the United States, the collective North American electrical grid would have to change much faster than is reasonably expected.

Texas and California are the primary states for the study since they are the states with the largest populations. The group found that in both states consumption of electricity would increase faster than the capacity of the grid to provide it. This would create enormous strains on the local infrastructure. For instance, hypothetically if all passenger cars were made electric today the Texas Interconnection (the Texas electric grid) would have to produce 110 more terawatt-hours of electricity per year, which is the amount of electricity consumption of 11 million homes. This amount of added demand would represent an increase of 30% over Texas's current electricity production capacity. Worse still, the study found that California would have to produce nearly 50% more energy to make up for its current driver fuel usage.

American motorists drive around three trillion miles per year combined, which consumes over 170 billion gallons of gasoline and diesel according to the U.S. Department of Transportation's Federal Highway Administration. Given the need for Americans to be able to cover large distances and the love that American drivers have for driving, the utilities have their work cut out for them.



- The technological progression in the wearables industry has created a new opportunity for app developers. Wearables are fast gaining popularity in the technology world just like smartphones did when they first hit the market.

Most forward-thinking companies are already making forays into this fast-paced technology by moving into wearable app development services.

- The Maryland Department of the Environment has drafted a comprehensive, economy-wide plan to dramatically reduce emissions of greenhouse gases that contribute to climate change. The draft plan will set Maryland on an ambitious path and serve as a model for how the nation can respond to climate change while also supporting economic growth.



The Greenhouse Gas Emissions Reduction Act – Reauthorization, signed into law by Governor Larry Hogan, expanded on the original law to require that the state achieve at least a 40% reduction in statewide greenhouse gas emissions from 2006 levels by 2030. This requirement is substantially greater than the United States’ commitment to reduce emissions by 26-28% by 2025 under the Paris Agreement.

- Maryland’s commitment to smart energy use and protecting the environment is enthusiastic—and growing. The state’s Renewable Portfolio Standard will require 50 percent renewable sources by 2030.

Recently passed legislation will help, expanding the Electric Vehicle Tax Credit program and doubling the Charging Station Tax Rebate. Another measure furthers Maryland’s commitment to meet the goals of the Chesapeake Bay Watershed Improvement Plan.

And the new Maryland Energy Innovation Institute will develop clean energy innovations, and attract private investment to commercialize them. It’s a collaboration between University of Maryland Energy Research Center and the Maryland Clean Energy Center. Just one more example of Maryland’s support for innovative companies powering the future.

### Top 10 New Medical Technologies

1. Smart inhalers
2. Robotic Surgery
3. Wireless Brain Sensors
4. 3D Printing
5. Artificial Organs
6. Health Wearables
7. Precision Medicine
8. Virtual Reality
9. Telehealth
10. CRISPR



## Social Media Statistics

- There will be an estimated 2.77 billion social media users in 2019.
- As at Q3 2018, Facebook has 2.27 billion monthly active users.
- As at June 2018, Instagram has 1 billion monthly active users.
- As at Q3 2018, Twitter has 326 million monthly active users.
- LinkedIn has 260 million monthly active users.
- 80 percent of Instagram users live outside the U.S.
- 32 percent of all Internet users are on Instagram.
- Over 95 million photos and videos are shared on Instagram daily.
- Visual content is 40 times more likely to be shared on social media than any other type of content.
- Facebook status updates with images get 2.3 times more engagement than Facebook status updates without images.
- People are 80 percent more likely to read content that has colored visuals.
- Infographics are 3 times more likely to be liked and shared compared to any other type of content on social media.
- Mobile is responsible for 92 percent of Facebook's ad revenue.
- 64 percent of Facebook's monthly active users use Facebook messenger.
- Social media influences the shopping activities of 23 percent of online shoppers.
- 30 percent of online shoppers are willing to purchase a product on social media sites.
- Social media ad spend is expected to overtake newspaper ad spend by 2019.

## Public Policy and Accountability

### State and Local

- Maryland's 16 community colleges operate a network of 23 campuses and numerous learning centers across the state. And students who invest their time and money attending Maryland's community colleges benefit from a lifetime of higher earnings.

Maryland community college students in 2015–16, for example, will receive a 12.1 percent annual average rate of return on their investment in education. And that continues throughout their working lives. Put another way, those students will receive \$2.60 in higher future earnings for every dollar spent on their community college education in Maryland.

- Businesses across the state count on Maryland's excellent schools to generate workers who excel. **Nearly 40 percent of Marylanders hold a bachelor's degree or higher**, ranking third in the nation.

The state's K–12 public school system consistently outperforms those in the other states. And Maryland's 57 accredited two- and four-year colleges and universities include some of the world's leading academic institutions.

In addition, Maryland's 16 community colleges offer continuing education classes and certificates, as well as customized workforce training.

# FOR-PROFIT COLLEGES: LESS FAVORABLE OUTCOMES, DEEPER DEBT FOR STUDENTS

## MARYLAND



**MD for-profit colleges disproportionately HARM:**  
 LOW-INCOME FAMILIES • AFRICAN AMERICANS • WOMEN

**Undergraduate enrollment at Maryland for-profit colleges is:**

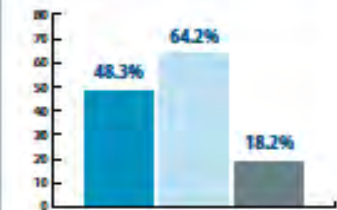
- **63.7% low-income**, compared to 30.1% low-income for all nonprofit undergraduate institutions in the state.
- **62% African American**, compared to 28.2% African American for all nonprofit undergraduate institutions in the state.
- **65.7% female**, compared to 54.4% female for all nonprofit undergraduate institutions in the state.

**LESS LIKELY TO GRADUATE**

Students at for-profit colleges are **LESS LIKELY TO GRADUATE**

**MARYLAND COMPLETION RATE (IN 6 YEARS)**

- Public 4-Year
- Private 4-Year
- For-Profit 4-Year

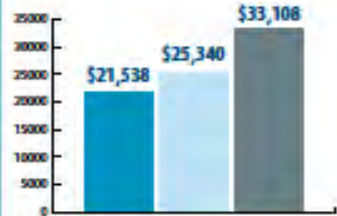


**DEEPER IN DEBT**

GRADUATES LEAVE SCHOOL **MORE INDEBTED**

**MARYLAND MEDIAN DEBT AT GRADUATION**

- Public 4-Year
- Private 4-Year
- For-Profit 4-Year

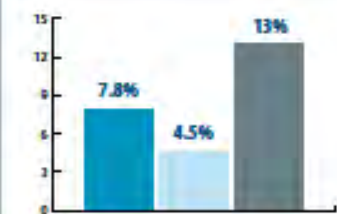


**MORE LIKELY TO DEFAULT**

Students at for-profit colleges are **MORE LIKELY TO DEFAULT** on their college debt, leading to economic instability

**MARYLAND THREE-YEAR COHORT DEFAULT RATE**

- Public 4-Year
- Private 4-Year
- For-Profit 4-Year



**POOR OUTCOMES**

National studies show that for-profit college grads are **LESS LIKELY TO** get a well-paying job in their field, compared to nonprofit college grads

**MD Students DESERVE HIGHER EDUCATION, NOT INCREASED DEBT**



- The College Transparency Act, introduced in 2019, would help researchers and policymakers answer important questions by tracking students over the course of their education rather than taking limited snapshots when they arrived at or leave a given institution. It's long been known that community colleges struggle with college completion more than four-year colleges, and there are a variety of factors at play: Community colleges receive much less state funding than four-year colleges, and their student population is more likely to be balancing other priorities such as caring for children or working long hours as well as to be placed in remedial classes that slow their path to a degree.

One solution would be to provide more funding for these schools while also addressing problems that prevent students from completing their degree, such as food insecurity, housing instability, and transportation issues. Beyond Tuition—the Center for American Progress' plan for addressing affordability, accountability, and equity in the United States' higher education system—calls for a major investment from state and federal governments in public higher education, which includes community colleges. Community colleges enroll a large share of low-income students and students of color, so investing in these institutions would be a powerful step toward reducing societal inequities.

- According to a new survey by American Public Media, government funding for public universities has dramatically decreased. In real terms, states have collectively scaled back their annual higher education funding by \$7 billion during the past decade, according to the Center on Budget and Policy Priorities. Meanwhile government-funded grants and loans have not kept pace with increases in the price of tuition over the past 10 years.

However, according to survey findings, 34% of U.S. adults think government funding for public colleges and universities has stayed the same over the past decade, while 27% think it has increased. At the same time, 44% of U.S. adults think government aid for college and universities has fallen behind the price of tuition.

The American public has strong, positive attitudes about the benefits of a community college education, according to the 2019 edition of the “Varying Degrees” study by New America.

Overall, 85 percent of Americans think public community colleges are worth the cost, and 78 percent are comfortable contributing their tax dollars to them (See *chart below*).

More than half, 62 percent, believe community colleges are run efficiently and spend money wisely, and 86 percent believe community colleges contribute to a strong American workforce.

With respect to those issues, community colleges got higher ratings than any other type of postsecondary institution.

Support for public community colleges is strong across all education levels, but the report found some variations. Among Americans with associate degrees, 88 percent believe community colleges are worth the cost. That compares to 82 percent among people with a high school education or less, 85 percent among people with a bachelor’s degree and 94 percent for people with a graduate degree.

There are similar patterns with regard to attitudes about supporting community colleges with tax dollars. Americans with graduate degrees (89 percent) and associate degrees (80 percent) were most comfortable contributing tax dollars to community colleges. Americans with a high school diploma or some college (77 percent) and Americans with bachelor’s degrees (73 percent) were less supportive.

#### Solid return on investment

In general, survey respondents believe the more education a person has, the higher the salary they will earn. However, while 23 percent believe people with a technical degree or certificate will earn much more than a person with no education beyond high school, only 20 percent believe a person with an associate degree will earn much more than someone with no postsecondary education.

Eight-seven percent agree that people with a technical degree or certificate “have an easier time finding a well-paying and stable career.” That compares to 81 percent for associate-degree earners and more than 90 percent for people with bachelors, advanced and professional degrees.

In comparing attitudes among generations, the study found millennials (ages 25 to 39) are most dubious about the value of higher education, in general. Only 21 percent of millennials strongly agree that “education beyond high school offers a good return on investment for the student.” That compares to 24 percent for the youngest group (Generation Z), 30 percent for Generation X, 33 percent for Baby Boomers and 42 percent for the Silent Generation.

When asked about the most important things higher education, in general, should do for students, the top three are: supporting learning and development toward lifelong careers; preparing students for entering the job market or graduate school; and teaching work-related skills and knowledge.



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