THE CITIZEN'S GUIDE TO UNDERSTANDING ARKANSAS ECONOMIC DATA

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Special Feature: Tax Reform in Arkansas

ARKANSAS CENTER FOR RESEARCH IN ECONOMICS | UNIVERSITY OF CENTRAL ARKANSAS

The Citizen's Guide to Understanding Arkansas Economic Data

Arkansas Center for Research in Economics

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Introduction

Knowing how Arkansas compares to its neighbors and the nation is key to understanding how our state is doing. A measurement can be trending upward over time but still lag far behind the regional or national average. You might care about these comparisons as an individual or business when deciding where to live or invest. As a citizen or elected representative, you might wonder why Arkansas is doing better than other states on some indicators and worse on others. Can we learn any lessons about good public policy from other states?

This book will help both citizens and policy makers to better understand our state's strengths and weaknesses. What is Arkansas doing well that we should do more of? What could we be doing better? Where are our neighboring states and the nation as a whole excelling, and what can we learn from their successes? Where does Arkansas stand out and provide examples that other states can learn from?

Economic data give us a way to gain this understanding. If you watch the news, you see economic data all the time. Employment is up! Wages are stagnant! Poverty is declining! State government revenue is higher than projected! But it's often hard to contextualize the data. Where do they come from? What do they mean? How do current data compare to past data? And how far back do those data go?

That's why we put this book together. Inside you'll find the data on important economic indicators for Arkansas, along with simple descriptions of what the data really mean—how they're collected, how they're measured, and, crucially, what they leave out. Even something as simple as income is hard to define, and as you will see, there are several different definitions of income. Median household income, per capita personal income, and wages are all related, but how do they differ? What does it mean if one is going up while another is going down? For each indicator, we provide the longest time series of data available. Sometimes this period is just a decade. Other times it goes back almost 80 years.

Have you seen new releases of monthly, quarterly, and annual data in the news? They're all subject to revision, since the initial reports are necessarily based on incomplete data. Month to month, or even quarter to quarter, fluctuations can be "noisy," as statisticians call it, since they are based on small samples of data. Sometimes, there may be no real change over the short term, and all that noise is just a distraction.

For this reason, we use annual data for most of the indicators we describe. Because we want to minimize reporting on trends that may not represent reality, we don't always report on data for the latest year, or even for 2017 in some cases. Instead, we take a longer view and use data that have already been revised for greater accuracy to give you a better sense of the real trends in economic data and to see them in their proper historical context. The media often focus on very recent data, like last month's unemployment rate. But that information can be misleading if you don't have the long-run trends to compare it to.

Furthermore, especially for data that are in US dollars, we need to make an adjustment for inflation, since the value of a dollar in 2016 is not the same as the value of a dollar in 2006 or 1946. Government statisticians have been collecting data on prices for decades. A common one you may have heard of is the Consumer Price Index. Using these data, we can make past dollars comparable to current dollars. It's not a perfect comparison, but it's much better than not adjusting the data. When necessary in this book, we provide an explanation for how the data are adjusted, but in general, if you're wondering, "Are the data adjusted for inflation?," the answer is probably yes.

And not everything is about money. Migration between states and countries is measured in terms of the number of people. Education is extremely important to society and to the economy, but it is especially hard to measure. Do we use graduation rates? Test scores? Something else? For tough topics like these, we present several different indicators and explain what each can tell us. Our data book gives you the best information we have at the time of its writing, and we'll update that information in future editions.

Arkansas is a state of almost exactly three million people. That makes us the 32nd largest of the 50 states. But our economy ranks slightly lower, at 34th place. Already, that gives us some indication that our economy might not be performing as well as other states' economies. But why? Can we learn anything about how to improve conditions in Arkansas by looking at other states?

The book also includes a special feature looking at other states' good and bad attempts at tax reform. The feature article is coauthored by Jeremy Horpedahl, a coeditor of this volume, and Nicole Kaeding, an economist at the Tax Foundation. Horpedahl and Kaeding, along with several others from the Tax Foundation, wrote a book about taxes in Arkansas, published in 2016 and titled *Arkansas: The Road Map to Tax Reform*. Since writing that book, Arkansas's legislature has taken a great interest in improving Arkansas's tax system, and Horpedahl and Kaeding are two experts the legislature has called on often to give testimony on how to improve taxes in Arkansas. In our special feature, they look at tax reforms in other states as models for what Arkansas should, and perhaps should not, consider when pursuing its own tax reforms.

We invite you to use this book in the way most helpful to you. Start at the beginning and read straight through, or skip to the section on whatever topic is in today's news, like unemployment, poverty, or job growth. Then, we hope you will share your thoughts with us. We want future editions—and future Arkansans—to be even better. We intend this book to be an annual publication, but each year we hope to do more than just add one more year's worth of data. Each new edition will have a completely different feature article, and it also will be improved based on suggestions from you, the reader.

SPECIAL FEATURE

Tax Reform in Arkansas

By Jeremy Horpedahl and Nicole Kaeding

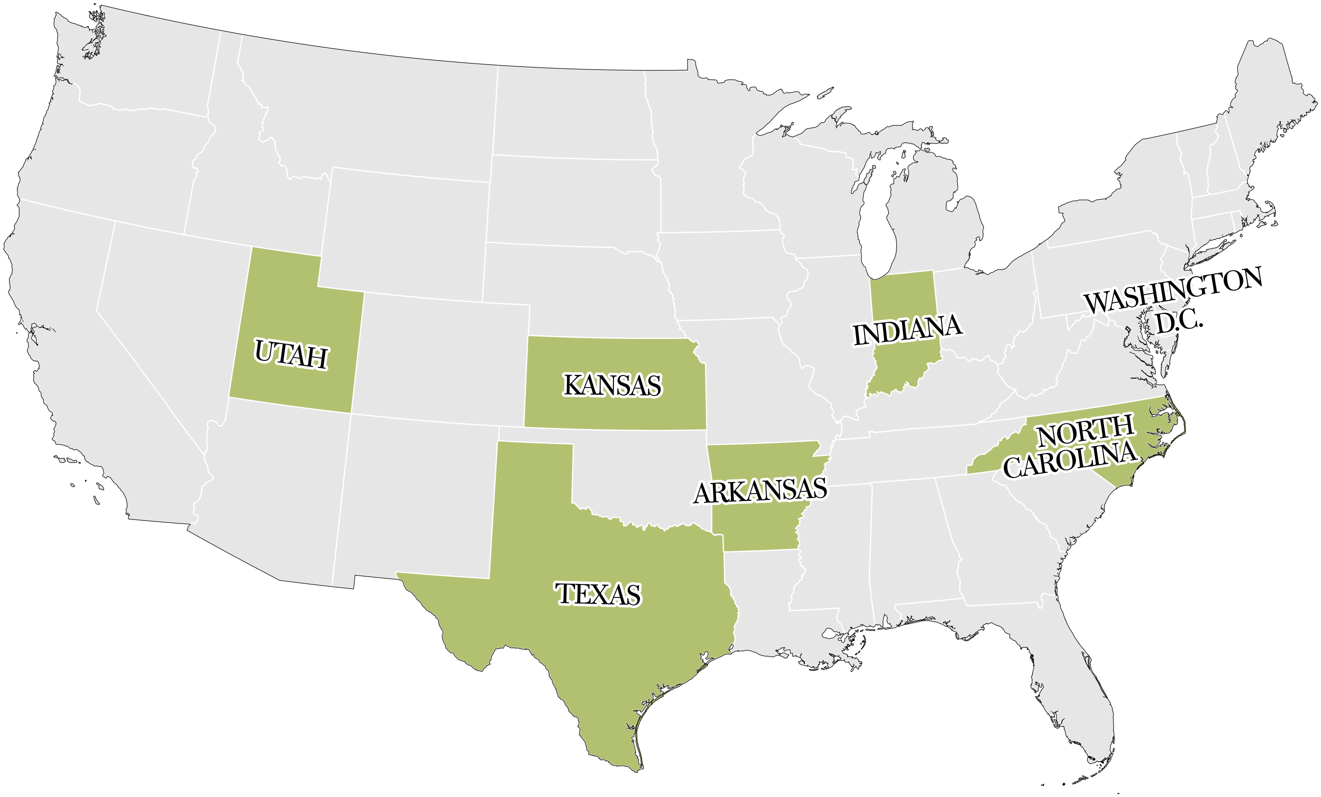
Introduction

How can Arkansas improve its tax system? In 2016, we undertook an in-depth research project to better understand Arkansas's tax system, what the citizens and businesses of Arkansas liked and disliked about taxes, and how Arkansas compares to other states on a variety of measures. The results of that study were published in our book *Arkansas: The Road Map to Tax Reform* in November 2016.[1]

In this article, we have three objectives. First, we briefly summarize the findings and suggestions from our book. Second, we discuss some recent changes to Arkansas's tax system, following our book's publication. Finally, we review several tax reform efforts in other states, all of which have reforms and lessons that are useful for Arkansans to understand.

In the time since our book was published, we have received a lot of feedback and many questions, and a common theme was: This all sounds great, but is this really possible? Have any other states tried similar reforms in recent years? The answer to both questions is a resounding yes. And in this article, we will get into the details of what other states have done, focusing on areas of reform that either we suggested in our book

1 Nicole Kaeding, Scott Drenkard, Jeremy Horpedahl, Joseph Bishop-Henchman, and Jared Walczak, "Arkansas: The Road Map to Tax Reform," Tax Foundation, November 14, 2016, https://taxfoundation.org/arkansas-road-map-tax-reform/.



or have been under debate in Arkansas. Right now is an especially important time to learn from other states, as the Arkansas Tax Relief and Reform Task Force has made their recommendations and members of the legislature will be considering them.

Arkansas's Current Tax Structure

Arkansas last passed comprehensive tax reform in 1971, leaving the Natural State with an almost 50-year-old tax code, a tax code unprepared for and uncompetitive in the 21st century. According to the *State Business Tax Climate Index*, Arkansas ranks in the bottom third of all states, with the 39th-best tax climate among the 50 states.[2]

The state's individual and corporate income taxes are particularly uncompetitive. Arkansas has the highest individual income tax in the Southeast, with a top marginal rate of 6.9%. The state's individual income tax is also quite complicated, as it uses four sets of rates and brackets, making it the only state with this structure.

2 Jared Walczak, Scott Drenkard, and Joseph Bishop-Henchman, "2018 State Business Tax Climate Index," Tax Foundation, October 17, 2017, https://taxfoundation.org/state-business-tax-climate-index-2018/.

The state's corporate income tax is also high. The top marginal rate is 6.5%, with a large benefit recapture provision for any firm with income above $100,000. Arkansas also continues to use a problematic throwback rule, adding complexity to the system, while significantly lagging other states on corporate income tax base provisions, such as net operating losses.

Arkansas's sales tax also needs reform. The state has the third highest combined state and local sales tax rate in the country. Because changes to the sales tax only require a majority vote in the legislature (compared to changes to the individual and corporate income tax, which need supermajorities), Arkansas frequently uses its sales tax as a way to raise revenue, leading to the high rate. While the top income tax rate has not been increased since 1971, the sales tax rate has been increased six times (three times with voter-approved constitutional amendments, three times by the legislature). Additionally, the state's sales tax base is too small. The state exempts a number of goods, such as prescription drugs, while providing a preferential rate on groceries. The state also excludes most services from its sales tax base.

Finally, Arkansas is an outlier among states. It still has a franchise tax (also known as a capital stock tax) and an inventory tax. Only 17 states have a franchise tax, with Arkansas's tax having the second highest rate nationally. Since 2010, five states — Kansas, Rhode Island, West Virginia, Missouri, and Pennsylvania — have phased out their franchise taxes, while Mississippi and New York are currently phasing theirs out.

Individual and corporate income taxes are particularly uncompetitive. Arkansas has the highest individual income tax in the Southeast. It is also quite complicated, as it uses four sets of rates and brackets, making it the only state with this structure.

Additionally, Arkansas is one of only 12 states that fully taxes business inventory within its property taxes.

Arkansas: The Road Map to Tax Reform includes three comprehensive tax reform options for improving the state's tax competitiveness.[3] These plans lower tax rates, broaden tax bases, and follow the examples of other states that have completed tax reform in the last several years.

3 Kaeding et al., "Arkansas: The Road Map to Tax Reform."

Recent Changes to Arkansas's Tax Structure

Since the release of our book in 2016, Arkansas has made several positive revisions to its tax code. In 2017, the state repealed its largest business tax credit, the InvestArk credit. The credit rebated part of a firm's sales tax liability when it expanded within Arkansas, but it served as an offset for its improperly structured sales tax on machinery repair parts. Arkansas decided to remedy both issues simultaneously: it repealed the credit, while removing the sales tax on repair parts.[4]

Additionally, the state lowered income taxes for low-income tax filers, those with income below $21,000, effective for the 2019 tax year, and it created the Arkansas Tax Relief and Reform Task Force.[5] The task force's job was to study Arkansas's tax code and provide recommendations. The criteria they used to judge its research and to make recommendations were:

- Modernize and simplify the Arkansas tax code.
- Make the Arkansas tax laws competitive with other states in order to attract businesses to the state.
- Create jobs for Arkansans.
- Ensure fairness to all individuals and entities impacted by the tax laws of the State of Arkansas.[6]

4 Nicole Kaeding, "Trading Bad Policy for Good Policy in Arkansas," Tax Foundation, February 21, 2017, https://taxfoundation.org/investark-sb362-trading-bad-policy-good-policy-arkansas/.

5 Nicole Kaeding, "Tax Cuts Signed in Arkansas," Tax Foundation, February 2, 2017, https://taxfoundation.org/tax-cuts-signed-arkansas/.

Lessons from Other States' Experiences

As Arkansas undertakes the herculean task of reforming and modernizing its state tax code, it can learn from the lessons of other states. A number of states have developed and passed tax reforms in the last several years. This article looks in depth at five recent state tax reform efforts in Utah, Indiana, North Carolina, the District of Columbia, and Kansas. The first four are generally considered to be successful examples of tax reform. While each approached the important questions differently, these four all broadened tax bases, lowered tax rates, and simplified their tax structures. North Carolina and Utah completed theirs in one large tax package, with smaller modifications later. Indiana completed a series of smaller reforms over a number of years, while the District of Columbia used a series of tax triggers to accomplish its goals.

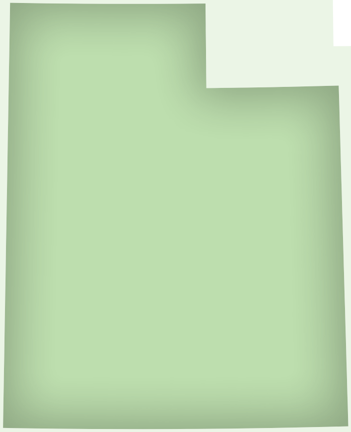
Kansas is the unique state in this grouping, and instead, illustrates the risks to state tax reform. Base broadening is an essential part of tax reform. Kansas exempted a large part of income from its tax base, leading to tax avoidance.

6 Ibid.

Utah's Reforms before (and during) the Great Recession

In 2006 and 2007, Utah enacted a major reform of its tax code, first in a special legislative session in late 2006, and then in the 2007 general session a few months later. The major achievement of this tax reform was the creation of a flat-rate tax system for the individual income tax, which was passed in a 2006 special session. In the 2007 general session, Utah enacted several more tax changes, including a small decrease in the overall state sales tax rate and a larger decrease in the sales tax on groceries.

Unlike North Carolina (discussed later in this article), Utah began its tax reform efforts from a position of strength in its tax system. It already ranked well (18th) in the 2006 edition of the Tax Foundation's *State Business Tax Climate Index*.[7] In the 2018 edition of the *Index*, Utah has moved up even further, with the eighth best overall score and the 11th best score for the individual income tax. And that eighth best overall score is actually the highest score among states that have all three major tax types.[8] Utah started from a strong position, but its 2006–07 reforms moved the state up to have one of the best business tax climates in the country.



Prior to the 2006–07 reforms, Utah had a progressive income tax with six brackets. The brackets ranged from 2.3% up to 7%, and this specific set of brackets had been in place since 1997, though Utah had a multibracket income tax since its enactment in 1931.[9] The top rate of 7.0% applied to married couples with taxable income above $8,627 per year (or $4,314 for single filers). The standard deduction and personal exemption were both tied to the federal standard deduction and personal exemption in Utah, and reforms converted these deductions into credits.

The big change was to move Utah from a six-bracket, progressive tax system to a flat-rate income tax of 5%. The initial reform passed in the 2006 special session created a dual-track system, in which filers could either continue filing under the old progressive

7 Jonathan Williams, "Utah's New Flat Tax," Tax Foundation, September 22, 2006, https://taxfoundation.org/utahs-new-flat-tax/.

8 Jared Walczak, Scott Drenkard, and Joseph Bishop-Henchman, "2018 State Business Tax Climate Index," Tax Foundation, October 17, 2017, https://taxfoundation.org/state-business-tax-climate-index-2018/.

9 Utah State Tax Commission, Economic & Statistical Unit, "History of the Utah Tax Structure," November 2016, 160, http://tax.utah.gov/esu/history/history.pdf.

By lowering rates, broadening the base, and making sure the overall package was roughly revenue-neutral, Utah demonstrated that good tax reform can work even in a rough business cycle.

system or use the new flat rate. The flat rate was initially set at 5.35%, though this rate and the dual-track system only existed for tax year 2007. In 2007, the legislature lowered the rate to 5% and eliminated the six-bracket system, leaving only the flat rate system for all taxpayers.

Prior to the reform, a married couple would not be paying a 5% marginal rate until they were above $5,177 in taxable income (the rate was 5.2%), so some taxpayers would have seen a net tax increase under this reform. To partially offset this tax increase, Utah made two changes to the sales tax rates, as well as one change to income tax credits. The general sales tax rate was lowered slightly, from 4.75% to 4.65%, and the tax rate on food was lowered to 1.75% in two steps.[10]

Utah added new income tax credits to help make whole those taxpayers who would see their rates increase under a flat-rate income tax. Instead of taking the standard deduction and personal exemption to arrive at taxable income, the new tax system applied these as credits (equal to 6% of the total) after the tax is calculated.[11] The credits are nonrefundable, and start to phase out above $24,000 for married-filing-joint returns (this figure is adjusted for inflation, so it is almost $28,000 today).[12] Thus, high-income taxpayers pay exactly 5% of their income in taxes, whereas low-income taxpayers pay less than 5% (zero at some income levels), retaining some progressivity even within a flat-rate system.

These changes to the tax code did result in a net cut to state revenue. The individual income tax changes resulted in a roughly $190 million revenue reduction, and the sales tax changes reduced state revenues by about $160 million (with most of that coming from the sales tax reduction on groceries).[13]

Utah also had the unusual experience of its tax changes going into effect right as the Great Recession hit state budgets. But because Utah carried out its reforms in a prudent manner, the state did not suffer additional adverse effects from the recession (other than the effects all states felt). By lowering rates, broadening the base, and making sure the overall package was roughly revenue-neutral, Utah demonstrated that good tax reform can work even in a rough business cycle.

10 Utah Legislature, Office of Legislative Research and General Counsel, "Tax Relief & Reform: What Does It Mean for Taxpayers?" briefing paper, March 2007.

11 Taxpayers can also use federal itemized deductions as their credit (less any state income tax included in itemized deductions). The personal exemption credit is set at 75% of the federal level.

12 Utah Legislature, "Tax Relief & Reform: What Does It Mean for Taxpayers?"

13 Ibid.

Indiana's Consistent Path to Reform

Unlike Utah and North Carolina, which tackled the majority of their reforms in one legislative session, Indiana approached reform in smaller pieces. The state passed small reforms in multiple sessions, which, in combination, represent a far-reaching reform of the Hoosier state's tax code. By lowering individual and corporate tax rates, reforming the state's tangible personal property tax, and repealing its inheritance tax, Indiana now ranks ninth in the *State Business Tax Climate Index*,[14] the second-highest rank of a state with every major tax type (following only Utah).[15]

Indiana's first step toward tax reform began in 2011. In that year, the state launched a bold strategy, lowering the corporate income tax rate from 8.5% to 6.5% by 2015. The rate would fall by 0.5% each fiscal year, slowly lowering the tax burden for Indiana businesses.[16]

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14 Walczak, Drenkard, and Bishop-Henchman, "2018 State Business Tax Climate Index."

15 States ranking above Indiana, except for Utah, are missing one or more of the major taxes. For instance, Wyoming, ranked first, does not have an individual or corporate income tax due to the state's heavy reliance on severance taxes.

16 Joseph Bishop-Henchman, "Indiana Approves Tax Changes, Including Corporate Tax Rate Reduction," Tax Foundation, May 2, 2011, https://taxfoundation.org/indiana-approves-tax-changes-including-corporate-tax-rate-reduction.

Indiana's Original Corporate Income Tax Phasedown

Fiscal Year	Rate
2012	8.0%
2013	7.5
2014	7.0
2015	6.5

Note: Indiana's corporate income tax reductions were made on July 1 of each year. Source: Joseph Bishop-Henchman, "Indiana Approves Tax Changes, Including Corporate Tax Rate Reduction," Tax Foundation, May 2, 2011, https://taxfoundation.org/indiana-approves-tax-changes-including-corporate-tax-rate-reduction.

The corporate rate reduction was financed in part by eliminating a tax credit for municipal bonds from other states. Indiana was unique in that it allowed credits for non-Indiana bonds. The state also eliminated net operating loss carrybacks after the 2011 tax year.

In 2013, the first year of then-Governor Mike Pence's (R) term, the state continued its tax reform. This tax package made several key changes. First, it established a phasedown for the individual income tax, to match the state's corporate income tax. When fully phased in, Indiana would have the second lowest individual income tax, behind only Pennsylvania, of any state that taxes individual income in the country.[17]

The 2013 tax package also accelerated the elimination of the state's inheritance tax. The tax, originally slated for elimination in 2022, was repealed immediately.[18] Finally, the plan retained the corporate income tax phasedown created in 2011.

Indiana's Individual Income Tax Phasedown

Year	Rate
2013	3.40%
2014	3.40
2015	3.30
2016	3.30
2017	3.23

Source: Scott Drenkard, "Indiana's 2014 Tax Package Continues State's Pattern of Year-over-Year Improvements," Tax Foundation Fiscal Fact no. 425, April 7, 2014, https://taxfoundation.org/indiana-s-2014-tax-package-continues-state-s-pattern-year-over-year-improvements.

Indiana continued its trend of tax reform in 2014, with further reductions in the state's corporate income tax. By 2022, the state's corporate income tax rate will be 4.9%, an impressive reduction from the state's 8.5% rate in 2011.

The state also made noteworthy changes to its local tangible personal property taxes in 2014.[19] Tangible personal property taxes are local property taxes on inventory, machinery, and other capital investments of businesses. Indiana recognized the need to reduce and eliminate these taxes, but was concerned about how to proceed given local governments' reliance on the tax revenue. The state came up with a creative solution:

17 In the interim, North Dakota cut its individual income tax rate. In 2017, Indiana had the third lowest individual income tax rate of states that tax individual income.

18 Joseph Bishop-Henchman, "Indiana Approves Income Tax Reduction," Tax Foundation, May 14, 2013, https://taxfoundation.org/indiana-approves-income-tax-reduction.

19 Scott Drenkard, "Indiana's 2014 Tax Package Continues State's Pattern of Year-over-Year Improvements," Tax Foundation FF no. 425, April 7, 2014, https://taxfoundation.org/indiana-s-2014-tax-package-continues-state-s-pattern-year-over-year-improvements.

local governments were granted significant authority to reduce these taxes. Local governments could first decide to exempt the small amounts, less than $20,000, in tangible personal property value. Localities were also permitted to exempt new property purchases.[20]

Indiana's Further Corporate Income Tax Phasedown

Fiscal Year	Rate
2012	8.50%
2013	8.00
2014	7.50
2015	7.00
2016	6.50
2017	6.25
2018	6.00
2019	5.75
2020	5.50
2021	5.25
2022	4.90

Note: Indiana's corporate income tax reductions were made on July 1 of each year. Source: Scott Drenkard, "Indiana's 2014 Tax Package Continues State's Pattern of Year-Over-Year Improvements," Tax Foundation Fiscal Fact no. 425, April 7, 2014, https://taxfoundation.org/indiana-s-2014-tax-package-continues-state-s-pattern-year-over-year-improvements/.

Never content on tax issues, the Hoosier state pushed forward again in 2015,[21] eliminating its throwback rule for corporate income taxes. Throwback rules are complicated provisions that

> *Almost every year since 2011, Indiana has passed tax reforms to improve its competitiveness, including lowering its individual and corporate income tax rates.*

require businesses to add untaxed income, known as "nowhere income," from other states into another state's tax base. Multiple states try to claim this untaxed income, requiring firms to engage in a tangled web of calculations to determine their taxable income. Eliminating this rule further simplified the state's corporate income tax.

The state also furthered its tangible personal property reforms from 2014. While 2014's reform allowed localities the option to exempt up to $20,000 in tangible personal property, in 2015, the state automatically exempted the amount statewide.[22]

The state also created a taxpayer rebate program in 2011. If the state's rainy-day fund exceeded 10% (later revised to 12.5%) of the state's budget spending, the excess would be automatically refunded. Half the money would help to lower the unfunded liability within the teacher's pension program, while the other half would be refunded to Indiana residents via an

20 Ibid.

21 Ben Bristor and Scott Drenkard, "Indiana Tackles Throwback Rule and Personal Property Tax," Tax Foundation, June 30, 2015, https://taxfoundation.org/indiana-tackles-throwback-rule-and-personal-property-tax/.

22 Ibid.

income tax credit. Residents saw a $111 tax refund in 2012, when the state had a $2.5 billion surplus.[23] The state continued to run surpluses, but future legislatures dedicated more of the surplus to education.[24]

At the same time that all these reforms took place, the state also launched a nation-leading tax incentive review process.[25] All Indiana tax incentives must be reviewed on a five-year basis by the state's Legislative Services Agency (LSA). And even more important, when cost-benefit analysis of the incentives proved the provisions were ineffective, the state has seen fit to repeal them.[26] In 2015, LSA's research showed that a program providing a tax deduction for solar-powered roof vents was not fruitful. According to the report, "The link between the solar-powered roof vent/fan deduction and taxpayers' expenditures … is questionable and appears to be very weak, if at all present."[27] Eliminating these incentives allowed the state to finance other tax reforms.

Finally, in 2017, Indiana raised its gasoline tax as part of a package to create a long-term transportation funding plan. The 10-cent-per-gallon increase is expected to generate $1.2 billion annually and help fund a number of construction projects around the state.[28] Approximately $850 million would finance state construction projects, with $350 million going to local infrastructure projects. This plan followed a transportation study committee identifying $1 billion a year in funding projects.[29] While raising a gas tax is often unpopular, aligning user fees, like gas taxes, with the associated spending projects, like road construction, is a sound financing approach for states. Recent polling further suggests that ensuring the dedication of Indiana's gas taxes to road maintenance and construction has increased the popularity of what may appear on its face to be an unpopular tax hike.[30]

Indiana has launched an aggressive campaign in the last six years to overhaul and reform its state tax code. Almost every year since 2011, the state has passed tax reforms to improve its competitiveness, including lowering its individual and corporate income tax rates, reforming tangible personal property taxes, and reforming corporate tax base rules. Indiana's actions represent a responsible step forward, particularly for states concerned about enacting too many changes at one time.

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23 Kevin Rader, "Indiana Announces Taxpayer Refunds," WTHR-TV, November 21, 2012, https://www.wthr.com/article/indiana-announces-taxpayer-refunds.

24 Tony Cook, "Automatic Tax Refund from the State? Don't Expect One," *Indianapolis Star*, July 3, 2015, https://www.indystar.com/story/news/politics/2015/07/03/automatic-tax-refund-state-expect-one/29675755/.

25 Pew Charitable Trusts, "Indiana: Tax Incentive Evaluation Ratings," May 3, 2017, http://www.pewtrusts.org/en/research-and-analysis/fact-sheets/2017/05/state-tax-incentive-evaluation-ratings-indiana.

26 Indiana General Assembly, "House Enrolled Act No. 1142," 2015, https://iga.in.gov/legislative/2015/bills/house/1142#document-2e46b813.

27 Indiana General Assembly, Indiana Legislative Services Agency, "Indiana Tax Incentive Review," November 2014, 17, https://iga.in.gov/legislative/2014/publications/tax_incentive_review/#document-0b08377d.

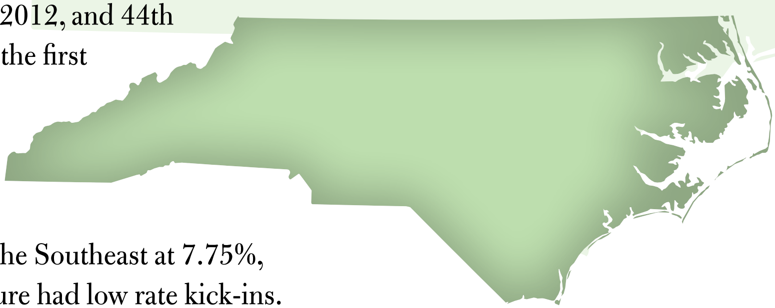
28 Kasey Chronis, "Gas Tax Hike of 10 Cents per Gallon Takes Effect in Indiana," WNDU-TV, June 30, 2017, http://www.wndu.com/content/news/New-laws-budget-items-take-effect-in-Indiana-and-Michigan-on-Saturday-431727563.html.

29 Joseph Bishop-Henchman, "Indiana Gas Tax Proposal: Existing User Taxes & Fees Cover Less Than Half of Road Costs," Tax Foundation, January 11, 2017, https://taxfoundation.org/indiana-gas-tax-proposal-existing-user-taxes-fees-cover-less-half-road-costs/.

30 Brian Slodysko, "Poll: Majority Approve of Indiana's 10-Cent Fuel Tax Increase," Associated Press in *South Bend* (Indiana) *Tribune*, October 23, 2017, https://www.southbendtribune.com/news/local/poll-majority-approve-of-indiana-s--cent-fuel-tax/article_1f59837f-523d-5213-8fd2-6c9079470d36.html.

North Carolina's 2013 Tax Reforms

North Carolina's tax code had long been uncompetitive before its recent reform. The state's tax code was among the bottom 10 of states on the Tax Foundation's *State Business Tax Climate Index*, ranking 46th in 2011, 45th in 2012, and 44th in 2013, the final score before the first comprehensive tax reform.[31]



The list of issues with the state's tax code was long. The state had the highest individual income tax rate in the Southeast at 7.75%, and its progressive rate structure had low rate kick-ins. Income above $12,750 was taxed at 7%.

Business taxes were also high in North Carolina. The corporate income tax in the Tar Heel State was the highest in the Southeast at 6.9%, and the state was plagued by a narrow corporate tax base. From 2003 to 2009, North Carolina provided more than $6.7 billion in economic development incentives, such as tax credits, abatements, and special incentive packages, but the success of these packages was lackluster.[32] North Carolina was one of only 20 states with a franchise tax,[33] a tax on business assets, with the high rate of 0.15% of assets.

In 2013, the state undertook comprehensive tax reform, seeking to improve the state's tax climate. The North Carolina legislature passed a dramatic, comprehensive overhaul of the state's tax code. The plan broadened, flattened, and lowered the individual income tax, lowered a number of business taxes, and expanded the sales tax base, among other changes.

The first major change was a modification to the state's individual income tax. The state consolidated its three income tax brackets, with a top rate of 7.75%,

31 "North Carolina Illustrated: A Visual Guide to Tax Reform," Tax Foundation, November 5, 2015, https://taxfoundation.org/north-carolina-illustrated/.

32 Joseph Bishop-Henchman and Scott Drenkard, "North Carolina Tax Reform Options: A Guide to Fair, Simple, Pro-Growth Reform," Tax Foundation, January 23, 2013, https://taxfoundation.org/north-carolina-tax-reform-options-guide-fair-simple-pro-growth-reform.

33 Several states have repealed their franchise tax since North Carolina began reform. Currently, 17 states have a franchise tax.

into a flat income tax with a top rate of 5.8%. It also included a further phasedown of rates to reach 5.75% in 2015.

To mitigate concerns about regressivity in this change, the state coupled its rate changes to tax base changes. The state increased its standard deduction from $6,000 for married filers to $15,000, while repealing its personal exemption of $2,000.[34] Combined, North Carolinians would see the first $15,000 of their income be exempt from taxation, compared to $8,000 prior to reform. The state also increased the amount of its child tax credit for lower-income households. The credit increased from $100 to $125, but the increase was limited to married filers below $40,000 in income.[35]

At the same time, the state limited a number of its individual tax expenditures to finance these tax changes. The total number of individual income tax expenditures fell from 40 to 17, and even for the retained expenditures, many were limited.[36] The total itemized deduction for mortgage interest and property taxes paid was capped at $20,000.[37] The adoption tax credit decreased from 50% of the federal credit to 30% of the federal credit.

By broadening its tax bases, the state was able to dramatically lower its individual and corporate income tax rates, lowering tax burdens for individuals. Compliance costs were also lowered with the larger standard deduction.

North Carolina also lowered its corporate income tax, as part of its tax reform package, from 6.9% to 6% in 2014 and 5% in 2015. Additionally, the state created a unique tax trigger to further lower the corporate rate if the state's revenue hit specific targets. If revenues exceeded $20.2 billion in 2015, the corporate income tax rate would fall again to 4% in 2016, with another cut to 3% in 2017 if 2016 revenues exceeded $20.975 billion. In both cases, the state achieved the revenue target, lowering corporate income tax rates.[38]

34 Tax Foundation, "North Carolina Illustrated: A Visual Guide to Tax Reform."

35 Ibid.

36 North Carolina Department of Revenue, "North Carolina Biennial Tax Expenditure Report – 2011," https://www.dor.state.nc.us/publications/nc_tax_expenditure_report_11.pdf, and North Carolina Department of Revenue, "North Carolina Biennial Tax Expenditure Report – 2013," https://www.dor.state.nc.us/publications/nc_tax_expenditure_report_13.pdf.

37 North Carolina State Law 2013-316 §1.1.(d).

38 Jared Walczak, "Designing Tax Triggers: Lessons from the States," Tax Foundation, September 7, 2016, https://taxfoundation.org/designing-tax-triggers-lessons-states/.

Similar to the individual income tax, the state eliminated several corporate tax expenditures. The state's generous film credit was allowed to expire and was subsequently replaced with a grant program. Credits for low-income housing, historic rehabilitation, and recycling oyster shells, among others, were also allowed to expire.[39]

Finally, the state made large changes to its sales tax structure as part of its tax reform package. North Carolina had two sales tax holidays. The first exempted clothing, school supplies, and computers, among other items, in early August each year for back-to-school purchases. The second, in November, exempted ENERGY STAR® home appliances, such as refrigerators, from the sales tax. The state eliminated both sales tax holidays as part of its tax reform package.

The state expanded its sales tax base to include several new purchases as well, though to a lesser degree than in several of the original proposals.[40] For instance, bread and other bakery items sold at a bakery were no longer exempt from the sales tax. North Carolina also began charging sales tax on admission fees to entertainment experiences such as live performances, movies, festivals, and museums.[41] Finally, the state expanded its sales tax base to more fully tax manufactured and mobile homes.[42]

Tax triggers are a prudent means of implementing tax cuts. Finally, tax cuts don't necessarily have to diminish the progressivity of the overall tax code, as evidenced by the expanded zero bracket and earned income tax credit.

North Carolina's tax reform was groundbreaking, making it the first state to pass comprehensive tax reform in one legislative session since Utah in the mid-2000s. By broadening its tax bases, the state was able to dramatically lower its individual and corporate income tax rates, lowering tax burdens for individuals. Compliance costs were also lowered with the larger standard deduction. And finally, North Carolina's strategic use of a tax trigger ensured that the state had sufficient revenue to meet its spending needs. North Carolina's 2013 tax reform are an excellent example of what is possible for a state to accomplish with tax reform.

39 North Carolina Department of Revenue, "North Carolina Biennial Tax Expenditure Report – 2013," and North Carolina Department of Revenue, "North Carolina Biennial Tax Expenditure Report – 2015," https://www.dor.state.nc.us/publications/nc_tax_expenditure_report_15.pdf.

40 Liz Malm and Scott Drenkard, "North Carolina Considers Impressive Tax Reform Options," Tax Foundation, June 7, 2013, https://taxfoundation.org/north-carolina-considers-impressive-tax-reform-options/.

41 N.C.S.L. 2013-316, §5(b) and (c).

42 Tax Foundation, "North Carolina Illustrated: A Visual Guide to Tax Reform."

2015 Tax Reforms

Following the passage of its comprehensive tax reform package in 2013, North Carolina made further modifications and reforms during its 2015 legislative session. These changes advanced upon the principles of its 2013 reform. The state made further cuts to its individual income tax, lowering the rate from 5.750 to 5.499% in 2017. North Carolina also slightly increased its standard deduction from $15,000 to $15,500 for married filers. Finally, the state kept its corporate income tax rate trigger in place, which allowed rates to decrease to 4% in 2016 and 3% in 2017.

The state also expanded its sales tax base to include service contracts, such as those for "repair, maintenance, and installation" services,[43] and used the additional revenues to ensure equity among its local governments for their spending priorities.[44]

2017 Tax Reforms

In 2017, the state legislature continued to push forward with state tax reforms, even after the party in the governor's mansion flipped with the election of Democratic Governor Roy Cooper. The Republican-controlled legislature passed multiple tax reforms within its budget, and subsequently overrode the governor's veto of the changes.[45]

The state's individual income tax rate was reduced again in 2019, from 5.499% to 5.250%. At the same time, the state's standard deduction was increased from $17,500 to $20,000 for married filers.[46]

Businesses will also see additional tax cuts under the budget agreement. The corporate income tax will fall from 3% to 2.5%, also in 2019.[47] At the same time, the franchise tax will be lowered for S corporations. Instead of 0.15% on all assets, S corps will pay a flat $200 on their first $1 million in capital value. Assets in excess of $1 million will be subject to the 0.15% rate.[48]

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43 North Carolina State Law 2015-6§105-164.3(33d).

44 Scott Drenkard, "North Carolina Budget Compromise Delivers Further Tax Reform," Tax Foundation, September 17, 2015, https://taxfoundation.org/north-carolina-budget-compromise-delivers-further-tax-reform/.

45 Colin Campbell, "NC House Overrides Budget Veto, Making the Spending Plan Law," (Raleigh, NC) *News & Observer*, June 28, 2017, http://www.newsobserver.com/news/politics-government/state-politics/article158589669.html.

46 Nicole Kaeding, "North Carolina Continues Its Successful Tax Reforms," Tax Foundation, October 27, 2017, https://taxfoundation.org/north-carolina-continues-tax-reforms/.

47 Ibid.

48 Ibid.

District of Columbia

In 2014, the District of Columbia passed a tax reform package that lowered individual income tax rates and business tax rates, increased the standard deduction and personal exemption amounts, and expanded the Earned Income Tax Credit for childless workers. Some of the changes took place right away, while many of the changes used a tax trigger, so they were not implemented until enough new tax revenue was available.[49] As of January 2018, all the changes that required tax triggers have been enacted.[50] In addition to the tax triggers, the tax changes were partially paid for by expanding the sales tax base to several personal services.

Many of the changes DC enacted came directly from the recommendations of a Tax Revision Commission, which held a series of meetings and public hearings over a 16-month period in 2012 and 2013.[51] Some of the commission's recommendations addressed ways that DC could be more competitive with neighboring Virginia and Maryland. For example, the district's business

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49 The District of Columbia used a unique tax trigger approach to manage its revenue availability during tax reform. It divided all its recommendations into 26 concrete steps. The first nine were implemented immediately, with the remaining 17 being added as revenues allowed. For a full list, see Joseph Bishop-Henchman, "DC to Enact Remaining Tax Cuts after Projection of Large Recurring Surplus," Tax Foundation, February 28, 2017, https://taxfoundation.org/dc-enact-tax-cuts-large-surplus.

50 Jared Walczak, "State Tax Changes That Took Effect on January 1, 2018," Tax Foundation, January 2, 2018, https://taxfoundation.org/state-tax-changes-took-effect-january-1-2018/.

51 D.C. Tax Revision Commission, "Final Report of the D.C. Tax Revision Commission," May 2014, http://www.dctaxrevisioncommission.org/final-report.

franchise tax rate (a form of a corporate income tax) was 9.975% prior to the reforms, while Maryland's was 8.25% and Virginia's was even lower at 6%. The commission recommended lowering the rate to match Maryland's, and the reform package put this change in place. Much of the reduction was done in steps triggered by tax revenue surpluses.

The individual income tax changed in two major ways. First the "zero bracket," the amount of income a taxpayer can earn without owing any tax, was greatly expanded by increasing both the standard deduction and personal exemptions to match the amounts in the federal tax code. For example, a married couple with two children now had $27,800 of untaxed income, whereas before it was only $10,800.[52] Second, a new 6.5% tax bracket was added, lowering the rate for households with incomes of $40,000 to $60,000 (it had been 8.5%, which still applied to those over $60,000). As with the changes to the business tax, these two changes to the individual income tax were done in steps through tax triggers.

While the tax reform package as a whole reduced revenue by about $67 million, there was one major change that increased revenue: the expansion of the sales tax base to certain personal services. The services included in the base expansion were recommended by the Tax Revision Commission as well. The list of services included construction contractors and other construction-related services, storage of household goods and mini-storage, water for consumption at home, barber and beautician services, carpet and upholstery cleaning, health clubs and tanning studios, car washes, and bowling alleys and billiards parlors. As would be expected, businesses in these industries opposed the idea of being included in the sales tax base, and health clubs even tried to name this a "yoga tax." But despite the orchestrated fanfare, the sales tax base expansion was included in the final tax package.

The tax reform package in DC demonstrates a number of important tax reform principles in action. First, lowering rates by broadening the tax base can be done effectively, even when narrow interests object to being included in the base. Second, when structured correctly, tax triggers are a prudent means of implementing tax cuts, as we saw in North Carolina. Finally, tax cuts don't necessarily have to diminish the progressivity of the overall tax code, as evidenced by the expanded zero bracket and earned income tax credit.

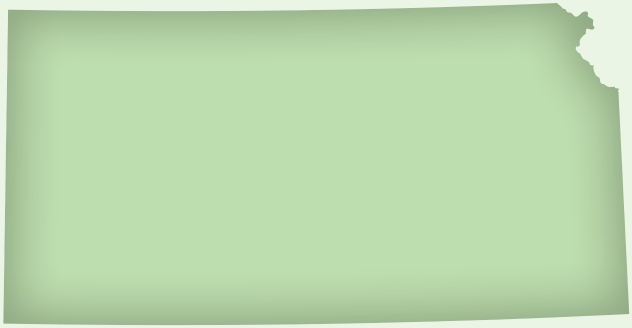
52 These figures will change under the revised federal tax code, as altered by the Tax Cuts and Jobs Act. The District of Columbia conforms to the federal standard deduction and personal exemption.

Kansas's Missteps in Tax Reform

Unlike the states discussed in this article, Kansas represents a case study in how not to approach state-level tax reform. Kansas passed large tax rate cuts without accompanying base broadening, creating a large hole in the state's budget. At the same time, the state completely exempted one type of income from the income tax, leading to tax avoidance.

In 2012, Governor Sam Brownback (R) proposed an aggressive tax package. It would have lowered the state's individual income tax, with the top rate falling from 6.45% to 4.9%, while increasing the state's standard deduction.[53] A number of other deductions, such as mortgage interest, would be eliminated. At the same time, nonwage income from pass-through businesses would be exempt. Overall, the plan would have been revenue-neutral.[54]

However, the package actually passed by the legislature differed significantly from the original plan proposed by Governor Brownback. After several months of debate among the governor, house, and senate, the house grew frustrated and sent the unresolved plan to the governor's desk.[55] Many of the identified pay-fors in the governor's plan were removed from the final package, representing a large net tax cut for the state. The governor decided to go ahead and sign the plan, and promised to sign a compromise bill to supplant it when the house and senate ironed out the details. But negotiators balked, and the state was left with a tax cut with estimated annual costs of $803 million by 2014.[56]



The plan was also problematic for its complete exemption of nonwage income for pass-through businesses. Pass-through businesses, such as sole proprietorships and LLCs, are taxed through the individual income tax rather than the corporate tax.

53 Joseph Bishop-Henchman, "Kansas Governor Proposes Significant Income Tax Reform, Reducing Rate from 6.45% to 4.9%," Tax Foundation, January 19, 2012, https://taxfoundation.org/kansas-governor-proposes-significant-income-tax-reform-reducing-rate-645-49/.

54 Ibid.

55 Mark Robyn, "Not in Kansas Anymore: Income Taxes on Pass-Through Businesses Eliminated," Tax Foundation, May 29, 2012, https://taxfoundation.org/not-kansas-anymore-income-taxes-pass-through-businesses-eliminated/.

56 Mark Robyn, "Legislators Maneuver in Kansas' Income Tax Reform Debate," Tax Foundation, May 11, 2012, https://taxfoundation.org/legislators-maneuver-kansas-income-tax-reform-debate/.

Smart, sensible tax reform is possible and can dramatically improve competitiveness. However, reforms must be thoughtful and diligent, and not haphazard.

Owners of these businesses pay themselves a wage, but any additional income is taxed on Schedule C of their income tax return. Kansas's tax plan dictated that all nonwage income would be exempt from taxation, creating an incentive for tax avoidance.[57]

Reports of abuse of this provision quickly circulated within the state. Bill Self, head coach of the Kansas University men's basketball team, had the majority of his income paid to an LLC in the state to help avoid Kansas income taxes.[58] A study by several academic economists highlighted the tax avoidance caused by the provision. First, filers with pass-through income increased the amount of their nonwage income to take advantage of the tax change. Second, the economists found "no evidence of increases in investment." Their research found "income shifting rather than real economic activity."[59] State estimates put the total loss of revenue from this provision at $200 million to $300 million a year.[60]

In 2013, Kansas considered ways to pass the base broadeners needed to finance its 2012 tax cuts. Again, "legislators stripped out the base broadening and kept the tax cuts," arguing that "starving the beast" was the preferred approach.[61] Many in the legislature refused to confront the issues they had created the year before. Large tax cuts without revenue or spending offsets create large budget holes, impacting the ability of the state to provide services. The final package passed in 2013 did end up raising revenues, but it was still a large net tax cut. After all the changes, the state still passed an almost $500 million tax cut for 2014, with the amounts increased further in later years. (By 2018, the cut was expected to be over $900 million in annual revenue.[62] For comparison, Kansas's general revenue budget was $6 billion.)

At the same time, the state continued to miss a number of its revenue projections, partly due to weak agricultural prices and partly due to the pass-through

57 Mark Robyn, "Not in Kansas Anymore."

58 Dan Margolies and Sam Zeff, "Thanks to Tax Cuts, Bill Self, Highest Paid State Employee, Owes Little in Kansas Income Taxes," KCUR-FM, May 16, 2016, http://kcur.org/post/thanks-tax-cuts-bill-self-highest-paid-state-employee-owes-little-kansas-income-taxes#stream/0.

59 Jason DeBacker, Bradley T. Heim, Shanthi P. Ramnath, and Justin M. Ross, "The Impact of State Taxes on Pass-Through Businesses: Evidence from the 2012 Kansas Income Tax Reform," September 1, 2017, p. 2, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2958353.

60 Scott Drenkard and Joseph Bishop-Henchman, "Testimony: Reexamining Kansas' Pass-Through Carve Out," Tax Foundation, January 19, 2017, https://taxfoundation.org/testimony-reexamining-kansas-pass-through-carve-out/.

61 Liz Malm and Joseph Bishop-Henchman, "Kansas May Face Budget Problems as Senate Again Strips Tax Reform Out of Tax Cut Bill," Tax Foundation, March 15, 2013, https://taxfoundation.org/kansas-may-face-budget-problems-senate-again-strips-tax-reform-out-tax-cut-bill/.

62 Joseph Bishop-Henchman and Scott Drenkard, "Kansas 2013 Tax Reform Improves on Last Year's Efforts," Tax Foundation, June 18, 2013, https://taxfoundation.org/kansas-2013-tax-reform-improves-last-years-efforts/.

exemption. These missed projections added to the budget crunch, as the state continued to struggle for revenue to pay for spending programs.[63]

As a result, the state faced a large budget crunch. Kansas had to drain its rainy-day fund and issue furloughs for state employees, among other efforts.[64] Finally, in 2015, the state began a series of tax increases to finance the previous cuts. The sales tax rate was increased and a number of deductions were eliminated, among other changes.[65] In 2017, over Governor Brownback's veto, Kansas passed another round of tax increases, including repeal of its pass-through exemption, to help close the budget gap.[66]

While the state's individual income tax in 2018 will still be lower than it was before tax reform efforts began in 2012, Kansas's story over the last five years illustrates the risks of cutting taxes without regard to sound tax policy or a state's spending priorities. By providing a wholesale exemption to pass-through income, the state encouraged individuals to simply reclassify their income. It was not an economic growth driver, as some proponents had promised. Additionally, the state's reckless slashing of revenues, without accompanying spending changes, risked the fiscal solvency of the state. By 2017, Kansas was one of only four states without budget reserves.[67]

Tax reform is difficult, and Kansas's experience illustrates how states should not approach these challenging questions.

Concluding Insights from State Legislators Who Were There

In December 2017, the Arkansas Tax Relief and Reform Task Force invited legislators from Indiana, North Carolina, Oklahoma, and Kansas to share their thoughts and experiences on tax reform. Throughout the conversation, five key themes emerged.[68]

First, tax reform is a process. Representative John Szoka (R) of North Carolina described tax reform as an "evolution, not a revolution." Second, cutting revenue cannot be the single goal. Representative Steven Johnson (R) from Kansas discussed how Kansas's 10% revenue cut put the state at risk. Third, spending must be considered simultaneously. North Carolina Representative Bill Brawley (R) discussed the state's new highway prioritization system, while Speaker Tim Moore (R) noted that North Carolina also reformed its education and unemployment insurance programs. Balanced budget requirements mean that states must consider spending changes

63 Joseph Bishop-Henchman, "Kansas May Drop Pass-Through Exclusion after Revenue Projections Miss Mark Again," Tax Foundation, April 30, 2015, https://taxfoundation.org/kansas-may-drop-pass-through-exclusion-after-revenue-projections-miss-mark-again/.

64 Joseph Bishop-Henchman, "Kansas Approves Tax Increase Package, Likely Will Be Back for More," Tax Foundation, June 12, 2015, https://taxfoundation.org/kansas-approves-tax-increase-package-likely-will-be-back-more/.

65 Ibid.

66 Joseph Bishop-Henchman, "Kansas Pass-Through Carveout Repealed after Legislature Overrides Gov. Brownback's Veto," Tax Foundation, June 6, 2017, https://taxfoundation.org/brownback-pledges-veto-kansas-tax-bill/.

67 Ibid.

68 Nicole Kaeding, "Arkansas Tax Reform: Lessons from Other Legislators," Tax Foundation Blog, December 6, 2017, https://taxfoundation.org/arkansas-tax-reform-lessons-legislators/.

as part of tax reform. Fourth, tax trigger designs are critical. As discussed previously, North Carolina's tax trigger was a critical part of its tax reform efforts. Oklahoma Tax Commissioner Clark Jolley (R) spent a large part of his presentation discussing his state's challenging tax trigger.

But most importantly, all the presenters echoed that tax reform is worth the effort. Eliminating tax expenditures and handling trade-offs isn't politically easy, but in the end, the presenters reiterated that tax reform was worth the effort. Senator Brandt Hershman (R) of Indiana outlined the various accolades Indiana continues to receive for reforming its tax code, and how those changes are translating into greater economic opportunity for Hoosiers.

There are important lessons to learn from other state experiences with tax reform. While Kansas's troubled experience teaches us that reforms must be thoughtful and diligent, comprehensive reforms in Utah, Indiana, North Carolina, and the District of Columbia illustrate that smart, sensible tax reform is possible, and can dramatically improve a state's competitiveness.

Conclusion

As Arkansas's legislature considers the reforms proposed by the Arkansas Tax Relief and Reform Task Force, there are important lessons to learn from other states' and jurisdictions' experiences with tax reform. Utah, Indiana, North Carolina, and the District of Columbia illustrate that smart, sensible tax reform is possible and can dramatically improve competitiveness. However, reforms must be thoughtful and diligent, and not haphazard, as Kansas illustrates. Slashing a state's tax revenues, without making necessary spending or tax base changes, puts the state's fiscal health in jeopardy.

Median Household Income

What is it?

The median household income is the number in the middle when we list the incomes of every household from poorest to richest. Think of this as separating households' incomes into two equal groups: one group has incomes above the median, and the other has incomes below it. The median is exactly in the middle.

A household consists of one or more people who live together in a housing unit. The household may or may not be a family.

■ **Suppose you have five households with different incomes:**

Household 1:	$10,000
Household 2:	$30,000
Household 3:	$50,000
Household 4:	$100,000
Household 5:	$200,000

The median income in this group is $50,000. Half the households have lower incomes, and half the households have higher incomes. The more common measure—the average, or mean—would be $78,000 in this example.

Why do government officials and economists use median household income as a measuring stick? While the measure isn't perfect, unlike other measures (such as the mean), the median cannot be distorted by a small number of extremely rich (or extremely poor) households.

Why is it important to Arkansans?

Arkansas's median household income was $45,907 in 2016.[1] That's significantly lower than the median household income of most other US states—only West Virginia, Louisiana, and Mississippi are clearly lower (Kentucky is roughly equal). Arkansas's median household income is the fifth lowest in the nation.

■ **Arkansas was also far below the 2016 national median household income of $59,309 in 2016. The state came in at about 77.8% of the national level.**

Your first thought might be that Arkansas's low median household income means that Arkansans aren't as well off as their neighbors or even most other Americans. But it's more complicated than that.

1 All figures in this subsection come from US Census Bureau, Table H-8, Median Household Income by State.

What about cost of living?

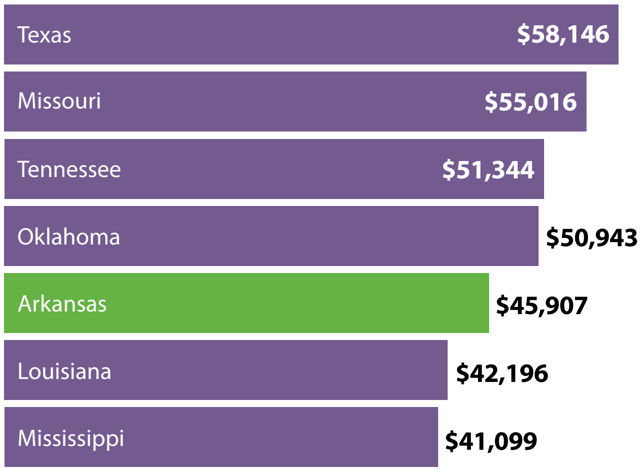
That's a great question. Median household income itself does not reflect differences in the cost of living. Before we can really know how much better off Texans are with their higher household incomes, we need to know how much it costs to live in Texas compared with how much it costs to live in Arkansas.

The US Bureau of Economic Analysis publishes a regional price parity index that can be used to adjust income data relative to other states. After making the adjustment, Arkansas's median household income increases to $52,525, closer to the US median (about 89% of it), but still well below it. Texas's income also goes up slightly, but its rank falls from 25th to 31st, as it has an average cost of living (though cost of living can vary considerably within a state).[2]

But Arkansas also remains near the bottom rank of states, rising from 47th to only 44th place. Meanwhile, Missouri, which was already ahead of Arkansas, jumps up 16 places, making it the 20th highest in the nation.

Nominal incomes (like the ones in the chart of surrounding states) can be deceptive when measuring a state's relative standard of living. However, we should be cautious when interpreting the adjusted figures as well. A state may have a lower cost of living in part because it might be less attractive to live there. The lower prices of goods, and especially of housing, may reflect the relative lower demand to live in a particular area. But still, cost of living matters; median household income is only part of the story.

Surrounding States' Median Household Income, 2016



Source: US Census Bureau, Table H-8, Median Household Income by State.

2 Authors' calculations using the BEA's 2015 Regional Price Parities by State data. Arkansas's RPP is 87.4, meaning that the cost of living in Arkansas is 87.4% of the national average. The data can be found at https://www.bea.gov/newsreleases/regional/rpp/2017/pdf/rpp0617.pdf.

Are there types of income that aren't counted in median household income?

Yes. Median household income presents an incomplete picture of the resources on which a household can draw. When it measures median household income, the Census Bureau counts most forms of income, such as wages, salaries, most investment income, most government benefits, child support, and alimony. A few forms of income, such as capital gains and lump sum payments, are not included.[3] But most importantly, median household income does not in any way capture a household's wealth. A household may be able to save extra in good years and draw on those savings in bad years to smooth out its income and maintain a consistent standard of living.

Does median household income consider the effect of taxes?

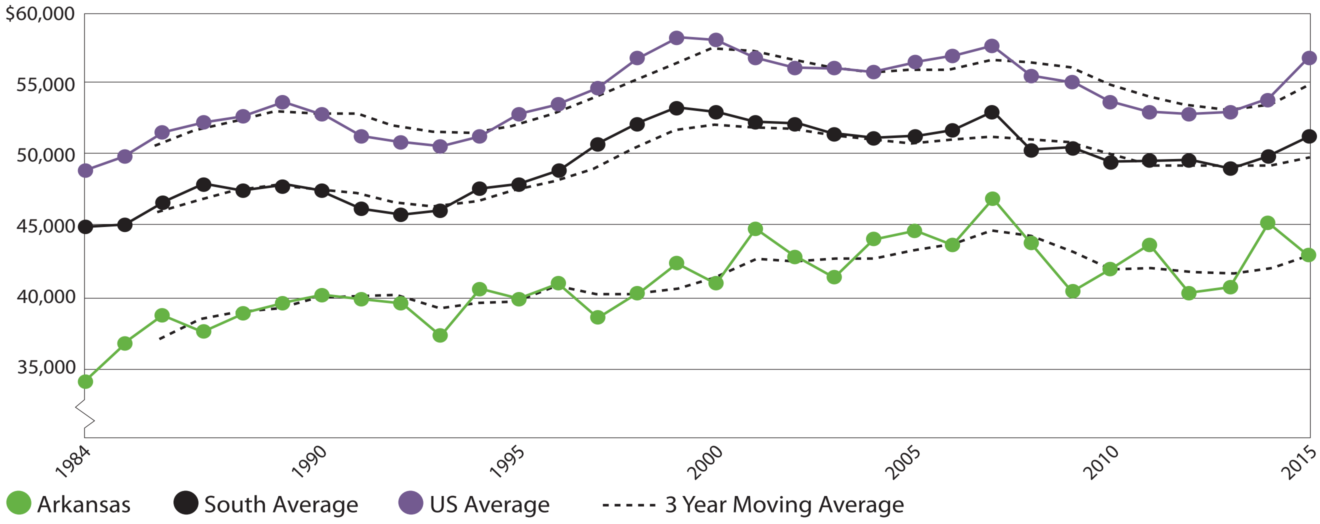
No, and the amount of household income that goes to taxes can vary dramatically depending on several factors:

- tax credits and deductions the household takes
- number of individuals contributing to household income
- number of children in the household
- marginal tax rates of each individual contributing to household income

Two households could have the same median income but different piles of money to work with after taxes.

[3] US Census Bureau, "Income," https://www.census.gov/glossary/#term_Income, accessed January 3, 2019.

Median Household Income, 1984–2015



Sources: US Census Bureau, Table H-6, Regional Median Household Income; US Census Bureau, Table H-8, Median Household Income by State. Both are available at https://www.census.gov/data/tables/time-series/demo/income-poverty/historical-income-households.html.

What is the trend in Arkansas's median household income?

In 2016 dollars, median household income has trended upward overall from 1984 through 2016, though it was often flat or down for extended periods. Starting at $34,068, it hovered around $40,000 throughout most of the 1990s, peaked at $46,634 in 2007 just before the Great Recession began, and has ranged from about $40,000 to just under $46,000 over the last decade.[4]

While median household income has recovered since the bottom of the recession, it is still below the pre-recession peak, and in real terms it is just slightly above its 2001 level. Arkansas's median household income has usually followed broad national trends, despite being well below the national average.[5]

[4] US Census Bureau, Table H-8, Median Household Income by State.

[5] Ibid.

Arkansas Fortune 500 Companies

What are they?

The *Fortune* 500 companies are the largest US corporations (measured by total revenue). Collectively, they make up two-thirds of US GDP and they employ more than 28.2 million people around the globe.[1] They are incorporated and operate in the United States and file financial statements with a government agency.[2] *Fortune* magazine compiles a list of these companies annually and ranks them by total revenue.

Why are Fortune 500 companies important to Arkansans?

Let's take one example. Arkansas has the country's (and the world's) largest company by revenue: Walmart. With $485.9 billion in global revenues in 2016,[3] this Bentonville-based company is a powerhouse in our state. Founded in 1962, Walmart employs 2.3 million people worldwide.[4] The company's stock market capitalization (the total value of the company's outstanding shares) is $291.3 billion, and its regular, full-time hourly associates' average wage is $13.38 per hour.[5]

Here's what Walmart did for Arkansas in fiscal year 2017:[6]

- employed more than 52,000 associates in the state
- collected $445.5 million in sales tax for Arkansas
- gave $64.31 million to community organizations
- operated 128 in-state retail stores where Arkansans can shop

Walmart plans to build a new corporate headquarters in Bentonville. A Walmart spokesperson told the *Arkansas Democrat-Gazette* that the company is making a long-term commitment to staying in the state.[7]

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1 *Fortune* 500, "Arkansas," http://fortune.com/fortune500/list/filtered?statename=Arkansas, accessed October 23, 2017.

2 Ibid.; click on "see our methodology."

3 *Fortune* 500, "Walmart," http://fortune.com/fortune500/walmart/, accessed January 22, 2018.

4 Ibid.

5 Ibid; Walmart, "Our Locations," https://corporate.walmart.com/our-story/our-locations#/united-states/arkansas, accessed October 23, 2017.

6 Walmart, "Our Locations."

7 Robbie Neiswanger, "Wal-Mart reveals new headquarter plans," *Arkansas Democrat-Gazette*, September 15, 2017, http://www.nwaonline.com/news/2017/sep/15/wal-mart-reveals-new-headquarter-plans/.

Other Fortune 500 Companies in Arkansas

Tyson Foods, ranked 82nd in the *Fortune* 500, brought in $36.9 billion in fiscal year 2016.[8] Founded in 1935 and headquartered in Springdale, the company's 122,000 employees[9]—22,900 of whom work in Arkansas[10]—process fresh and frozen chicken. Tyson's market capitalization is $30.6 billion.[11]

Murphy USA, a national gas station and convenience store chain headquartered in El Dorado, ranked 291st with $9.6 billion in revenues.[12] Founded in 1944, the company now employs 4,100 people in Arkansas and 6,600 overall, and it has a market capitalization of $2.8 billion.[13]

J.B. Hunt Transportation Services, which helps its customers move their freight via truck, ranked 407th with $6.6 billion in revenues.[14] The company's headquarters is in Lowell, and about 3,600 of J.B. Hunt's 22,190 employees work in Arkansas.[15] Since its founding in 1961, the company's stock market capitalization has grown to $12.3 billion.[16]

Next is **Dillard's**, the Little Rock-based department-store chain founded in 1938 that earned $6.4 billion in 2016 and ranked 417th.[17] With a stock-market capitalization of $1.8 billion, 2,850 of the company's 21,600 employees work in Arkansas.[18]

Finally, at No. 485, we have Little Rock-based **Windstream Holdings**, a voice and data network communications firm that brought in $5.4 billion in revenues.[19] Founded in 1943 as Allied Telephone Company,[20] its market capitalization is $0.4 billion and it employs 11,870 people.[21] The company has undergone many changes over the years and took its current name, Windstream, in 2006, when the spinoff of Alltel's landline business merged with VALOR Communications Group.[22]

Looking beyond the *Fortune* 500 to the *Fortune* 1,000 gives Arkansas two more standout firms: No. 774 **ArcBest**, a freight and logistics solutions provider, with $2.7 billion in revenues, and No. 972 **Murphy Oil** (which spun off Murphy USA in 2013),[23] with $1.9 billion in revenues from oil and natural gas exploration and production.[24]

8 *Fortune* 500, "Tyson," http://fortune.com/fortune500/tyson-foods/, accessed January 22, 2018.

9 *Fortune* 500, "Tyson."

10 Arkansas Next, "Where The Jobs Are (And Who Pays the Most) in Arkansas," September 13, 2017, http://www.arkansasnext.com/post/106872/where-the-jobs-are-and-who-pays-the-most-in-arkansas#Most.

11 *Fortune* 500, "Tyson."

12 *Fortune* 500, "Murphy USA," http://fortune.com/fortune500/murphy-usa/, accessed January 22, 2018.

13 Arkansas Next, "Where The Jobs Are"; *Fortune* 500, "Murphy USA."

14 *Fortune* 500, "J. B. Hunt," http://fortune.com/fortune500/j-b-hunt-transport-services/, accessed January 22, 2018.

15 Arkansas Next, "Where The Jobs Are"; *Fortune* 500, "J. B. Hunt."

16 *Fortune* 500, "J. B. Hunt."

17 *Fortune* 500, "Dillard's," http://fortune.com/fortune500/dillards/, accessed January 3, 2019.

18 *Fortune* 500, "Dillard's"; Arkansas Next, "Where The Jobs Are."

19 *Fortune* 500, "Windstream Holdings," http://fortune.com/fortune500/windstream-holdings/, accessed January 22, 2018.

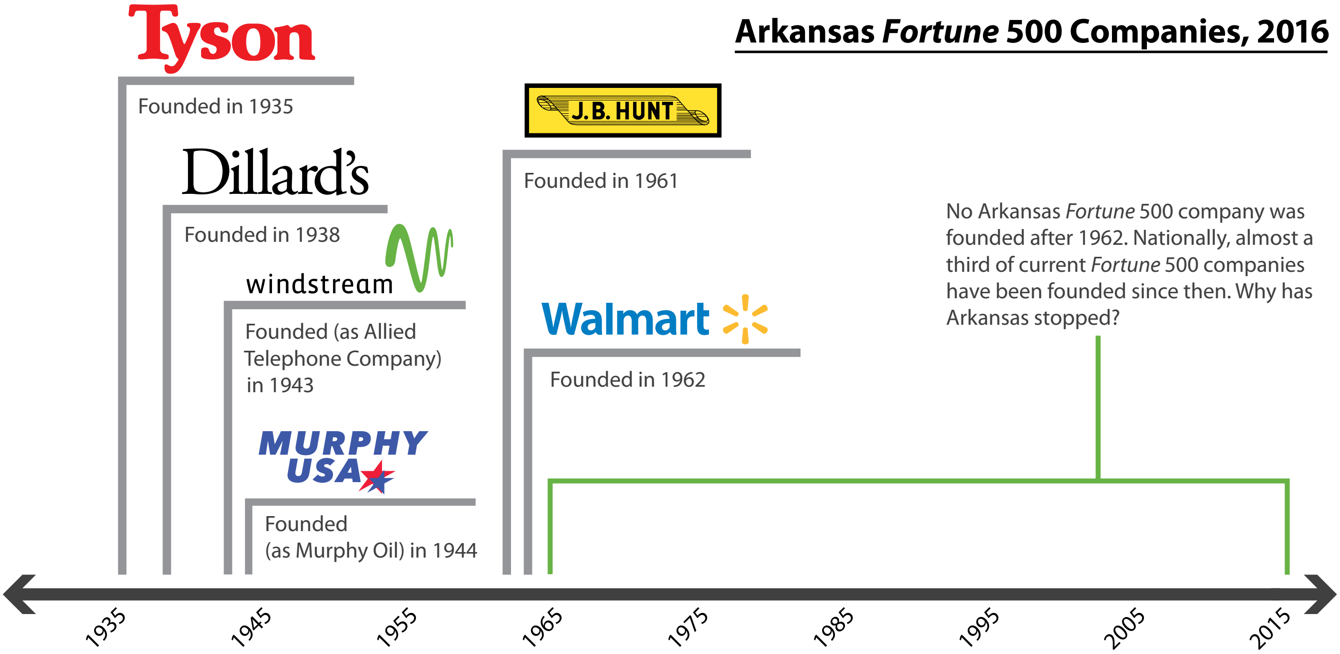
20 Windstream, "History," http://news.windstream.com/history, accessed January 3, 2019.

21 *Fortune* 500, "Windstream Holdings."

22 Windstream, "History."

23 Murphy Oil Corp, "Our History," http://www.murphyoilcorp.com/About-Us/Our-History/, accessed January 3, 2019.

24 *Fortune* 500, "Arkansas."



How does Arkansas's number of Fortune 500 companies rank nationally?

Texas, California, and New York have the highest concentrations of *Fortune* 500 companies, but they also have the largest populations.[25] Arkansas ranks 11th nationally in number of *Fortune* 500 companies per person: just above Texas and just behind New York.[26] Arkansas is way ahead of California and other states, not to mention the 13 states with no *Fortune* 500 companies.[27]

Here's another way to think of it: while Arkansas often ranks similarly to Mississippi on measures of income and poverty, Mississippi does not have a single *Fortune* 500 company. Arkansas has six. While neighboring Texas has a lot more at 51, Texas also has a lot more people; on a per capita basis, the states are similar (Arkansas is slightly ahead). While all of Arkansas's neighbors other than Mississippi have at least one *Fortune* 500 company, they all have fewer per capita than Arkansas.

25 Jeremy Horpedahl, "Make State Great," *Arkansas Democrat-Gazette*, May 4, 2017.

26 Ibid.

27 Ibid.

What are the trends in Arkansas's Fortune 500 companies?

The bad news about Arkansas's *Fortune* 500 companies is that they're all old companies. As you can see from the chart on the left, in Arkansas, none of our *Fortune* 500 companies were founded more recently than 1962. But nationally, almost half of all *Fortune* 500 companies were founded after 1962. In other words, the rest of the country has been creating new, highly successful companies for the last 55 years—but for some reason, Arkansas stopped.[28]

Of course, there is nothing wrong with old companies. They employ people and generate income just as much as new companies. But the distant founding dates of Arkansas's top companies indicate that Arkansas's historic entrepreneurship may have been stifled in some way. Determining why entrepreneurship has declined is complicated, but it is notable that sales, income, and corporate tax rates have all increased in Arkansas since Walmart's founding.

Texas, by strong contrast, has no personal income tax and a lower sales tax, and until 2008, no corporate income tax. (That tax, called the Texas margin tax, is often criticized as complex and unfair.) In that state, more than one-third of *Fortune* 500 companies were founded after Walmart (and that's still true if we exclude Texas's unique energy sector.[29])

Arkansas's burdensome occupational licensing laws—the third most burdensome in the country—are another example of policies that could be stifling entrepreneurship.[30] While these laws may not harm big companies, they often do harm the smallest entrepreneurs—the companies that could be the Walmarts and Tysons of tomorrow.

28 Ibid.

29 Scott Drenkard, "The Texas Margin Tax: A Failed Experiment," Tax Foundation Special Report No. 226 (Washington, DC: Tax Foundation, January 2015), https://taxfoundation.org/texas-margin-tax-failed-experiment/.

30 See Amy Fontinelle, David Mitchell, and Thomas Snyder, *Unnatural Rights in the Natural State: Occupational Licensing in Arkansas* (Conway, AR: Arkansas Center for Research in Economics, 2016), http://uca.edu/acre/files/2014/07/ACRE_OccupationalLicensing_InteractiveWeb.pdf; Dick M. Carpenter, Lisa Knepper, Kyle Sweetland, and Jennifer McDonald, *License to Work: A National Study of Burdens from Occupational Licensing*, 2nd ed. (Arlington, VA: Institute for Justice, 2017).

Economic Freedom in Arkansas

What is economic freedom?

Economic freedom describes people's ability to act within the market—whether they're selling their computer programming services, selling someone else's clothing line, or buying a new car or a haircut—free of undue restrictions.[1]

Clear and consistent property rights and laws, as well as consumers' freedom of choice and businesses' and entrepreneurs' freedom to compete, form the foundations of economic freedom.

According to the definition in a well-known report on global economic freedom, "The cornerstones of economic freedom are personal choice, voluntary exchange, open markets, and clearly defined and enforced property rights. Individuals are economically free when they are permitted to choose for themselves and engage in voluntary transactions as long as they do not harm the person or property of others."[2]

And the authors of a recent study on economic freedom in North America explain that "the freest economies operate with minimal government interference, relying upon personal choice and markets to answer basic economic questions such as what is to be produced, how it is to be produced, how much is produced, and for whom production is intended. As government imposes restrictions on these choices, there is less economic freedom."[3]

Why is economic freedom important to Arkansas?

Economic freedom affects our ability to pursue the jobs we want; to buy and sell homes and businesses; and to feel secure that no person or government will steal what we have rightly earned, been given, or inherited.

For example, when it comes to occupational choice, Arkansas has some of the worst regulations in the nation. For low- and middle-income jobs, Arkansas has the third most burdensome regulations to earn a living.[4] When people can't enter the occupation of their choice, their personal economic freedom is limited. So is the freedom of consumers, since these regulations also raise prices.

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1 Dean Stansel, José Torra, and Fred McMahon, *Economic Freedom of North America* (Vancouver, Canada: Fraser Institute, 2016).

2 James Gwartney, Robert Lawson, and Joshua Hall, *Economic Freedom of the World: 2017 Annual Report* (Vancouver, Canada: Fraser Institute, 2017).

3 Stansel, Torra, and McMahon, *Economic Freedom*.

4 Dick M. Carpenter, Lisa Knepper, Kyle Sweetland, and Jennifer McDonald, *License to Work: A National Study of Burdens from Occupational Licensing*, 2nd ed. (Arlington, VA: Institute for Justice, 2017).

How does Arkansas rank on economic freedom?

One of the most widely used measures of economic freedom for US states is the Fraser Institute's *Economic Freedom of North America* report (it also covers Canada and Mexico). On the measure of economic freedom called the "subnational score," which is best for comparing US states, Arkansas scores 6.7 out of a possible 10 points. This score ranks Arkansas 35th out of the 50 US states. The Fraser Institute also provides scores for several subcomponents of the index. Arkansas's worst component is taxation, for which it ranks 43rd in the nation. But on size of government and labor market freedom, Arkansas ranks somewhat higher, at 30th place for both.[5]

Another well-known and comprehensive measure of economic and personal freedom is the Cato Institute's *Freedom in the 50 States* report.[6] Arkansas ranks 25th for economic freedom in the most recent report,[7] which covers 2014.

Cato considers Arkansas to be "mediocre" on economic freedom. The Cato index tells us that Arkansas is doing well on local taxes, debt and subsidies, and deregulation of telecommunications. But Arkansas does poorly on state taxes, occupational licensing, cronyism, and price controls.

How does Arkansas's economic freedom compare to that of its neighbors?

The following table shows how Arkansas compares to its neighbors in terms of economic freedom, according to the latest Economic Freedom of North America report.

Surrounding States' Economic Freedom, 2016

State	Score	Rank
Texas	8.1	2nd
Tennessee	7.8	5th
Oklahoma	7.5	7th
Missouri	7.3	13th
Louisiana	7.1	23rd
Arkansas	6.7	35th
Mississippi	6.3	45th

Source: Dean Stansel, José Torra, and Fred McMahon, *Economic Freedom of North America* 2017 (Vancouver, Canada: Fraser Institute, 2017), figure 1.2b.

5 Stansel, Torra, and McMahon, *Economic Freedom*.

6 William P. Ruger and Jason Sorens, *Freedom in the 50 States*, Cato Institute, https://www.freedominthe50states.org, accessed January 3, 2019.

7 Ruger and Sorens, "Arkansas," *Freedom in the 50 States*, Cato Institute, https://www.freedominthe50states.org/overall/arkansas, accessed January 3, 2019.

What are the limits of this measurement?

The limitations of any economic freedom index relate to which items are included and how much weight is given to each. It can be difficult to measure how much a particular tax or regulation limits individual freedom. Further, some individuals within a state will experience greater freedom than others depending on which regulations and taxes affect them and how heavily. And it is difficult to measure how much regulations and taxes change people's behavior.

Which index should we care more about, the Fraser Institute's or the Cato Institute's? Neither; each has its strengths and weaknesses. The Fraser Institute index is updated annually but employs a more limited set of measures. The Cato Institute index is updated less frequently, but includes more variables. Some measures of economic freedom at the state level are not available annually, which is part of the reason for the difference in scores between the two institutes' measures.

Do measures of economic freedom tell us how the various restrictions on freedom affect different income groups? No. Since Arkansas is a poorer state, we might be more interested in regulations that specifically affect low-income individuals, such as occupational licensing laws.

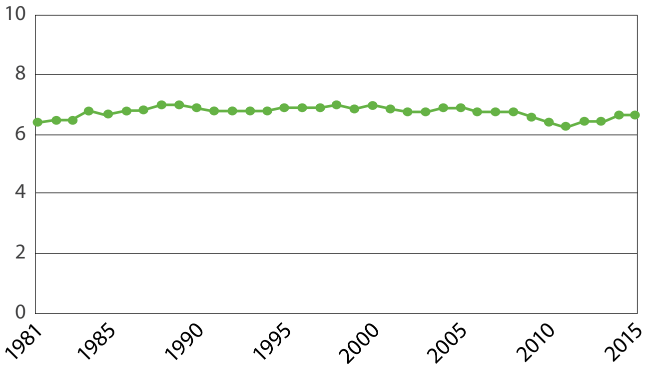
What are the trends in Arkansas's economic freedom?

According to the Fraser Institute index, which goes back to 1981, Arkansas's *score* has not varied much. It has fluctuated between 6.4 and 7.1, so it is currently right in the middle of its long-run range. But Arkansas's *rank* in economic freedom has declined, from a high of 15th place in the early 1990s to a low of 37th place in 2012 and 2013 (it currently ranks 35th). In other words, other states have been improving their scores, while Arkansas has stood still. This standstill makes Arkansas less competitive in attracting workers, families, and businesses.

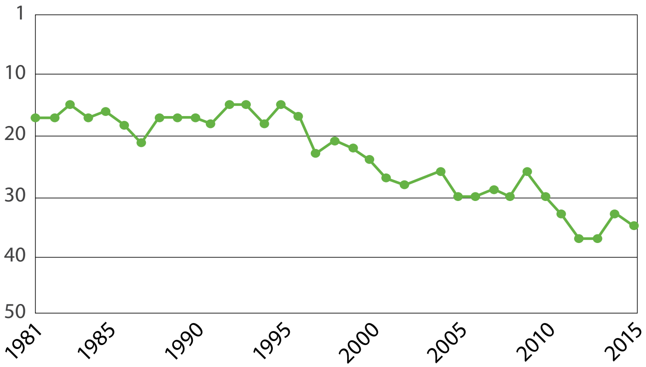
Looking at individual components of the index, the Fraser index shows that Arkansas's score for both size of government and taxation has declined since 1981, though much more dramatically for government size. But Arkansas's labor market freedom has increased since 1981. Thus, while Arkansas's overall score has been fairly stable over time, there has been quite a bit of change in the component rankings that make up that score.

According to the Cato Institute's index, Arkansas's economic freedom relative to the other 49 states has held steady since 2000. But keep in mind that the Cato measure is updated less frequently, and draws on only 14 years of data, in contrast to the Fraser Institute's 35 years.

Arkansas Economic Freedom Score, 1981–2015



Arkansas Economic Freedom Rank, 1981–2015



How could Arkansas improve its residents' economic freedom?

Arkansas could improve its residents' economic freedom by lowering state sales and use taxes. To make up the difference, it could rely more on property taxes to fund local needs. The state could also remove or reduce occupational licensing requirements for dozens of professionals, such as athletic trainers, nutritionists, massage therapists, and landscaping contractors.

Personal Income, Per Capita Personal Income, and Disposable Personal Income

What are they?

Personal income is the total income people receive from all sources, both domestic and international.

Sources of personal income include:

- labor, such as wages, salaries, tips, bonuses, and supplements to wages and salaries such as contributions to employee pension and insurance funds;
- proprietors' income from owning a home or business;
- income produced by financial assets such as dividends, interest, and rent; and
- government benefits, such as Social Security benefits, medical benefits, veterans' benefits, and unemployment insurance.

The US Bureau of Economic Analysis (BEA) reports personal income.[1] Arkansas's total 2017 personal income was $122.5 billion, which ranked 34th nationally before adjusting for population.[2]

Per capita personal income is simply the total state personal income divided by the number of people in the state. In 2017, Arkansas's population was 3,004,279 (32nd in the nation) as reported by the US Census Bureau. Its per capita personal income was $40,791 (43rd in the nation).[3]

Disposable personal income is the money available to individuals and households for uses such as spending and saving after they've paid their personal income taxes. It is calculated as personal income minus personal current taxes paid to federal, state,

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1 US Bureau of Economic Analysis (BEA), "State Personal Income and Employment: Concepts, Data Sources, and Statistical Methods," September 2016, https://bea.gov/regional/pdf/spi2015.pdf.

2 BEA, "Personal Income for Arkansas," March 22, 2018, https://www.bea.gov/regional/bearfacts/action.cfm?geoType=3&fips=05000&areatype=05000.

3 Ibid.

and local governments.[4] As with personal income, it is also useful to look at disposable personal income on a per capita basis by dividing it by the population. Disposable personal income per capita in Arkansas was $36,786 in 2017.

Why are personal income measures important to Arkansans?

State governments use personal income data to measure the economic base for planning purposes, such as how much tax revenue they can generate with income taxes. The federal government uses state personal income data to allocate federal aid and matching grants to the states. Most of these funds go to health care; the rest go to welfare programs, transportation, community and regional development, education, job training, employment, and social services.[5]

Another use of personal income data involves state spending limits. According to the BEA, 19 states have constitutional or statutory limits on state government taxes and spending that are tied to state personal income or one of its components. These states account for more than one-half of the US population, though Arkansas is not one of these states (Arkansas is one of 20 states with no explicit tax or expenditure limits).

When disposable personal income increases, consumer spending increases. Arkansas businesses may perform better when residents have more money to spend on everything from restaurant meals to new cars. Businesses, in turn, have more revenue to reinvest. They can afford to hire more workers, purchase more goods and services from other businesses, and buy back shares from or pay dividends to shareholders (in the case of publicly traded companies).

The BEA breaks down personal income by industry. By looking at how personal income is changing in each industry, we can get a better idea of what's happening in Arkansas's economy and how it compares to what's happening in the United States as a whole. And knowing which industries are growing and which are shrinking can help people make better decisions about what educational and career choices to pursue or where to invest in new businesses.

Using the four quarters of data from the fourth quarter of 2016 to the fourth quarter of 2017 (the latest available at the time of writing), these are the five private, nonfarm industries with the fastest-growing earnings in Arkansas:

- professional, scientific, and technical services (5.9%)
- educational services (5.2%)
- wholesale trade (5.1%)
- durable goods manufacturing (4.8%)
- construction (4.7%)

4 BEA, "A Guide to the National Income and Product Accounts of the United States," https://www.bea.gov/national/pdf/nipaguid.pdf, accessed January 3, 2019.

5 Norton Francis et al., "What Types of Federal Grants Are Made to State and Local Governments and How Do They Work?" The Tax Policy Center's Briefing Book (Washington, DC: Tax Policy Center, n.d., ca. 2015), http://www.taxpolicycenter.org/briefing-book/what-types-federalgrants-are-made-state-and-local-governments-and-how-do-they-work, accessed January 17, 2018.

The same list for the nation as a whole is very different, with only construction appearing in the top five for both Arkansas and the United States.[6] To catch up to Missouri, Arkansas's total personal income would need to increase by $5.6 billion, or 5.1%. To catch up to Texas, it would need to increase by $16.1 billion, or 14.6%.

What's not included in personal income?

Personal income may provide an incomplete picture of an individual's true income because it doesn't capture people's ability to spend money by using savings or borrowing. It does not include capital gains or losses, for example.[7] An individual could make $150,000 from the sale of a house and this sum would not be reflected in personal income. Also not included are personal contributions for social insurance, income from government employee retirement plans, income from private pensions and annuities, and income from interpersonal transfers, such as child support and alimony.[8]

The shortcomings of personal income carry over to per capita personal income and disposable personal income. Disposable personal income is further distorted by the fact that even though it doesn't include the capital gains people earn when they sell assets that have increased in value, it does include any capital gains taxes a person might have paid. Disposable personal income also doesn't include the accumulation of wealth (i.e., savings) that people can use to support their spending.[9]

What is the trend in Arkansas's personal income?

Real per capita disposable personal income in Arkansas has increased steadily since the late 1940s, with temporary drops during US recessions. It has grown from $8,523 in 1948 to $36,786 in 2017 (in inflation-adjusted dollars). In the 1950s, this measure averaged just 62% of the national level, but by the late 1970s, it was up to 80% of the national level, where it has roughly stayed since then (it was 83.4% in 2017). Prior to 2012, Arkansas rarely ranked higher than

6 Interested readers can locate the data we used by going to BEA's Interactive Data at https://www.bea.gov/itable/, selecting "GDP & Personal Income" under "Regional Data," clicking "Begin using the data," and following these steps: (1) select "Quarterly State Personal Income"; (2) select "Personal Income by Major Component and Earnings by Industry (SQ5, SQ5H, SQ5N)"; (3) select "NAICS"; (4) select "Arkansas" for "Area," "Compound annual growth rate between any two periods" for "unit of measure," and "All statistics in table" for "statistic"; (5) select "2016:Q4" to "2017:Q4"; then (6) see the section "Earnings by Industry."

7 John Ruser, Adrienne Pilot, and Charles Nelson, "Alternative Measures of Household Income: BEA Personal Income, CPS Money Income, and Beyond," working paper prepared for presentation to the Federal Economic Statistics Advisory Committee on December 14, 2004, https://www.bea.gov/about/pdf/AlternativemeasuresHHincomeFESAC121404.pdf.

8 Ibid., p. 6.

9 Ibid.

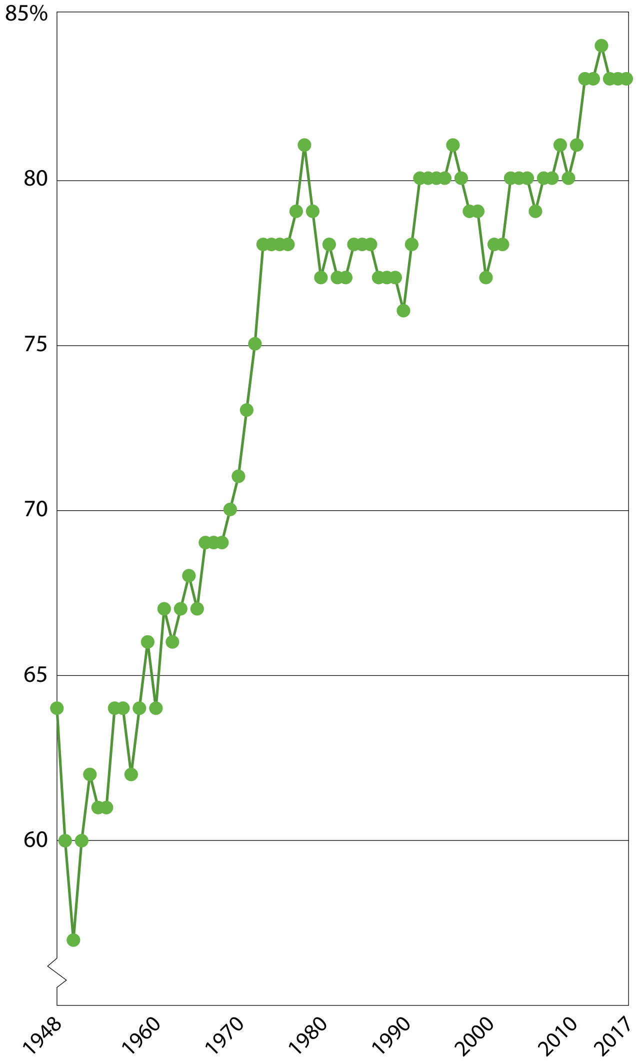
47th in the nation, and often 49th. But since 2012, Arkansas's rank has been 41st, 42nd, or 43rd.[10]

Within Arkansas's metropolitan areas, per capita personal income in 2016 was highest in Northwest Arkansas at $55,729 (the Fayetteville-Springdale-Rogers area). Per capita personal income was lowest in Pine Bluff, at $32,227—number 376 out of the country's 382 metropolitan statistical areas (MSAs).

Why is there such a big difference in income between these two areas? The answer is complex, but in short, Northwest Arkansas has benefited from the decades-long presence of several Fortune 500 companies and, more recently, from many startup businesses. Pine Bluff has been losing both people and businesses in recent years, making economic growth difficult. But the question of "Why?" is very complex.

The largest MSA in Arkansas, Little Rock (including North Little Rock, Conway, and the surrounding communities), was in the middle, at $42,582. For Arkansans living outside the wealthier areas in Arkansas, the numbers are much lower. If we eliminate Northwest Arkansas counties and the Little Rock metropolitan area, per capita income drops from $39,722 to $33,549.[11]

The Average Arkansan's Disposable Income as a Percentage of the Average American's Disposable Income, 1948–2017



Source: US BEA, SA51 Disposable Personal Income Summary: Disposable Personal Income, Population, and Per Capita Disposable Personal Income.

10 US BEA, SA51 Disposable Personal Income Summary: Disposable Personal Income, Population, and Per Capita Disposable Personal Income.

11 US BEA, CA1 Personal Income Summary: Personal Income, Population, Per Capita Personal Income. Note: 2017 data have not yet been released for MSAs and counties as of this writing.

Wages

What are they?

Wages are what employers pay for labor and are typically stated in dollars per hour. To know how much workers earn per month or per year, we need to know how many hours they work. Wages do not include the value of any additional benefits workers receive, such as health care, sick leave, and paid vacation.

Arkansas has a legal minimum wage of $9.25 per hour, approved by voters in 2018. This legal minimum is higher than the federal legal minimum of $7.25 per hour. While the legal minimum wage is often the first thing people think about when wages are mentioned, it is not relevant for the vast majority of the workforce. Nationally, only 2.3% of workers earned at or below the national minimum wage in 2017 (workers may legally be paid less if other compensation, such as tips, makes up the difference). In Arkansas, that figure is even lower, at 1.8%.[1] Few other states in the South have a minimum wage above the national minimum. Missouri is the only state that borders Arkansas to have a higher minimum wage ($8.60 per hour) than the national one ($7.25 per hour), and Florida (at $8.25 per hour) does as well. All other states in the South use the national minimum.

If the legal minimum wage does not apply to most workers, how are wages determined? Economists have found that wages are closely related to worker productivity (how much they produce per hour), and that as a worker's productivity increases, wages generally will as well. To put it another way, there is no example of a country or state increasing its wages over a long period of history without a similar rise in productivity.[2] Many things determine worker productivity, but some common factors are on-the-job training, years of education, and the kind of education, such as college major, as well as the amount of capital available for the worker to use.

1 Bureau of Labor Statistics (BLS), "Characteristics of Minimum Wage Workers, 2017," Report 1072, March 2018, https://www.bls.gov/opub/reports/minimum-wage/2017/home.htm.

2 See Paul Krugman, *Pop Internationalism*, (Cambridge, MA: MIT Press, 1997), p. 55-56 for a discussion of the relationship between wages and productivity.

Why are wages important to Arkansans?

For many Arkansans, wages are the primary form of income they earn to support themselves, their families, and their communities. The Bureau of Labor Statistics (BLS) estimates that in 2017 in Arkansas, 769,000 workers out of a total 1.24 million, or about 62%, were paid hourly wages. (The remaining workers were mainly paid on salary, or on a non-hourly basis.)[3]

How does Arkansas rank nationally for wages?

As of 2017, the District of Columbia led the nation with a real median hourly wage of $33.82, though DC is an outlier since it is entirely a metropolitan area (metro areas have higher wages than non-metro areas). States with high wages include Alaska at $22.86 and Massachusetts at $22.81. The states with the lowest real median hourly wages in 2017 were Mississippi at $14.46, Arkansas at $14.82, and West Virginia at $15.16.[4] Nationally, the median wage across all occupations in 2017 was $18.12.[5]

These state differences in wages partly reflect differences in the cost of living, but not completely. To adjust for this, we can use the Regional Price Parity data from the Bureau of Economic Analysis (also discussed in the Median Household Income section). For example, without adjusting for the cost of living, Arkansas's median wage is 81.8% of the national median. After adjusting Arkansas's median wage up to $16.96 to account for the state's lower cost of living, its median wage is still below the national median, but it rises to a much closer 93.0%.[6]

Even after adjusting for cost of living differences, the states with the highest median wages—Alaska and Massachusetts—are still at the top, though they drop from about 126% of the national median to less than 120%. But some states move around quite a bit in the rankings. Ohio, Nebraska, Iowa, Missouri (Arkansas's neighbor), Kentucky, and Alabama all move up at least 15 spots in the rankings. Other states drop dramatically: California falls from 10th to 40th place, and Hawaii from 8th to 48th. But Arkansas doesn't move much, going from 49th to 47th place.

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3 The number of hourly workers comes from BLS, "Characteristics of Minimum Wage Workers, 2017." The total number of workers comes from BLS, "Current Employment Statistics," Total Nonfarm Employees, average for 2017, https://www.bls.gov/sae/. These are different surveys, so the 62% figure should be seen as a rough estimate.

4 BLS, "May 2017 Occupational Employment and Wage Estimates," https://www.bls.gov/oes/current/oessrcst.htm. BLS reports these data annually, but only for May. The raw data can be found at https://www.bls.gov/oes/special.requests/oesm17st.zip.

5 BLS, "May 2017 National Occupational Employment and Wage Estimates, United States," https://www.bls.gov/oes/current/oes_nat.htm.

6 Regional Price Parity data come from the Bureau of Economic Analysis, "Real Personal Income for States and Metropolitan Areas, 2015," https://www.bea.gov/newsreleases/regional/rpp/rpp_newsrelease.htm.

How do Arkansas's wages compare to surrounding states?

As of 2017, Arkansas had the second-lowest wages among its neighboring states at $14.82 per hour, which is about 82% of the national median (only Mississippi is lower, at $14.46). The neighboring state with the highest wages in 2017 was Texas, at $17.39 per hour. Texas workers also get to keep more of their wages since there is no state income tax.[7]

The surrounding state with the greatest real wage growth since 2008, when many states saw wages bottom out during the Great Recession, was Oklahoma, at 7.4%, compared to Arkansas's 1.5%. Going back to 2001, the earliest year for which we have comparable data from the BLS, Arkansas's median wage grew by 2.9% through 2017 in real terms. That's about average among our neighbors, and better than the national average. These growth rates are adjusted for inflation and are total growth rates, not annual averages.[8]

Real Median Hourly Wage Growth by State

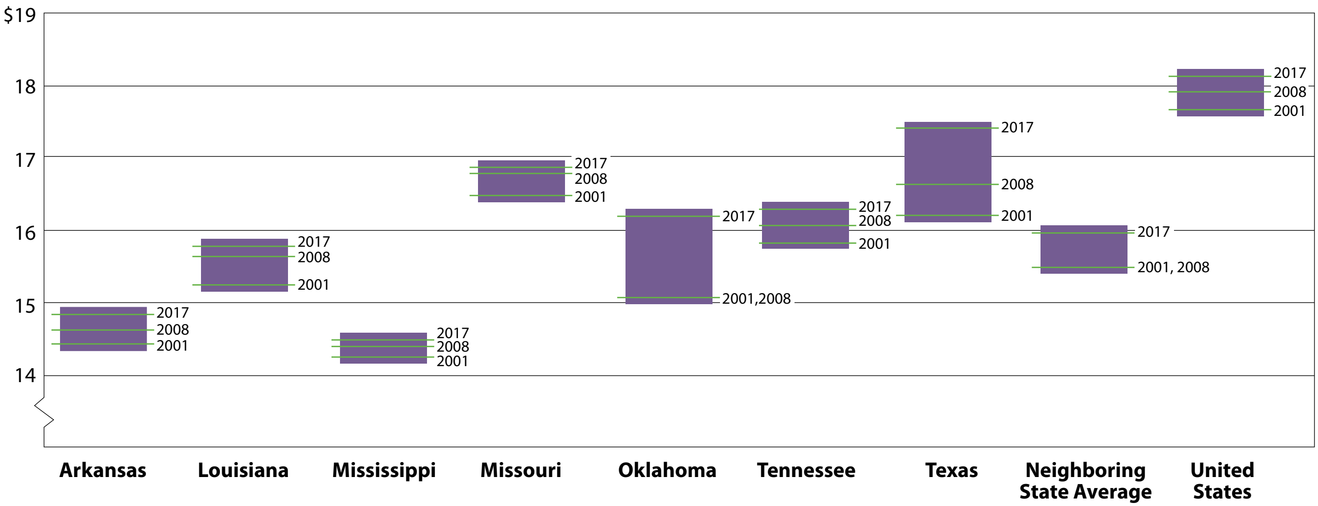
	2001	2008	2017	Change 2001–2017	Change 2008–2017
Arkansas	$14.40	$14.60	$14.82	2.9%	1.5%
Louisiana	15.23	15.75	15.62	2.6	−0.8
Mississippi	14.22	14.37	14.46	1.7	0.6
Missouri	16.78	16.46	16.85	0.4	2.4
Oklahoma	15.05	15.05	16.17	7.4	7.4
Tennessee	16.04	15.80	16.28	1.5	3.0
Texas	16.60	16.18	17.39	4.7	7.4
Neighboring state average	15.47	15.46	15.94	3.0	3.7
United States	17.90	17.65	18.12	1.2	2.7
Arkansas as % of US	80.5%	82.7%	81.3%		

Source: Bureau of Labor Statistics, Occupational Employment Statistics, https://www.bls.gov/oes/tables.htm.

7 BLS, "May 2017 Occupational Employment and Wage Estimates," https://www.bls.gov/oes/current/oessrcst.htm.

8 Historical wage data come from the BLS's Occupational Employment Statistics data at https://www.bls.gov/oes/tables.htm.

Real Median Hourly Wage Growth by State, 2001–2017



Source: BLS, Occupational Employment Statistics, https://www.bls.gov/oes/tables.htm.

The BLS also provides data for wage levels other than the median wage. The lowest level reported is the 10th percentile (meaning that 90% of workers make more than this wage). It is useful to analyze this wage level since we are concerned with how the least-well-off workers in Arkansas are doing in the labor market. In Arkansas, the worker in the 10th percentile earned $9.02 per hour in 2017, which is about 94% of the national wage at this percentile.[9] That figure is much closer to the national level than Arkansans' median wage. We should be careful not to attribute the closing of the gap with the national wage level to Arkansas's higher minimum wage, however, for two reasons.

First, Arkansas has always been close to the national level at the 10th percentile, even before it raised its minimum wage (in 2011 and 2012, Arkansas's 10th percentile wage was over 94% of the national level). Second, Arkansas is similar to its neighbors in this respect, and only Missouri has a higher minimum legal wage than the national minimum wage. All the other neighboring states use the national legal minimum of $7.25, but the 10th percentile range is from $8.40 to $9.02 per hour among Arkansas's neighbors.[10]

9 BLS, "Occupational Employment Statistics," 2017, https://www.bls.gov/oes/tables.htm.

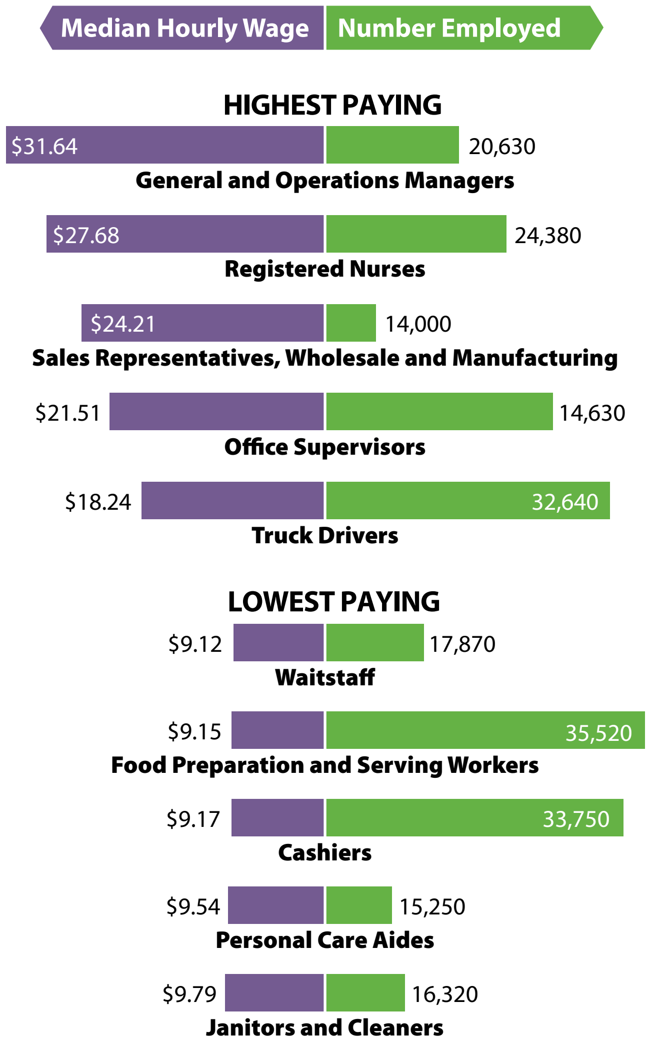
10 State-specific data can be accessed from the BLS at https://www.bls.gov/oes/special.requests/oesm17st.zip.

Which occupations pay the highest and lowest wages?

Family and general practitioners, general internists, obstetricians and gynecologists, and surgeons all earn at least $100 per hour (or $208,000 per year) and are the highest median wage occupations in Arkansas.[11] Also high on the list are specialist dentists ($96.85 per hour), anesthesiologists ($90.82 per hour), and other physicians and surgeons ($90.02 per hour).[12] And most if not all of these high-paying medical professions are paid on salary, not hourly.[13]

Amusement and recreation attendants have the lowest median hourly wages in Arkansas at $9.07 per hour.[14] Also low on the list are food preparation and service workers ($9.11 per hour), waitstaff ($9.12 per hour), and a category including lifeguards, ski patrol, and other recreational protective services ($9.13 per hour).[15] Some of these low-paid workers derive a large part of their income from tips, and their hourly wage directly from their employer is likely much lower, but these data reflect the inclusion of reported tips.

Median Wages for Common Arkansas Occupations, May 2017



These are the lowest and highest paying occupations that have at least 10,000 people employed in Arkansas. The occupation codes for the categories in this chart are as follows, from top to bottom: 11-1021, 29-1141, 41-4012, 43-1011, 53-3032, 35-3031, 35-3021, 41-2011, 39-9021, 37-2011.

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11 The BLS does not report the specific amount if it is over $100. All data are as of May 2017, the latest available at the time of writing.

12 Ibid.

13 BLS, "May 2017 State Occupational Employment and Wage Estimates, Arkansas," https://www.bls.gov/oes/current/oes_ar.htm#00-0000.

14 Ibid.

15 Ibid.

Which parts of the state have the highest median hourly wage?

The US Census Bureau groups Arkansas areas into metropolitan and nonmetropolitan areas, some of which overlap with neighboring states. There are six metropolitan statistical areas (MSAs) located primarily within Arkansas (the Texarkana and Memphis MSAs have more people in bordering states).

Of these six, the Little Rock MSA (which includes North Little Rock, Conway, and surrounding counties) had the highest median wage at $16.38 per hour in 2017, and the Northwest Arkansas MSA (including Fayetteville, Springdale, and Rogers) was not far behind, at $16.11 per hour. The Hot Springs MSA had the lowest median hourly wages, $12.94. The other three MSAs are Pine Bluff, Jonesboro, and Fort Smith, which had median wages of $14.87, $13.88, and $13.64 respectively.[16]

While the cost of living does differ slightly among these areas, adjusting the wages does not alter the order: Little Rock is still first at $18.02 and Hot Springs is still last at $15.19.[17]

For Arkansas counties outside of metropolitan areas, the state is divided into four areas (north, east, west, and south), and the median wages for these areas are between $13.00 and $14.00 per hour.[18]

What are the trends in Arkansas's wages?

From 2008 through 2017, the real median wage in Arkansas increased just 22 cents, from $14.60 to $14.82, an increase of just 1.5%. And 2008, during the Great Recession, marks the bottom of the wage trend. Even if we go back to 2001, Arkansas's median wages have only grown by 2.9%. That's only about 0.2% per year, after adjusting for inflation.

By comparison, the state with the highest growth rate, North Dakota, has seen a 23% increase over the same period, from $15.65 to $19.25. Median wages for the nation as a whole increased by 2.7% from 2008 to 2017, which is nothing to celebrate, but better than Arkansas.

Workers at the 10th percentile in Arkansas fared slightly better, with real wage growth of about 8% since 2008, or just under 1% per year—just above cost-of-living increases. Still, this increase is nothing to celebrate, either, as workers are seeing hardly any increase in their real wages.[19]

16 BLS, "May 2017 Metropolitan and Nonmetropolitan Area Occupational Employment and Wage Estimates," https://www.bls.gov/oes/current/oessrcma.htm.

17 All the Arkansas MSAs have their wages adjusted upward, since all are below the national average cost of living.

18 BLS, "May 2017 Metropolitan and Nonmetropolitan Area Occupational Employment and Wage Estimates."

19 The data in this section are all the authors' calculations using BLS, "Occupational Employment Statistics," 2017, https://www.bls.gov/oes/tables.htm.

Poverty

What is the poverty rate?

The poverty rate tells us what percentage of a geopolitical area's residents earn an income below certain thresholds. The US Census Bureau produces the official federal poverty statistics from responses to its Current Population Survey (CPS), a monthly survey of about 60,000 US households.[1]

The American Community Survey (ACS) is the best measure of subnational poverty rates because it has a larger sample size than the CPS. The ACS surveys about 3 million addresses per year and its results help to decide how federal and state funds are allocated.[2] The two surveys use different inputs, so their data should not be directly compared.[3] This section of our guide primarily relies on ACS data.

The most recent poverty rate for Arkansas is 17.2% for 2016, meaning that Arkansas has the nation's seventh highest poverty rate. The official US poverty rate is 14.0%.[4] For the United States as a whole, poverty rates decreased in every group from 2015 to 2016 except for adults 65 and older.[5]

The poverty rate, along with many other economic indicators, gives Arkansas policymakers a gauge to see if they are helping the poorest citizens and families. It's good for the state's median household income to increase, but if the poverty rate is not falling at the same time, we might be worried and ask why.

How is the poverty threshold determined?

The Census Bureau sets a poverty threshold each year based on household composition and the age of a household's members. The poverty thresholds were developed in the 1960s and were initially based on an annual cash income deemed sufficient to meet basic needs. Basic needs were defined for most families as three times the cost of a standard food budget (as determined by the Department of Agriculture). Since

1 US Department of Labor, Bureau of Labor Statistics, "The Employment Situation: June 2018," news release, https://stats.bls.gov/news.release/pdf/empsit.pdf, 9.

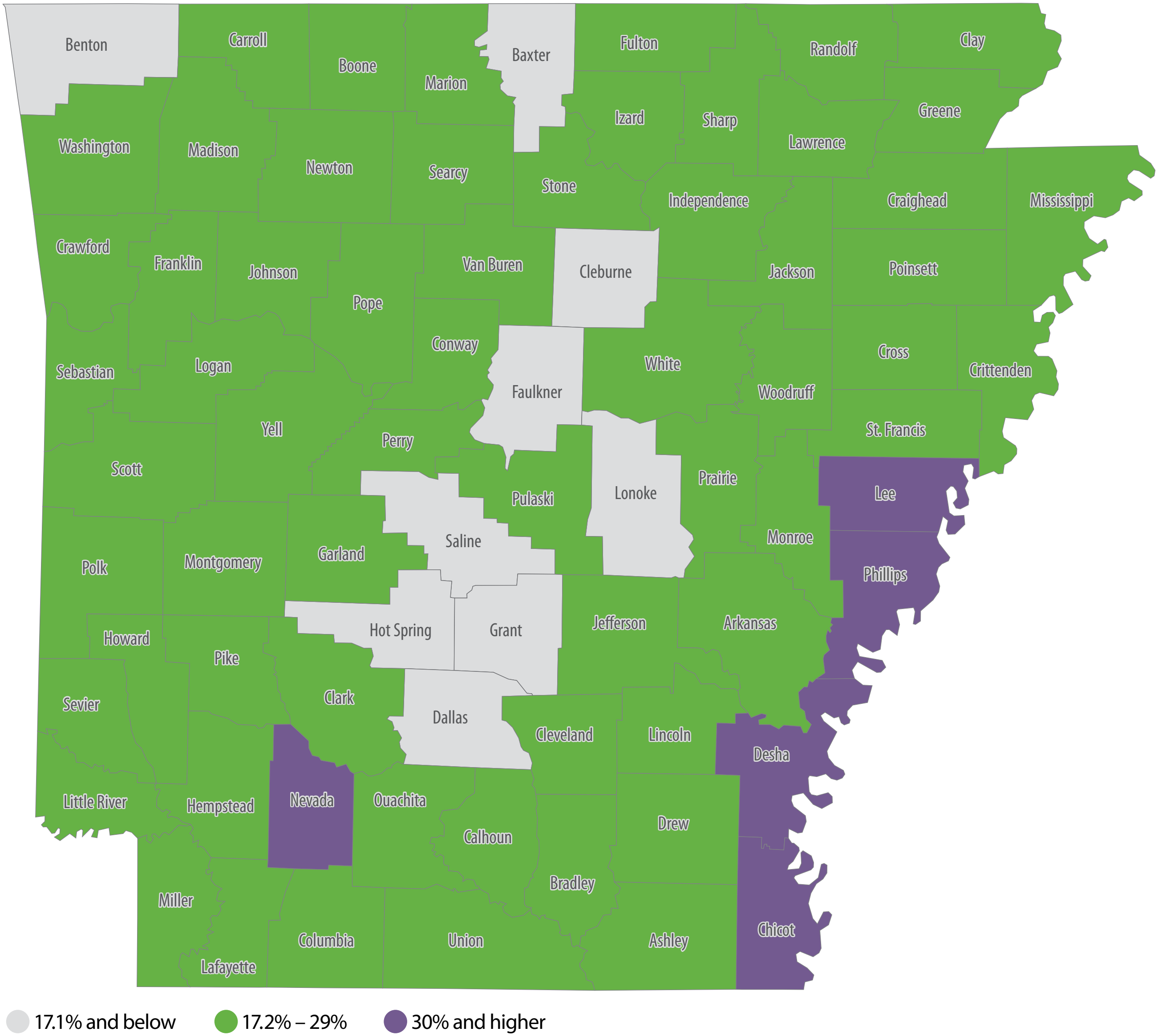
2 Institute for Research on Poverty, "How Is Poverty Measured in the United States?" last updated May 9, 2011, https://www.ssc.wisc.edu/irpweb/faqs/faq2.htm.

3 US Department of Agriculture (USDA), Economic Research Service, "Rural Poverty & Well-Being," A Note about Data Sources, https://www.ers.usda.gov/topics/rural-economy-population/rural-poverty-well-being/#note, accessed January 3, 2019.

4 American Community Survey, 2016, https://factfinder.census.gov/bkmk/navigation/1.0/en/d_program%3AACS/d_dataset%3AACS_16_1YR/d_product_type%3ADATA_PROFILE/. Recall that the ACS measure differs slightly from the CPS measure.

5 US Census Bureau, Income and Poverty in the United States: 2016, https://www.census.gov/library/publications/2017/demo/p60-259.html.

Percent of People Below Poverty Level, 2012–2016



Source: American Community Survey, average for 2012–16.

1969, the food-based thresholds have been adjusted for changes in the cost of living as measured by the Consumer Price Index and are no longer tied to the cost of food or of any specific necessities.

Any household whose income falls below the poverty level is considered poor, and all members of the household are counted as being in poverty. Income is defined as pretax income and cash welfare assistance. It does not include benefits from the Supplemental Nutrition Assistance Program (SNAP) or Medicaid, nor does it account for any taxes the family pays (but see the alternative Supplemental Poverty Measure, discussed later in this section, for important differences with respect to these factors).[6]

There are separate poverty thresholds for those over the age of 65, as well as for Alaska and Hawaii, but the other 48 states have the same poverty thresholds despite their varying costs of living. And it's important to note that this measurement of poverty is binary: either you are in poverty, or you are not. Earn one dollar above the threshold and you are not classified as being in poverty.

6 Ibid.

How are poverty thresholds used?

One major function of the poverty thresholds is to determine eligibility for a variety of federal programs. These range from Health and Human Services programs such as Head Start, the Children's Health Insurance Program, and various parts of Medicaid and Medicare, to food programs such as SNAP (formerly food stamps) and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), to the Weatherization Assistance Program, Job Corps, and Legal Services for the Poor (and many others).[7]

Some of these programs use percentage multiples of the poverty thresholds (such as 150% or 200%), and not all use these numbers as a hard cutoff: some use the thresholds as a target for phaseouts. For example, the Affordable Care Act provides subsidies for purchasing health insurance on the marketplace exchanges up to 400% of the poverty thresholds, but the subsidies get smaller as one approaches 400%, at which point they become zero.

7 US Department of Health and Human Services, What Programs Use the Poverty Guidelines?, last updated January 20, 2012, https://www.hhs.gov/answers/hhs-administrative/what-programs-use-the-poverty-guidelines/index.html.

What are the poverty thresholds?

In 2017, the national poverty threshold for a household of one person under age 65 was $12,752. If that person was 65 or older, the poverty threshold was about $1,000 lower, at $11,756.[8]

For two individuals in a household, you might think you would just double the one-person number, but that's not how poverty thresholds work. Instead, the figure for a two-person household is $16,414 if both are adults, or $16,895 if one is under 18. It is $14,816 if one or more of the adults are 65 or older.[9]

The logic for not doubling the threshold amount is that while preparing food for two is more expensive than preparing food for one, it is not twice as expensive. In other words, there are cost savings for buying and cooking more food at once. For instance, buying a five-pound sack of potatoes might cost the same as buying two pounds of loose potatoes. And cooking five pounds of potatoes would take more electricity, but not twice as much, as cooking two pounds of potatoes. Similar efficiencies exist for other household expenses. For example, a two-bedroom apartment is more expensive than a one bedroom, but not twice as expensive. For each additional household member, the poverty threshold increases, though not by a constant amount (usually somewhere between $3,000 and $6,000 per household member). Once a household grows beyond nine members, the poverty threshold does not increase any further.

How does Arkansas's poverty rate compare to surrounding states?

While Arkansas does have a high poverty rate, it is not out of line with many of our neighboring states. Arkansas's poverty rate of 17.2%, the seventh highest in the nation, is better than Louisiana's or Mississippi's. They have the highest poverty rates in the nation at 20.2% and 20.8% as of 2016. Oklahoma, Tennessee, and Texas are just below Arkansas with the 10th, 12th, and 13th highest rates (16.3%, 15.8%, and 15.6%). Missouri fares quite a bit better, right at the national poverty rate of 14%, ranked 23rd highest.

The fact that Arkansas's rate is close to its neighbors is cold comfort to those who live in poverty, however. We should not use this comparison as an excuse to say that everything is okay, but merely as an acknowledgement of reality and a starting point for improvement.

8 The poverty threshold is lower for the elderly because they spend less on food, which was the determining factor when the poverty thresholds were established.

9 US Census Bureau, Poverty Thresholds, https://www.census.gov/data/tables/time-series/demo/income-poverty/historical-poverty-thresholds.html, accessed January 3, 2019.

Arkansas's poverty rates vary considerably by county. The counties with the highest poverty rates are Phillips, Desha, Chicot, Nevada, and Lee, which all had poverty rates above 30% in 2016. The counties with the lowest poverty rates are Saline, Benton, Lonoke, Grant, and Baxter, which all had poverty rates under 14%.[10]

US poverty rates do not adjust for the cost of living in different areas. As such, the poverty rate may be overstated in areas with lower living costs and understated in areas with higher living costs.[11]

Are there other ways to measure poverty?

Yes. In 2009, the Census Bureau introduced a new Supplemental Poverty Measure to account for shortcomings in the official poverty rate. This new measure is not intended to be used for determining qualifications for antipoverty programs, primarily because it includes the value of many antipoverty programs in its calculations. Instead, it is designed to give a different perspective on poverty, to show the effects of both taxes and government transfer programs on the well-being of individuals and families.[12]

In addition to adding in the value of government programs and subtracting taxes from an individual's income, the Supplemental Poverty Measure (SPM) is different in a few other ways. First, the poverty thresholds are not set by the cost of buying food in the 1960s. Instead, they are based on the cost of buying food, clothing, shelter, and utilities, updated on a five-year moving average basis.[13] Second, the thresholds vary based on the cost of housing in different locations, a recognition of the varying cost of living across the country that the official poverty measure neglects. The SPM also subtracts some expenses, such as medical expenses, that are not really discretionary.

These changes can either increase or decrease state poverty rates as measured by the SPM compared to the official rate. And they do: in 13 states, the supplemental rate is higher; in 20 states (including Arkansas), it is lower; and in the remaining 17 states, it is about the same (not statistically different). Arkansas's Supplemental Poverty Rate is about 2 percentage points lower than its official poverty rate. Arkansas also improves from being the ninth poorest state to the 15th poorest.[14]

In other words, the cost of living is lower in Arkansas than the national average, but not low enough that the poverty rank changes dramatically. Some states do see large changes, though: California, Florida, New

10 American Community Survey, average for 2012–16. County poverty rates use five-year averages since the sample size is so small.

11 USDA, Economic Research Service, "Rural Poverty & Well-Being," A Note about Data Sources.

12 Liana Fox, The Supplemental Poverty Measure: 2016, US Census Bureau, September 2017, https://www.census.gov/content/dam/Census/library/publications/2017/demo/p60-261.pdf.

13 For example, the 2016 threshold is based on an average for the costs from 2012 through 2016.

14 This ranking differs slightly from the seventh-poorest ranking discussed above because the SPM uses CPS data, and because it is an average of 2014–16 measures, rather than just a measure for 2016 as the ACS measure is.

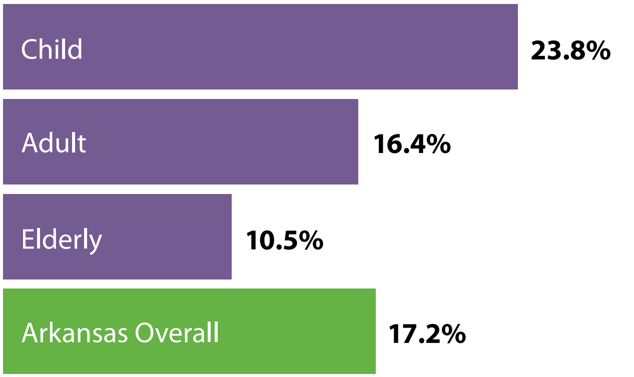
York, New Jersey, Virginia, Hawaii, Maryland, and Connecticut all move up at least 10 spots (indicating higher poverty by this new measure), while Idaho, Kansas, South Dakota, Maine, Ohio, Oklahoma, and West Virginia all move down 10 spots or more (indicating lower poverty by this new measure). For the nation as a whole, about 3 million more people are counted as being in poverty under the supplemental measure.

How does Arkansas's poverty rate vary by age?

The child poverty rate tells us the percentage of children under 18 living in families below the poverty line. In Arkansas and across the country, child poverty rates are generally higher than overall poverty rates. If a family is below the poverty line, all family members are considered to be in poverty, and poor families have, on average, more children. In 2016, Arkansas had a child poverty rate of 23.8%, much higher than the state's overall rate of 17.2%. That means Arkansas has the eighth highest child poverty rate among the 50 states and Washington, DC. On the bright side, Arkansas's child poverty rate did decrease by 3.4% from 2015, when it was 27.2%.[15]

15 Alemayehu Bishaw, "Testing for a Rise in State Child Poverty Rates of 5% or Greater for 2015–2016," US Census Bureau, April 2018, https://www.census.gov/data/tables/2018/demo/income-poverty/state-level-child-poverty.html.

Arkansas Poverty Rates by Age Group, 2016



Source: US Census Bureau, American Community Survey, "Poverty Status in the Past 12 Months," 2016 ACS 1-year estimates, https://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml.

The poverty rate for those 65 years and older is lower than the overall poverty rate in Arkansas. It was 10.5% in 2016,[16] lower than the overall rate of 17.2%. The elderly poverty rate is lower than the overall poverty rate for the United States as well. The elderly have lower poverty rates because of retirement income such as Social Security and pension payments.

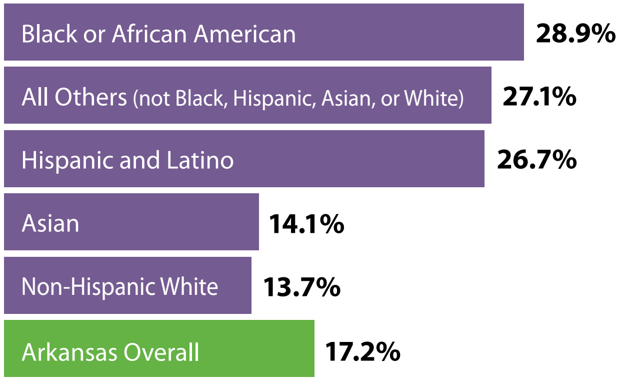
16 US Census Bureau, American Community Survey, "Percent of People 65 Years and Over Below Poverty Level in the Past 12 Months," 2016 ACS 1-year estimates, https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk. On the role of Social Security in lowering the poverty rate see Gary V. Engelhardt and Jonathan Gruber, "Social Security and the Evolution of Elderly Poverty," in Alan Auerbach, David Card and John Quigley (eds.) *Public Policy and the Income Distribution*. (New York: Russell Sage Foundation, 2006).

Which demographic groups in Arkansas have the highest and lowest poverty rates?

Grouping families by race and ethnicity, we see large differences in poverty rates in Arkansas. Arkansans categorized by the census as black or African American have the highest poverty rate at 28.9%. Non-Hispanic white Arkansans have the lowest poverty rate at 13.7%. But note that, because there are more white than black Arkansans (about 290,000 as compared to 127,000), the majority of Arkansans living in poverty are white.

Hispanics and Latinos have a poverty rate similar to African Americans at 26.7%, or about 56,000 individuals.[17]

Arkansas Poverty Rates by Race and Ethnicity, 2016



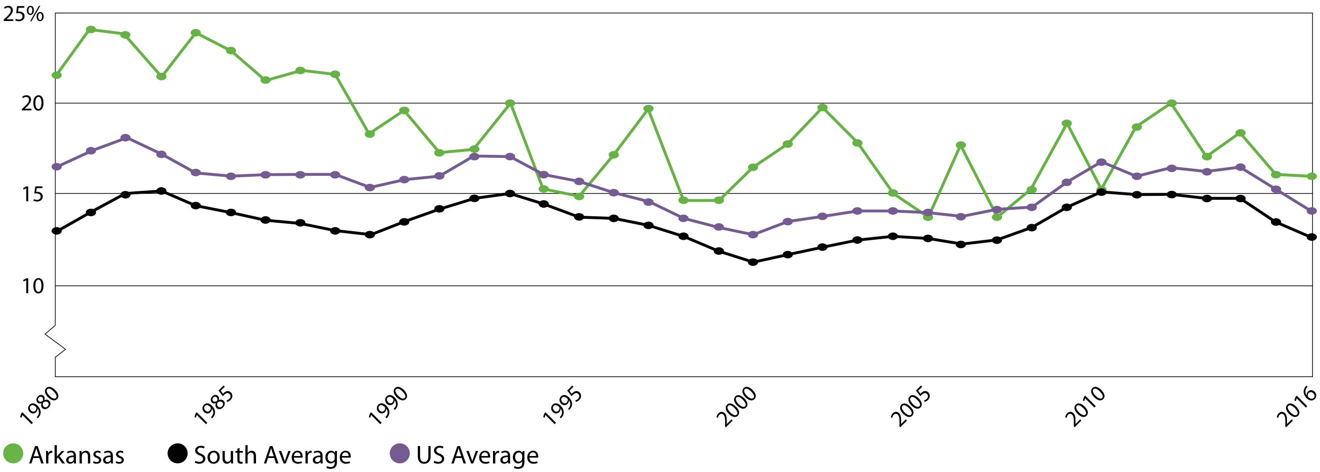
Source: US Census Bureau, American Community Survey, "Poverty Status in the Past 12 Months," 2016 ACS 1-year estimates, https://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml.

Looking at educational groups, it is not surprising that as educational attainment increases, the poverty rate falls, but the difference is dramatic. High school dropouts have a poverty rate of 27.2%, and those with a four-year college degree or higher have a rate of 4.5%. Even going to the next category, some college and associate's degrees, the poverty rate of 11.8% is over 2.5 times higher than that of four-year college graduates.[18]

17 US Census Bureau, American Community Survey, "Poverty Status in the Past 12 Months," 2016 ACS 1-year estimates, https://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml.

18 Ibid.

Arkansas Overall Poverty Rate, 1980–2016



Source: Tables 9 and 21, https://www.census.gov/data/tables/time-series/demo/income-poverty/historical-poverty-people.html.

What are the trends in Arkansas's poverty rate?

Since 1980, Arkansas's poverty rate has fluctuated from a high of 24.1% in 1981 to a low of 13.8% in both 2005 and 2007.[19] The poverty rate in Arkansas, like most of the nation, tends to change with the business cycle: it goes up in and around recessions, and declines when the economy improves. As the state's economy has improved in recent years and the unemployment rate has gone down, Arkansas has seen large declines in poverty rates.[20]

19 US Census Bureau, Historical Poverty Tables: People and Families, 1959–2016, Table 21, https://www.census.gov/data/tables/time-series/demo/income-poverty/historical-poverty-people.html, accessed January 3, 2019.

20 Associated Press, "Poverty Rate in Arkansas Shrinks," September 18, 2017, https://www.usnews.com/news/best-states/arkansas/articles/2017-09-18/poverty-rate-in-arkansas-shrinks.

Migration

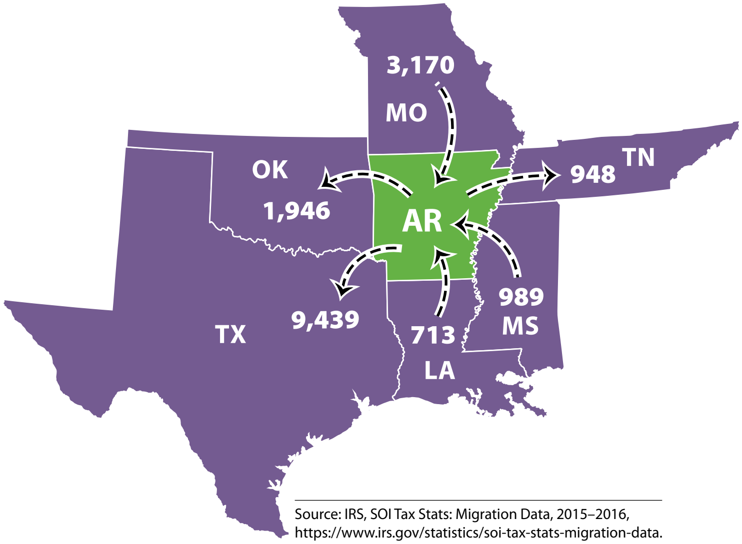
What is it?

Migration describes the movement of people to and from a geopolitical entity such as a city, county, state, or country. People may migrate in search of higher pay, lower living expenses, or an improved quality of life.

One source of migration data is the Internal Revenue Service's Statistics of Income program. This program, in collaboration with the US Census Bureau, tracks year-to-year address changes as reported on individuals' federal tax returns. Data from 1991 through 2016 are available showing the number of people who moved to a state and where they moved from, as well as the number of people who left a state and where they went. These data are also available at the county level.[1]

Migrants can come from other countries or other states. In Arkansas's case, the vast majority of migrants come from other states (at least, as far as we can determine from tax records). For example, in 2016, 61,281 individuals moved to Arkansas, but only 748 of them came from another country. Also in 2016, 60,253 individuals left Arkansas, and only 927 of them left the United States.[2] While the IRS data do not tell us where the 2016 international migrants came from, the American Immigration Council says that cumulatively, about 5% of Arkansans are foreign-born immigrants, and they mainly come from Mexico, El Salvador, India, Guatemala, and China.[3]

Net Migration to and from Surrounding States, 2011–2016



Source: IRS, SOI Tax Stats: Migration Data, 2015–2016, https://www.irs.gov/statistics/soi-tax-stats-migration-data.

1 Internal Revenue Service (IRS), Statistics of Income (SOI) Tax Stats: Migration Data, https://www.irs.gov/statistics/soi-tax-stats-migration-data, accessed January 3, 2019; Kevin Pierce, SOI Migration Data: A New Approach, IRS Statistics of Income Bulletin, Summer 2015, https://www.irs.gov/pub/irs-soi/soi-a-inmig-id1509.pdf.

2 IRS, SOI Tax Stats: Migration Data, 2015–2016, https://www.irs.gov/statistics/soi-tax-stats-migration-data-2015-2016.

3 American Immigration Council, Immigrants in Arkansas, fact sheet, October 6, 2017, https://www.americanimmigrationcouncil.org/research/immigrants-arkansas.

Why is it important to Arkansans?

Economic research suggests that positive net migration (meaning that more individuals move into the state than move out) benefits a state's economy because of the skills held by relocated workers. Expanding economies rely on these workers to fill both skilled and unskilled positions. Skilled workers are needed when the local education system is not producing desirable skills in sufficient quantities. Unskilled workers often work jobs unfilled by native residents.[4]

Migration helps Arkansas be as economically productive as possible and increases living standards for all residents. When working people move to Arkansas or move within Arkansas to an area where their skills are in higher demand, we not only benefit directly from the fruits of their labor, but the state gains tax revenue as well. When those people shop with the dollars they've earned, they provide sales tax revenue. And when they buy homes, local property tax revenues increase. When state and local governments use those tax dollars wisely, the provision of public goods and services such as infrastructure and education improves.

Conversely, when working people leave Arkansas because opportunities are better elsewhere, the state loses economic productivity and tax revenue.

4 George J. Borjas, "The Economic Benefits from Immigration," *Journal of Economic Perspectives* 9, no. 2 (Spring 1995): 3–22.

How does Arkansas rank on migration?

From 2015 to 2016, IRS data show that 20 states had positive net migration. Arkansas was among those states, with 1,028 more individuals moving into Arkansas than moving out.[5] This figure places Arkansas 19th in terms of raw net migration numbers. While that's near the bottom of the list of the 20 states with a net inflow, keep in mind that 30 states had a net outflow (more people leaving the state than coming there).[6]

Even if we examine these numbers on a population-weighted basis by dividing the number of net migrants by the number of nonmigrants (those that don't move in a given year), Arkansas's rank doesn't change much: it would be 20th, lowest among states with net inflows (keeping in mind again that most states had a net outflow).

5 This figure includes flows between Arkansas and other states and flows between Arkansas and other countries.

6 IRS, SOI Tax Stats: Migration Data, 2015–2016.

How does Arkansas's migration compare to surrounding states?

High-performing, high-wage economic sectors can attract migrants to a state even if red tape, taxes, and housing costs are relatively high.[7] However, in general, states with low taxes, relatively few regulations, and low housing costs have attracted the most migrants on net in recent years.[8]

This pattern seems to hold among Arkansas's neighboring states, with the biggest gainers of migrants being Tennessee and Texas, the two states in our region without an income tax on wages and salaries. From 2015 to 2016, Texas gained over 55,000 residents from migration, and Tennessee gained over 26,000. Recall that Arkansas also had a net gain of residents from migration, but it was only about 1,000 people. Louisiana lost the most: over 10,000 residents from 2015 to 2016. Mississippi lost about 6,000, Missouri lost about 4,800, and Oklahoma lost about 3,800. As a percentage of all residents, the migration numbers are very small: never more than 0.5% in either direction for these states. But whether a state is a net gainer or loser is still important.[9]

Arkansas's migration relationship to these neighboring states fits the overall pattern described here. Looking at the period from 2011 to 2016, Arkansas tends to lose residents to Oklahoma, Tennessee, and Texas in most years and to gain migrants from Missouri, Mississippi, and Louisiana in almost every year.

Are any individuals not captured in the migration data?

Yes. Individuals not required to file tax returns are not captured in the data. Also, individuals who don't file tax returns in consecutive years are not captured in the data.[10] A major missing group is migrants who do not currently have the legal right to work in the United States, but who do so anyway. No economic measurement is perfect, but the data we have are probably good enough since most people do file tax returns.

The IRS improved its calculation method starting with migration from 2011 to 2012.[11] Data from those years forward are not strictly comparable to data from

7 Joel Kotkin and Wendell Cox, "The States Gaining and Losing The Most Migrants—and Money," *New Geography*, September 8, 2016, http://www.newgeography.com/content/005380-the-states-gaining-and-losing-the-most-migrants-and-money.

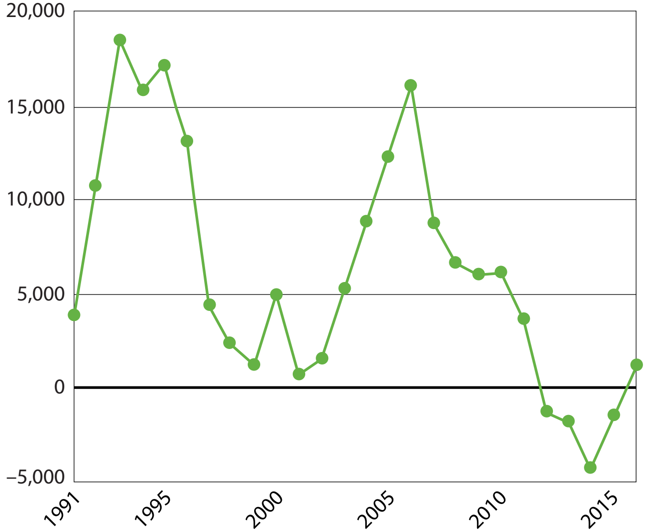
8 Ibid.

9 IRS, SOI Tax Stats: Migration Data, 2015–2016.

10 Pierce, SOI Migration Data.

11 Ibid.

Arkansas's Net Migration, 1991–2016



Source: IRS, SOI Tax Stats: Migration Data, 2015–2016, https://www.irs.gov/statistics/soi-tax-stats-migration-data.

previous years, and the older data are of a lower quality. For example, older data do not include individuals who filed tax returns after September 30 each year.[12] In 2012, about 4% of returns arrived after this date.[13] Newer data do include these returns, which is important because those who file late often have more complex returns and higher incomes. If high-income households are the most responsive to differences in tax rates, the older data might have missed a lot of the people most likely to move.

Even under the improved calculation method, individuals may not be counted if their taxpayer identification numbers (TINs) differ from one year to the next. One way this can happen is if someone switches from a temporary TIN to a permanent Social Security number,[14] which might be the case if an immigrant worker becomes a permanent resident, and it can also happen due to human error.

What are the trends in Arkansas's migration patterns?

From 1993 to 2011, Arkansas had net positive migration (more people moving into the state than leaving) in every year except for 2000, when net migration was nearly zero. During that 18-year period, about 1.17 million people moved into Arkansas from other states, while about 1.04 million moved out of Arkansas. That's a net gain of about 7,500 people per year. But after 2011, the trend reversed: Arkansas lost population to other states in each year from 2012 to 2015—on average, almost 2,200 people per year. The most recent data for 2016 show that the trend might be reversing again: Arkansas attracted about 1,200 people on net from other states.[15]

12 Ibid.

13 Ibid.

14 Ibid.

15 IRS, SOI Tax Stats: Migration Data, 2015–2016.

Educational Attainment

How does Arkansas rank for educational attainment?

As of 2016, 86% of Arkansans age 25 or older had at least a high school diploma or high school equivalency certificate, compared with 87.5% of all Americans. While Arkansas is close to the national average, that still puts us in 42nd place among all 50 states and the District of Columbia. Looking again at Arkansans who are 25 or older, in 2016, just 22.4% had a four-year college degree, compared with 31.3% of all Americans, putting Arkansas in 49th place.[1]

One common standardized test in the United States is the National Assessment of Education Progress (NAEP). The NAEP is administered nationwide and tests students at the fourth and eighth grade levels in many subjects, most commonly mathematics and reading. Not only do states get raw scores, but the NAEP also indicates the percentage of students performing at various levels, such as "basic" or "proficient."

The latest results available are from 2017. For eighth grade students in Arkansas, only 25% are considered proficient in mathematics while only 29% are considered proficient in reading. Nationwide, the results are not much better, with 34% of eighth graders proficient in mathematics and 36% proficient in reading (Massachusetts has the best results, with about half of students proficient in each subject).

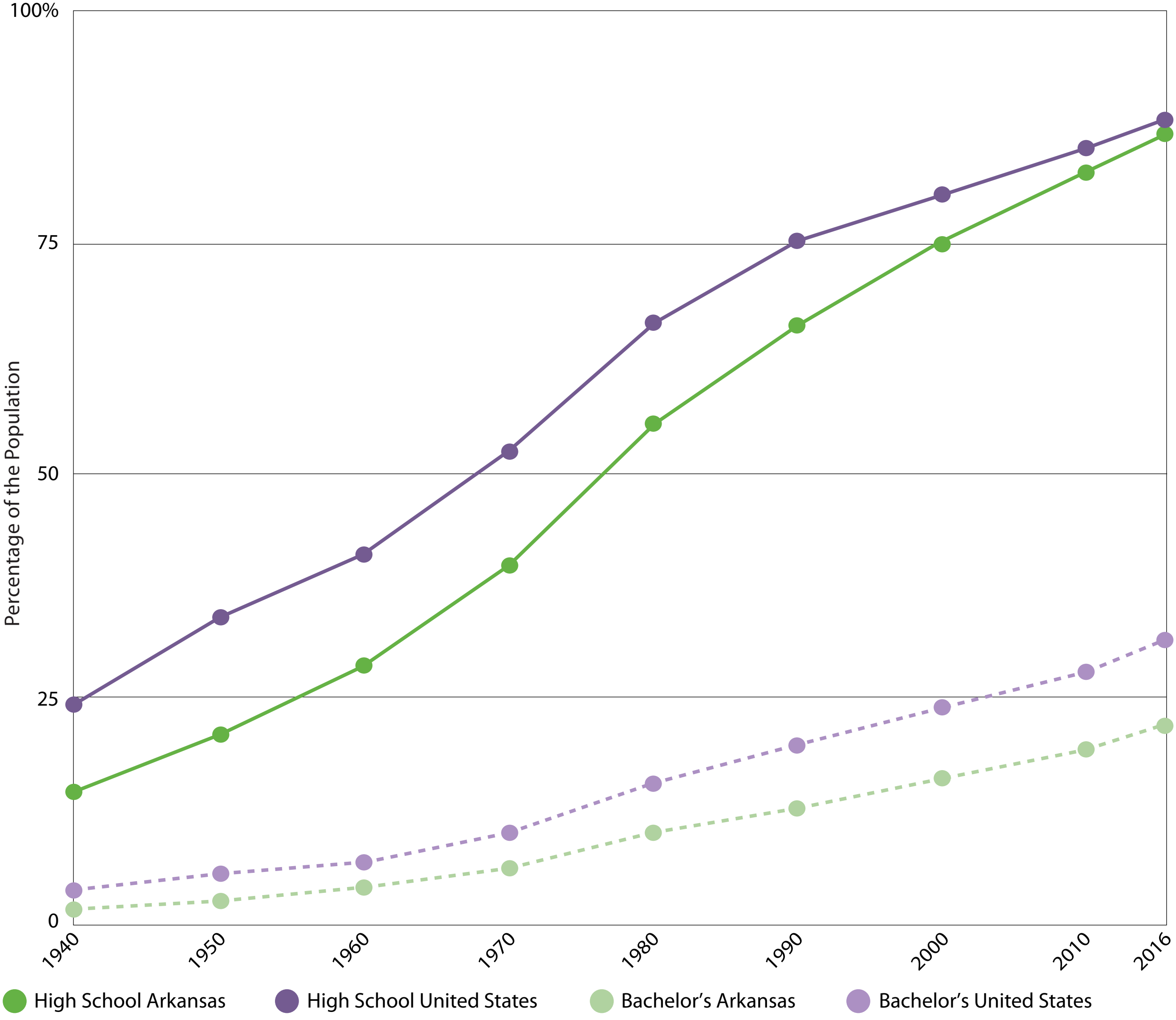
With those scores, Arkansas students rank 44th in mathematics and 41st in reading nationally. That's the bad news. The good news is that Arkansas, like most states, has seen dramatic improvements in recent years: in 1990, just 9% of Arkansas eighth graders were proficient in mathematics. In 1998, only 23% of Arkansas eighth graders were proficient in reading.[2] While these are big improvements, we still need to make major progress.[3]

1 US Census Bureau, American Community Survey, 2016. Rankings include the District of Columbia, and are thus out of 51.

2 How do we know that the NAEP test hasn't been made easier over the years so the results are less dismal? Because the test is designed (in part) to be used for comparisons over time. If the test creators made it easier or harder every year, they would be defeating one of the test's key purposes. See National Center for Education Statistics (NCES), "Interpreting NAEP Long-Term Trend Results," last updated August 22, 2013, https://nces.ed.gov/nationsreportcard/ltt/interpreting_results.aspx.

3 NAEP data include Washington, DC, in the rankings, and the earlier year comparisons (1990 and 1998) were the earliest available for those subjects. See the Nation's Report Card, NAEP Mathematics Report Card, https://www.nationsreportcard.gov/math_2017/, and NAEP Reading Report Card, https://www.nationsreportcard.gov/reading_2017/.

Educational Attainment, 1940–2016



Source: Tables 5a and 6a, https://www.census.gov/data/tables/2000/dec/phc-t-41.html.

Another set of standardized tests to examine are college entrance exams, such as the ACT and SAT. Using statistics from these exams can be challenging, since not all students graduating from high school take them. Also, the preference for which exam to take (ACT or SAT) varies by region and by state. The tests also don't account for high school dropouts. But for Arkansas we can use the ACT data as a reliable indicator of high school graduates' skills since about 96% of graduates take that test (only about 3% of Arkansas graduates take the SAT).[4]

For Arkansas high school graduates, the mean composite ACT score in 2016 was 20.2 out of a possible 36 points. This score compares favorably to the national average of 20.8 among high school graduates, about 59% of whom take the ACT. Comparing Arkansas to other states is challenging because of the variations in exam preference, but in 18 states, 100% of high school graduates take the ACT, including all of Arkansas's neighboring states except Texas and Oklahoma. (Fewer than half take it in Texas, and 82% take it in Oklahoma.) Examining this group of 19 states (the states where 100% take the test, plus Arkansas), Arkansas ranks above the middle of the pack at eighth place.

4 NCES, Table 226.60, Average ACT Scores and Percentage of Graduates Taking the ACT, by State: 2012 and 2016, *Digest of Education Statistics*, 2016, https://nces.ed.gov/programs/digest/d16/tables/dt16_226.60.asp?current=yes; NCES, Table 226.40, SAT Mean Scores, Standard Deviations, and Score Ranges for High School Seniors, and Percentage of the Graduating Class Taking the SAT, by State: 2017, *Digest of Education Statistics*, 2017, https://nces.ed.gov/programs/digest/d17/tables/dt17_226.40.asp?current=yes.

How does Arkansas's attainment compare to its neighbors?

Arkansas's neighboring states also generally rank low in educational achievement. While Arkansas is ranked 49th in the number of adults with a college degree, only two of our neighbors are ranked above 40th place: Texas is 32nd and Missouri is 34th. For high school graduation, the picture is not much different, although Texas falls to 50th place.[5] Among our neighboring states that favor the ACT, Arkansas ties with Missouri and ranks higher than Tennessee, Louisiana, and Mississippi.[6]

How is it measured?

Educational attainment measures how many years of education people have completed and what degrees they've earned. Using educational attainment statistics, we can see how many people have earned high school, college, master's, and doctoral degrees. We can also see how many people did not graduate from high school or college and what grade level they completed, as well as how many people have no formal education whatsoever.

5 California is last, in 51st place; for high school graduation rates, the size of the foreign-born population is an important factor.

6 NCES, Table 226.60.

Why is it important to Arkansans?

Education is a key to economic development. More educated workers tend to be more productive, which means they earn more. Thus, education helps to reduce poverty.[7] According to the World Bank, each additional year of schooling increases wages by 10% per year, making education the best investment individuals and governments can make.[8] Science, technology, engineering, and mathematics (STEM) majors earn the highest returns, with an average annual wage of $76,000, while the those in the teaching and serving category have the lowest, with an average annual wage of $46,000. High school graduates earn an average annual wage of $36,000.[9]

A more productive economy improves living standards not just for those workers who earn higher wages, but for everyone who benefits from the products and services they provide and the innovations they develop. And education teaches problem-solving, learning, communication, self-management, and social skills, all of which contribute to success in the labor market and in life.[10]

Are student loans a good way to improve educational attainment in Arkansas?

While many students incur debt for higher education, the rate of return (in terms of higher lifetime wages) on investing that money in a college degree is more than double the return of the stock market and more than five times the return of bonds. In other words, if someone gave you $100,000 to invest, a college degree would be among your best investment options.[11]

7 Harry A. Patrinos, "Why Education Matters for Economic Development," *Education for Global Development* (blog), World Bank, May 17, 2016, http://blogs.worldbank.org/education/why-education-matters-economic-development.

8 Ibid.

9 Anthony P. Carnevale, Ban Cheah, and Andrew R. Hanson, "The Economic Value of College Majors," Georgetown University Center on Education and the Workforce, 2015, https://cew.georgetown.edu/cew-reports/valueofcollegemajors/#full-report.

10 Patrinos, "Why Education Matters."

11 Michael Greenstone and Adam Looney, "Where Is the Best Place to Invest $102,000: In Stocks, Bonds, or a College Degree?" Hamilton Project, June 2011, http://www.hamiltonproject.org/assets/legacy/files/downloads_and_links/06_college_value.pdf.

How do we measure educational quality in Arkansas?

No perfect measure of how much students are learning exists, but standardized test scores are one measure to look at. Comparisons across states are difficult, since they do not necessarily reflect differences in the quality of the teachers and schools themselves, but reflect an interaction between the quality of the teachers and schools, and the advantages or disadvantages students bring into the classroom. For example, students from low-income families (or low-income states) might be expected to perform worse on standardized tests than students from high-income families (or high-income states). Still, the schools could be helping students earn higher scores; we can't judge a snapshot in isolation.

How does Arkansas's education spending compare to its neighboring states?

In total, Arkansas spends about $2,750 per capita (including all Arkansans) on education, ranking Arkansas 32nd in the nation. But that figure might be misleading, since the number of young people varies by state; the mix of private and public schools varies by state; and all spending (K–12, college, and vocational) is placed into one category.

A better measure is government spending in K–12 public schools per student enrolled in those schools. By this measure, Arkansas spends about $10,200 per student, ranking our state 37th. Nationwide, spending averages about $12,100 per student, with highs of $30,300 in the District of Columbia and $23,500 in New York. At the low end, a few states spend less than $7,000 per student.[12]

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12 Data are for 2015, the most recent comparable year across states. Spending data come from the US Census Bureau's Annual Survey of State and Local Government Finances for 2015, https://www.census.gov/govs/local/ (sum of spending on elementary and secondary education for current and capital expenditures). Student enrollment data come from NCES, Table 203.40, Enrollment in Public Elementary and Secondary Schools, by Level, Grade, and State or Jurisdiction: Fall 2015, *Digest of Education Statistics*, 2017, https://nces.ed.gov/programs/digest/d17/tables/dt17_203.40.asp.

How can we improve educational attainment in Arkansas?

Educational attainment in Arkansas could increase by ensuring that more students attain at least a third-grade reading level, improving STEM education, engaging more parents in their children's education, decreasing the dropout rate,[13] and increasing the college graduation rate.[14] Narrowing the achievement gap for economically disadvantaged students and racial and ethnic minority students is another important goal.[15] Arkansans would also benefit if more postsecondary students earned career and technical certificates or associate's degrees.[16]

13 Winthrop Rockefeller Foundation, "Goals for Arkansas," http://www.wrfoundation.org/what-we-do/goals-for-arkansas/increase-educational-attainment/, accessed July 23, 2018.

14 ForwARd Arkansas, "The State of Education in Arkansas, 2015 Full Report," https://forwardarkansas.org/wp-content/uploads/2016/01/ForwardFullReport1-26-15FA.pdf.

15 Dawn Tirado Simpson, "2014 Annual Report," Arkansas Commission on Closing the Academic Achievement Gap, http://www.arkansased.gov/public/userfiles/Policy_and_Special_Projects/GAP_2014/2014_AnnualReport_ClosingTheGap.pdf.

16 "Closing the Gap 2020: A Master Plan for Arkansas Higher Education," https://static.ark.org/eeuploads/adhe/Closing_the_Gap_2020.pdf.

In what areas does Arkansas excel in education?

The University of Arkansas is ranked in the top 2% of research universities in the nation by the Carnegie Foundation for the Advancement of Teaching.[17] It is also the country's 10th-fastest-growing public research university.[18] In the *U.S. News and World Report* Best High Schools rankings, Arkansas has one gold medal high school: Haas Hall Academy, a public charter school in Fayetteville that ranks 50th nationally.[19] Arkansas also has 26 silver-medal schools.[20]

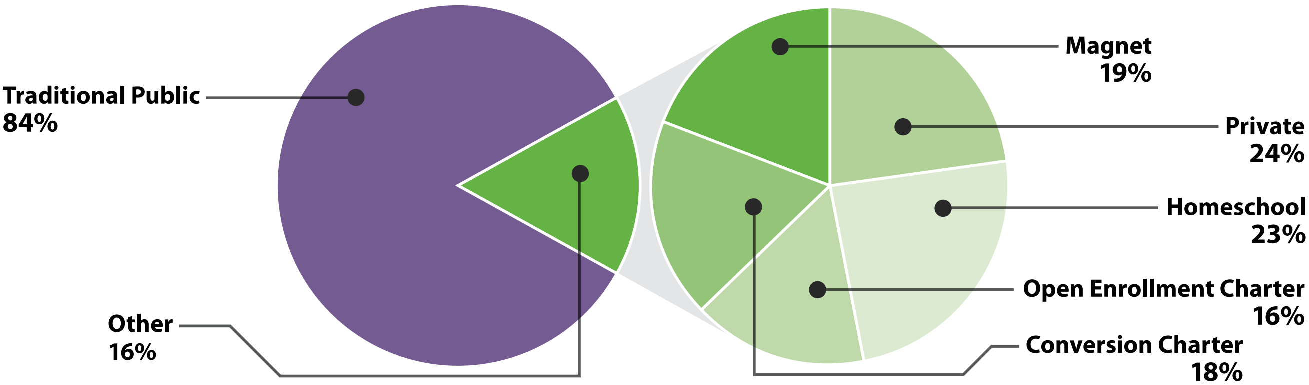
17 University of Arkansas, "By the Numbers," https://www.uark.edu/about/by-the-numbers.php, accessed July 23, 2018.

18 Ibid.

19 *U.S. News and World Report*, "Best High Schools in Arkansas," https://www.usnews.com/education/best-high-schools/arkansas, accessed July 23, 2018.

20 Ibid.

K-12 Enrollment by School Type, 2016–2017



Sources: NCES, Table 205.80, Private Elementary and Secondary Schools, Enrollment, Teachers, and High School Graduates, by State: Selected Years, 2005 through 2015, *Digest of Education Statistics*, 2016, https://nces.ed.gov/programs/digest/d16/tables/dt16_205.80.asp?current=yes. NCES, Table 203.20, Enrollment in Public Elementary and Secondary Schools, by Region, State, and Jurisdiction: Selected Years, Fall 1990 through Fall 2026, *Digest of Education Statistics*, 2016, https://nces.ed.gov/programs/digest/d16/tables/dt16_203.20.asp?current=yes.

What percentage of Arkansas schools are public vs. private?

The vast majority of Arkansas students in grades K–12 attend public schools. In 2015, only about 38,000 students attended private schools versus about 491,600 in public schools. In other words, only about 7% of primary and secondary students in Arkansas were enrolled in private schools.[21]

Arkansas also has a number of public charter schools, which are publicly funded but have more autonomy to determine standards for what to teach and whom to hire as teachers. The number of students attending public charter schools in Arkansas has grown in recent years. With 28,200 students attending public charter schools, enrollment rivals that of private schools.[22] Another similarly sized group is those educated at home: about 19,000 are homeschooled.[23]

21 NCES, Table 205.80, Private Elementary and Secondary Schools, Enrollment, Teachers, and High School Graduates, by State: Selected Years, 2005 through 2015, *Digest of Education Statistics*, 2016, https://nces.ed.gov/programs/digest/d16/tables/dt16_205.80.asp?current=yes; NCES, Table 203.20, Enrollment in Public Elementary and Secondary Schools, by Region, State, and Jurisdiction: Selected Years, Fall 1990 through Fall 2026, *Digest of Education Statistics*, 2016, https://nces.ed.gov/programs/digest/d16/tables/dt16_203.20.asp?current=yes.

22 Rebecca David and Kevin Hesla, "Estimated Public Charter School Enrollment 2017–18," National Alliance for Public Charter Schools, https://www.publiccharters.org/our-work/publications/estimated-public-charter-school-enrollment-2017-18.

23 Laura Monteverdi, "Home Schooling Popularity Soaring in Arkansas," KTHV Little Rock, February 27, 2017, https://www.thv11.com/article/news/local/home-schooling-popularity-soaring-in-arkansas/415443502.

How are public schools funded in Arkansas?

Primary and secondary schools in Arkansas are primarily operated and funded at the local level, but the state also plays an important role. Arkansas's constitution requires all school districts to impose a minimum property tax of 25 mills (the term for property tax rates) for funding schools. The state also provides foundation funding, a minimum amount of funding per student, set at $6,781 per student for the 2018–19 school year.

If the school district's mandatory 25 mills tax does not add up to $6,781 per student, the state gives the district the difference (only eight school districts generated that much revenue from the tax alone in 2017–18). If they choose, school districts can impose additional property taxes, and that revenue stays in the district. This process ensures a minimum level of funding for each school district, regardless of how poor the district is. However, it does not guarantee that every student will get the same quality of education.[24]

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[24] State of Arkansas, Bureau of Legislative Research, "Foundation Funding and the Matrix," Bureau Brief, June 2017, http://www.arkleg.state.ar.us/education/K12/AdequacyReports/2018/2017-06-20/05-HighlightsFoundationFundingBLR01.pdf; Arkansas Department of Education, Fiscal and Administrative Services Division, "Arkansas School Finance Manual: 2017–2018," http://www.arkansased.gov/public/userfiles/Fiscal_and_Admin_Services/Publication%20and%20reports/Arkansas_School_Finance_Manual/Arkansas_School_Finance_Manual_FY18_.pdf.

Government Revenue and Spending

What are they?

Government revenue is the money the state government receives from all the taxes Arkansans pay, voluntary fees Arkansans pay (such as college tuition), and transfers from the federal government. The major tax types are personal and corporate income taxes, general sales taxes, and property taxes; these make up 82% of state and local government tax revenue in Arkansas, or 58% of all revenue when we include revenue other than taxes. Minor tax types include cigarette and tobacco taxes, alcohol taxes, gas and transportation taxes, motor vehicle taxes, hotel and tourism taxes, and cell phone and wireless taxes; these make up 18% of state and local government tax revenue in Arkansas.[1]

Government spending is all the money the state spends on goods and services for constituents, on the salaries of government workers, and on transfer payments to individuals and families in the state. In Arkansas, the largest areas of government spending, ordered from highest to lowest, are these seven:[2]

- education (about 61% on K–12, 31% on higher education, and 8% on other education)
- public welfare (mostly Medicaid)
- highways and roads
- public safety (including police, fire protection, and prisons)
- public employee retirement plans
- health and hospitals (other than Medicaid)
- general government administration

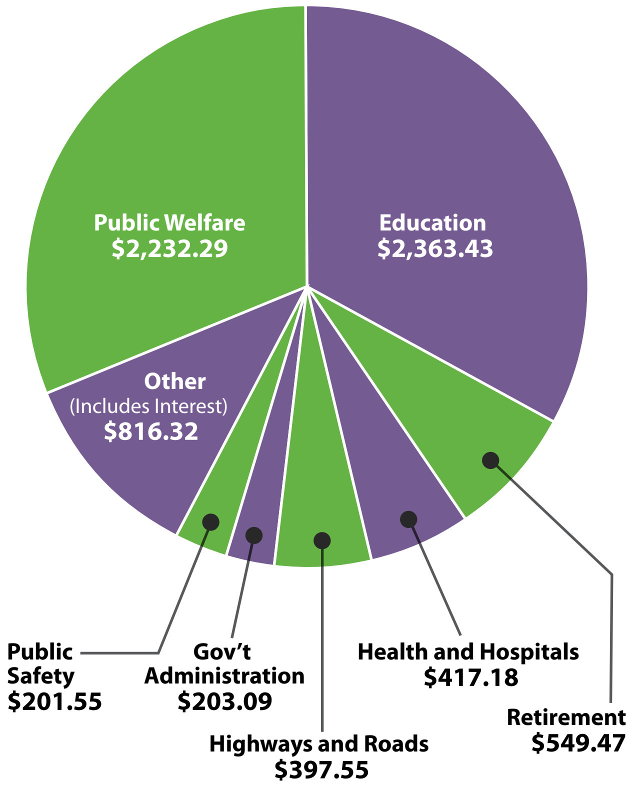
Government spending in Arkansas is sensitive to tax-system changes because of the state's Revenue Stabilization Act of 1945. The act prevents budget deficits by ensuring that programs are not funded if there isn't enough revenue to pay for them. The legislature ranks the spending programs into priority groups, and those that the legislature doesn't prioritize are only partially funded or are not funded at all in years when revenue falls below projections.

1 Data are for 2015 and come from the US Census Bureau's State and Local Government Finance survey, https://www.census.gov/govs/local/.

2 Ibid.

Arkansas Per Capita State Spending, 2015

(In millions of dollars)



Source: US Census Bureau, Annual Surveys of State and Local Government Finances, 2015.

Programs are ranked through a bill passed by the legislature that amends the 1945 act.[3]

Government revenue funds programs that private spending only partially covers, such as education, roads and highways, and health care, or does not cover at all, such as police and fire departments, parks, and prisons. When there isn't enough revenue to cover spending, key services may be cut.

For example, the 2008–09 fiscal year saw a drop-off in state revenue because of the Great Recession. That year, the legislature put spending into three categories: A, A1, and B. By the end of the year, categories A and A1 were fully funded, but the remaining revenue could fund only 63.6% of category B. As a result, tens of millions of dollars were cut from human services, higher education, the state general fund, and county aid, and a few million dollars were cut from various K–12 public school funds.[4]

3 Jeremy Horpedahl and Jacob Bundrick, *There's Nothing Natural about the State of Government Spending in Arkansas* (Arlington, VA: Mercatus Center at George Mason University, August 8, 2017), https://www.mercatus.org/publications/government-spending-arkansas.

4 The spending categories were established in Act 1201 of the 2007 session of the Arkansas General Assembly. Revenue data are from the Arkansas Bureau of Legislative Research, "Selected Statistical Financial Data for Arkansas," October 2016, http://www.arkleg.state.ar.us/assembly/2017/Summary%20Budget%20Manuals/2016_B_BOOK.PDF, p. 73.

How does Arkansas's government spending compare to the surrounding states?

Arkansas's state government spending per capita is higher than that of any surrounding state. It's also higher than that of Alabama, Florida, Georgia, North Carolina, South Carolina, and Virginia.[5] But it's higher for a specific reason: Arkansas has a very centralized system of government spending.

About 81% of government spending in Arkansas occurs at the state level. This percentage is the fifth highest in the nation, with the national average about 63%. When you include local government spending, Arkansas ranks more in the middle of the pack among its neighbors: much higher than Texas, Oklahoma, Missouri, and Tennessee, but much lower than Louisiana and Mississippi. In total, state and local government spending equals about 37% of personal income in Arkansas—a higher percentage than 34 other states.[6]

How does Arkansas rank nationally for government revenue and spending?

As described earlier, not all government revenue comes from taxes: in Arkansas, only about half of total government revenue is from taxes. Across the three types of taxes, Arkansas has high sales tax collections, mid-level income tax collections, and low property tax collections compared to other states. And since Arkansas is a relatively low-income state, if we divided these numbers by personal income, Arkansas's taxes would look even higher compared to the rest of the nation.

5 Horpedahl and Bundrick, *There's Nothing Natural about the State of Government Spending in Arkansas*.

6 All numbers in this paragraph are the authors' calculations using US Census Bureau, "Annual Survey of State and Local Government Finances," and US Census Bureau, "American Community Survey," 2015.

According to the Tax Foundation,[7] here's how Arkansas ranks nationally on various categories of government revenue, especially taxes:

- State tax collections per capita, FY 2016: . . . . 13th, at $3,163
- State and local tax collections per capita, FY 2015: . . . . 34th, at $3,868
- State revenue per capita, FY 2015:[8]. . . . . 17th, at $6,507
- State and local revenue per capita, FY 2015: . . . . 36th, at $7,934
- State and local general sales tax collections per capita, FY 2015: . . . . 11th, at $1,433
- State and local individual income tax collections per capita, FY 2015: . . . . 31st, at $895
- State and local property tax collections per capita, FY 2015: . . . . 48th, at $699

According to the US Census Bureau, Arkansas's state and local spending per capita was $7,851 in 2015 and $7,496 in 2017, ranking 15th in the nation in both years.[9]

What information can't we get from per-capita government spending?

How much Arkansas spends per person depends on how many people are eligible to receive a given service, how many eligible people choose to receive that service, and how much it costs to provide that service for each person.[10] For example, not everyone who is eligible for Medicaid uses its benefits, and many Arkansans never set foot in the state's parks. To explain it another way, Arkansas ranks 33rd in per capita spending on K–12 education, but this doesn't necessarily mean Arkansas should be spending as much as first-place Alaska in an attempt to improve education outcomes. Demographic factors such as how many school-age children a state has and how many children attend public schools also affect spending.[11]

7 Tax Foundation, "Facts and Figures: How Does Your State Compare?" Washington, DC: Tax Foundation, 2018, https://files.taxfoundation.org/20180411102900/Facts-Figures-2018-How-Does-Your-State-Compare.pdf.

8 Total tax collections per capita differ from state revenue per capita because states receive significant funds from the federal government.

9 Tax Policy Center, "State and Local Direct General Expenditures, Per Capita 1977 to 2015," https://www.taxpolicycenter.org/statistics/state-and-local-direct-general-expenditures-capita, accessed January 3, 2019.

10 Urban Institute, "What Everyone Should Know about Their State's Budget," January 2017, http://apps.urban.org/features/what-drives-state-spending/.

11 Ibid.

What are the trends in Arkansas's government spending?

From 1991 to 2015, Arkansas's state government spending grew by 110%—and yes, that figure is adjusted for inflation and population growth. Similar states spend an average of $5,763 per capita, while Arkansas spends $7,176: that's 25% more.[12] But it's important to remember that these data are slightly biased by Arkansas's highly centralized system of state finance.

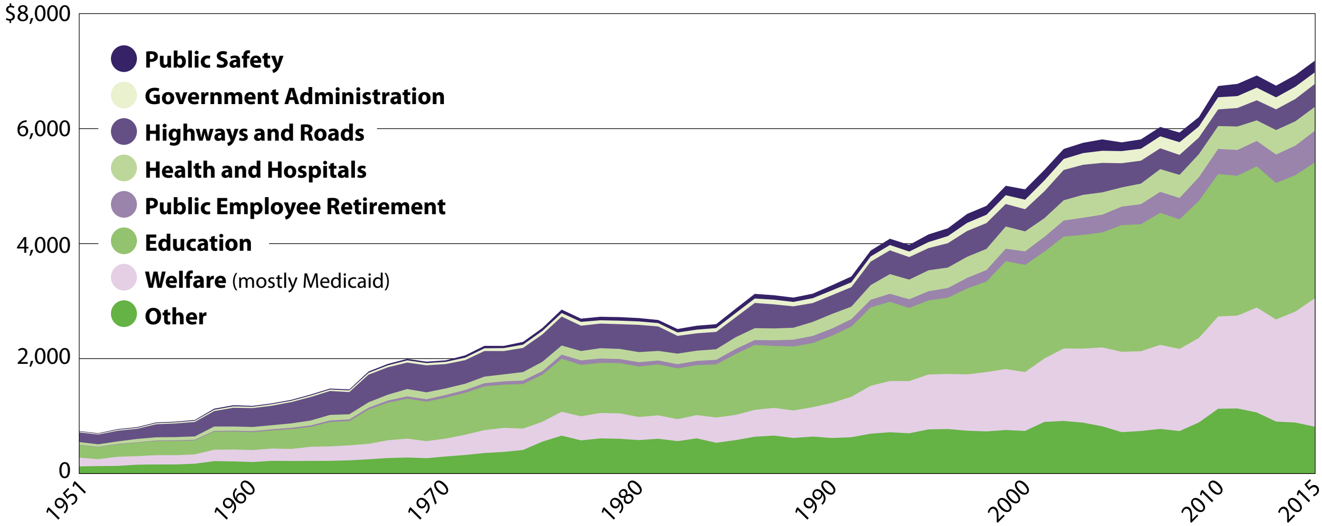
If we go back even further in time, to 1951 (the year for which we have some of the earliest comparable state data), state government spending in Arkansas, adjusted for inflation and population, was only $742 per person. State government spending has increased by 868% since then, even after making the proper adjustments.[13]

We have also considered the effect of federal transfers on Arkansas's spending. Federal transfers are allocations of federal tax dollars to the states to support services such as Medicaid, the Supplemental Nutrition

12 Horpedahl and Bundrick, *There's Nothing Natural about the State of Government Spending in Arkansas*; figures adjusted from 2013 to 2015 dollars.

13 Ibid.

Arkansas State Expenditures Per Capita,1951–2015 (In millions of 2015 dollars)



Source: US Census Bureau, Annual Surveys of State and Local Government Finances, 2015.

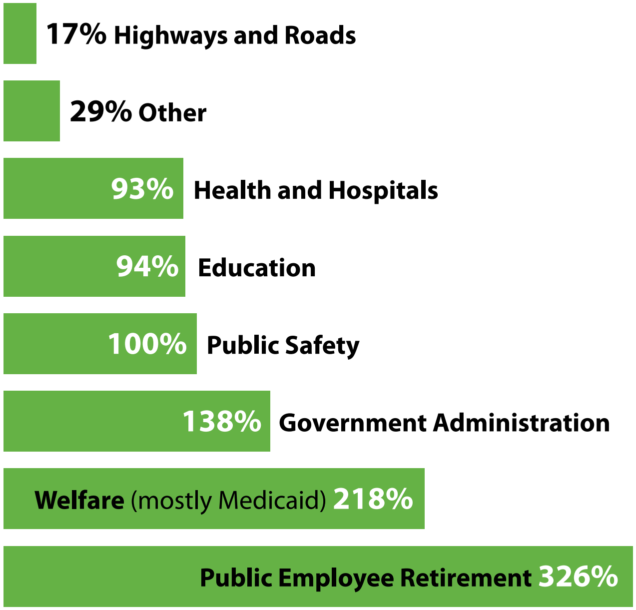
Assistance Program, the Low Income Home Energy Assistance Program, Temporary Assistance for Needy Families, and the Special Supplemental Nutrition Program for Women, Infants, and Children. Arkansas's per capita spending is much higher than that of similar states even after subtracting federal transfers from state government spending.[14]

Doesn't high state spending mean that Arkansans are receiving lots of public goods and services?

Mostly no. Arkansas spends more today to fund nearly the same services as it did in the early 1990s, which suggests that state spending has become less efficient. One area of spending that has grown due to policy changes is healthcare: specifically, access to Medicaid. Spending has increased most significantly on education, in part due to lawsuits from school districts claiming that the state was not living up to its constitutional requirements to fund education (the courts mostly agreed with the school districts).

Percentage Increase in Arkansas State Expenditures Per Capita, 1991–2015

(In 2015 dollars)



Source: US Census Bureau, Annual Surveys of State and Local Government Finances, 2015.

Public pensions and public safety (especially prisons and corrections) have also seen major spending increases at the state level. Public pensions do have a dedicated revenue source from salary contributions, though unfunded liabilities are as much a concern in Arkansas as they are in most states. Finally, spending on public safety has increased dramatically over a period when crime has fallen in Arkansas and across the nation.[15]

14 Horpedahl and Bundrick, *There's Nothing Natural about the State of Government Spending in Arkansas*.

15 Ibid.

Total Nonfarm Payroll Employment

What is it?

Total nonfarm payroll employment is the number of paid US workers in all businesses, excluding those who work for farms, serve in the military, volunteer for nonprofit organizations, and perform unpaid work in their own household. Self-employed, unincorporated individuals are excluded as well.[1]

Nonfarm payroll employment is also referred to as "covered employment," meaning employees that are covered by unemployment insurance, and this is one reason why so many categories of workers are excluded. There are separate estimates of farm employment, and in Arkansas, farm employment (including farm owners) is about 3.4% of total employment.[2]

Total nonfarm payroll employment includes workers in both goods-producing and services-producing sectors. The goods-producing sectors are natural resources and mining, construction, wholesale and retail trade, and manufacturing. The services-producing sectors are trade, transportation, and utilities; warehousing; financial activities; professional and business services; education and health services; leisure and hospitality; other services; and government.

The Employment Situation report from the Bureau of Labor Statistics (BLS) contains data from two government-conducted surveys: an establishment survey of about 149,000 businesses and government agencies representing about one-third of all nonfarm payroll employees, and a household survey of about 60,000 households.[3] The larger establishment survey of businesses generates the data in this section.

State labor market agencies such as the Arkansas Department of Workforce Services,[4] along with the

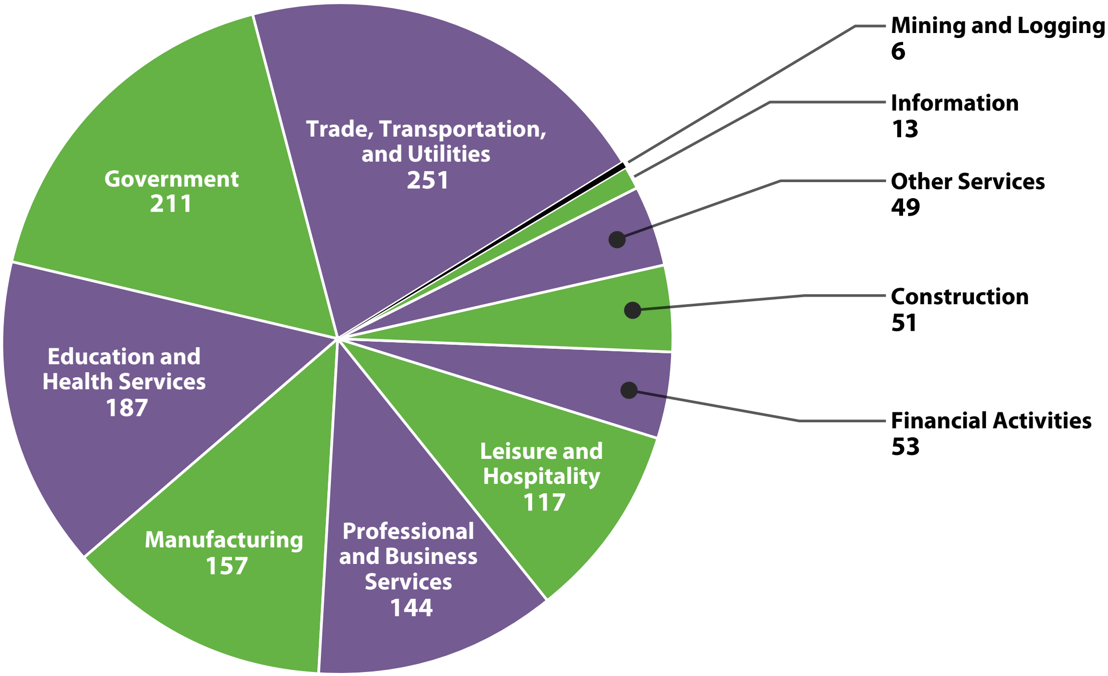
1 See the definition of "Payroll employment (Current Employment Statistics)" at https://www.bls.gov/bls/glossary.htm#P.

2 To locate the regional data cited here, go to Bureau of Economic Analysis, https://www.bea.gov/iTable/iTableHTML.cfm?reqid=70&step=1&isuri=1&acrdn=6, then select "Total Full-Time and Part-Time Employment by Industry (SA25, SA25N)," then select "NAICS (1998 and forward)," "Arkansas," and "2016" to see that farm employment is 54,847 out of 1,632,609 total employment.

3 BLS, Economic News Release, Employment Situation Technical Note, last modified August 3, 2018, https://www.bls.gov/news.release/empsit.tn.htm.

4 Arkansas Department of Workforce Services, dws.arkansas.gov.

Nonfarm Employment Sectors, 2017 (Thousands of workers)



Source: BLS, Economic News Release, Employment Situation Technical Note, last modified August 3, 2018, https://www.bls.gov/news.release/empsit.tn.htm. Data is an annual average using seasonally-adjusted figures.

federal BLS,[5] survey the job market monthly and compile federal and state data for the previous month. On the first Friday of each month, the bureau reports the change in the numbers from the previous month.

The Employment Situation report also includes information about the average workweek, average hourly earnings, and wage growth.[6] It is important because it is timely, covers most of the US economy, and has a large sample size. The report's release tends to affect the US stock market, the value of the dollar, and other financial markets as traders react to the news.

5 US Bureau of Labor Statistics, Current Employment Statistics, https://www.bls.gov/ces/.

6 See, for example, BLS, Economic News Release, Employment Situation Summary, August 3, 2018, https://www.bls.gov/news.release/empsit.nr0.htm.

Why is it important to Arkansans?

Job creation is one of the broadest state-level economic indicators, along with gross domestic product (GDP). When employment is increasing, more people are gaining an income, which results in greater spending. When it's decreasing, more people are losing their incomes, resulting in lower spending. Total nonfarm payroll employment data help economists analyze labor-market and economic conditions.

Looking at these data, along with other factors, helps us know if we are in an economic expansion or an economic contraction (recession).[7] However, in recent recessions, employment has been a lagging rather than leading indicator: it doesn't tend to fall until after other variables, such as GDP, have already been declining for months. Employment also doesn't recover as quickly as the broader economy. Still, nonfarm payroll employment data are important as one of the 10 variables officials look at to decide whether the economy is expanding or contracting and to adjust government policy accordingly.

For example, total nonfarm payroll employment is one indicator of how well the economy is doing and how the Federal Reserve might change its interest rate target to increase employment or curb inflation. When employment is faltering, lowering the target interest rate can help. Individuals and businesses can then borrow at a lower cost. When employment numbers are robust, inflation can result, so the Fed might decide to increase interest rates to slow borrowing and spending.

Also, knowing which sectors are expanding or contracting can tell us which closely related sectors might expand or contract in the near future. The nonfarm payroll report is not a leading indicator for the labor market, but it is a coincident indicator for the overall economy. For example, as firms' labor costs go up, prices can go up.

The total nonfarm payroll employment report also tells us how many jobs were created or lost in specific industries. We can compare Arkansas's employment numbers to those of other states and the United States as a whole to see how well the state and specific

Surrounding States' Total Nonfarm Payroll Employment Increase, May 2017 to May 2018

Arkansas	0.7%
Louisiana	1.0
Missouri	1.1
Mississippi	1.2
United States	1.6
Tennessee	1.8
Oklahoma	1.9
Texas	2.9

Source: Bureau of Labor Statistics, "State and Metro Area Employment, Hours, & Earnings," https://www.bls.gov/sae/.

[7] Federal Reserve Bank of San Francisco, "Why Does the Federal Reserve Consider Nonfarm Payroll Employment to Be an Important Economic Indicator?," June 2004, http://www.frbsf.org/education/publications/doctor-econ/2004/june/nonfarm-jobs-payroll-employment/.

industries are performing. Then we can evaluate which policies might be helping or harming Arkansas residents who want to work.

The report also breaks down job gains and losses by metropolitan statistical area.[8] This information helps us to see how people in different parts of Arkansas are faring.

Why are so many types of workers excluded from nonfarm payroll data?

The nonfarm payroll report primarily covers employment that may fluctuate with the overall economy. Military employment changes primarily based on the need for national defense, not the performance of the economy. Self-employed individuals don't usually lose their jobs during a recession, though their income may certainly decline. Agricultural employment tends to have its own business cycle that is not correlated with the broader economy. So even though only about 80% of the workforce is covered by the survey, it represents most of the workforce that tends to fluctuate throughout the ups and downs of the business cycle.

Why does the government make seasonal adjustments and revisions to the data after they are first published?

Seasonal adjustments make it easier to judge whether an employment change is due to normal annual changes or is an indicator that the economy is moving into or out of a recession. For example, retail stores tend to hire a lot of temporary additional workers during November and December, but these jobs are usually eliminated by January. This is a regular annual fluctuation, which you can see in the "not seasonally adjusted" series of the data, but we don't want to be fooled into thinking the economy is falling into a recession every January.

8 Arkansas Department of Workforce Services, "Arkansas Labor Market: May 2015," http://www.discover.arkansas.gov/Portals/136/Publications/Arkansas%20Labor%20Market/2015/LM_May_2015.pdf, 4–5.

Economists revise the numbers when more complete data become available. The payroll survey is just that: a survey of a sample of employers. The sample can give us good, real-time information on the economy, but the sample is not always completely representative of the economy. There is also a data series called the Quarterly Census of Employment and Wages, which is a complete data set of workers (at least, those covered by unemployment insurance), but it isn't available as frequently as the Establishment Survey. Furthermore, the Census Bureau conducts a survey of all businesses in the United States once every five years, which also can be used to supplement gaps in the survey data.

Why are there two surveys?

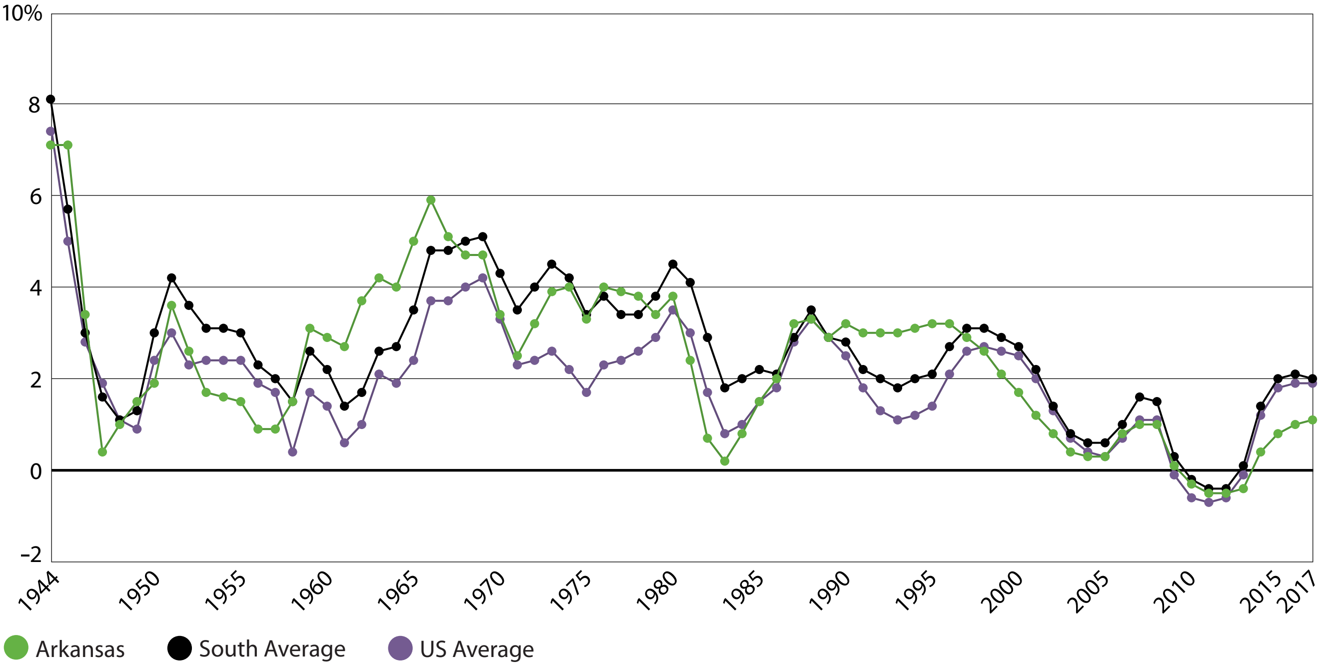
Why do we even use the household survey if the establishment survey is more reliable? The establishment survey's sample size is about seven times larger than the household survey's, so it is considered more reliable. It is also based on firms' actual payroll numbers rather than how individuals respond to a survey (questions can be confusing and yield inaccurate responses, despite attempts to make the survey user-friendly).

But the establishment survey of employers can only tell you how many people are employed. It can't, by definition, tell you how many people aren't working, or how many people are in school, or how many have given up looking for work. The numbers produced by each survey can paint a conflicting picture, due to sampling different parts of the economy. With both surveys, we get up-to-the-minute data, but when they conflict, it might mean we should reserve judgment until more complete data are available.

What is the trend in Arkansas's total nonfarm payroll employment?

Since the end of the Great Recession, Arkansas has seen job growth every year from 2010 to the present. However, it took until August of 2015 for the nonfarm employment number to surpass the previous peak achieved in February 2008 (both at about 1.2 million jobs, seasonally adjusted).

Nonfarm Payroll Employment Growth Rate, 1944–2017 (5-year average)



Source: Authors' calculations using Bureau of Labor Statistics Current Employment Statistics (for US data) and State and Metro Area Employment, Hours, & Earnings (for Arkansas and South region).

From January 2010, the low point of employment after the Great Recession, to January 2018, Arkansas added about 88,000 jobs—a growth rate of about 7.8% (these data are not seasonally adjusted, since we are comparing January of one year with January of another year). However, over this same period from 2010 to 2018, total employment across the country grew at a rate of 13.8%, much faster than Arkansas. If we just look at a recent period, such as May 2017 to May 2018, Arkansas nonfarm jobs grew by 0.7%, and nationally, jobs grew by 1.6%—over twice as fast as Arkansas. Arkansas also had the slowest growth among its neighbors over the past year.

Gross Domestic Product

What is it?

Gross domestic product (GDP) by state, also called gross state product (GSP), measures the output of a state's economy, typically over one year. It is the state counterpart to US GDP and is considered the broadest measure of economic activity. GDP by state measures the sum of value added from all finished industries in a state. In other words, for all the goods and services produced in a state, GSP measures how much of the products' final value was created in that state.

The US Bureau of Economic Analysis (BEA) compiles GDP by state and within states by various sectors of the economy. Some examples of the BEA's 21 sectors are construction, durable goods manufacturing, retail trade, government, federal military, and health care and social assistance.[1]

The private industry sectors that contribute the most to Arkansas's GDP are:

- finance, insurance, real estate, rental, and leasing;
- manufacturing; and
- professional and business services.[2]

The government sector is also large, encompassing all levels of government, including the military; it would be the third largest sector if ranked as a private industry.[3]

Arkansas's largest industries largely mirror the nation's largest industries:

- finance, insurance, real estate, rental, and leasing;
- government;
- professional and business services; and
- manufacturing.[4]

Arkansas's largest industries haven't changed much since 1997,[5] except that professional and business services has moved up in the ranking, replacing retail trade.

1 US Bureau of Economic Analysis, Industry List C. RIMS II 21 Row Industry Codes, https://www.bea.gov/regional/rims/rimsii/download/21IndustryListC.pdf.

2 To view the data we used, start at https://www.bea.gov/iTable/iTableHtml.cfm?reqid=70&step=1&isuri=1&acrdn=1, select "Annual Gross Domestic Product by State," select "GDP in Current Dollars," select "NAICS," select "All Industries," select "Arkansas" and "Levels," then select 2016.

3 Ibid.

4 Ibid., but search for United States instead of Arkansas.

5 Before 1997, the government used a slightly different industry classification system, so the data aren't strictly comparable.

Why is GDP by state important to Arkansas?

GDP by state shows how a state's economy is evolving over time. It also lets us compare one state's economy with other states' economies, though comparisons make more sense after correcting for population differences. Private sector GDP is also a rough measurement of the total potential tax base from which the government can draw its revenue.

Arkansas and Bordering States' GDP by State, 2016 (In billions of dollars)

Texas	$1,616.8
Tennessee	328.8
Missouri	300.9
Louisiana	235.1
Oklahoma	182.9
Arkansas	120.7
Mississippi	107.7

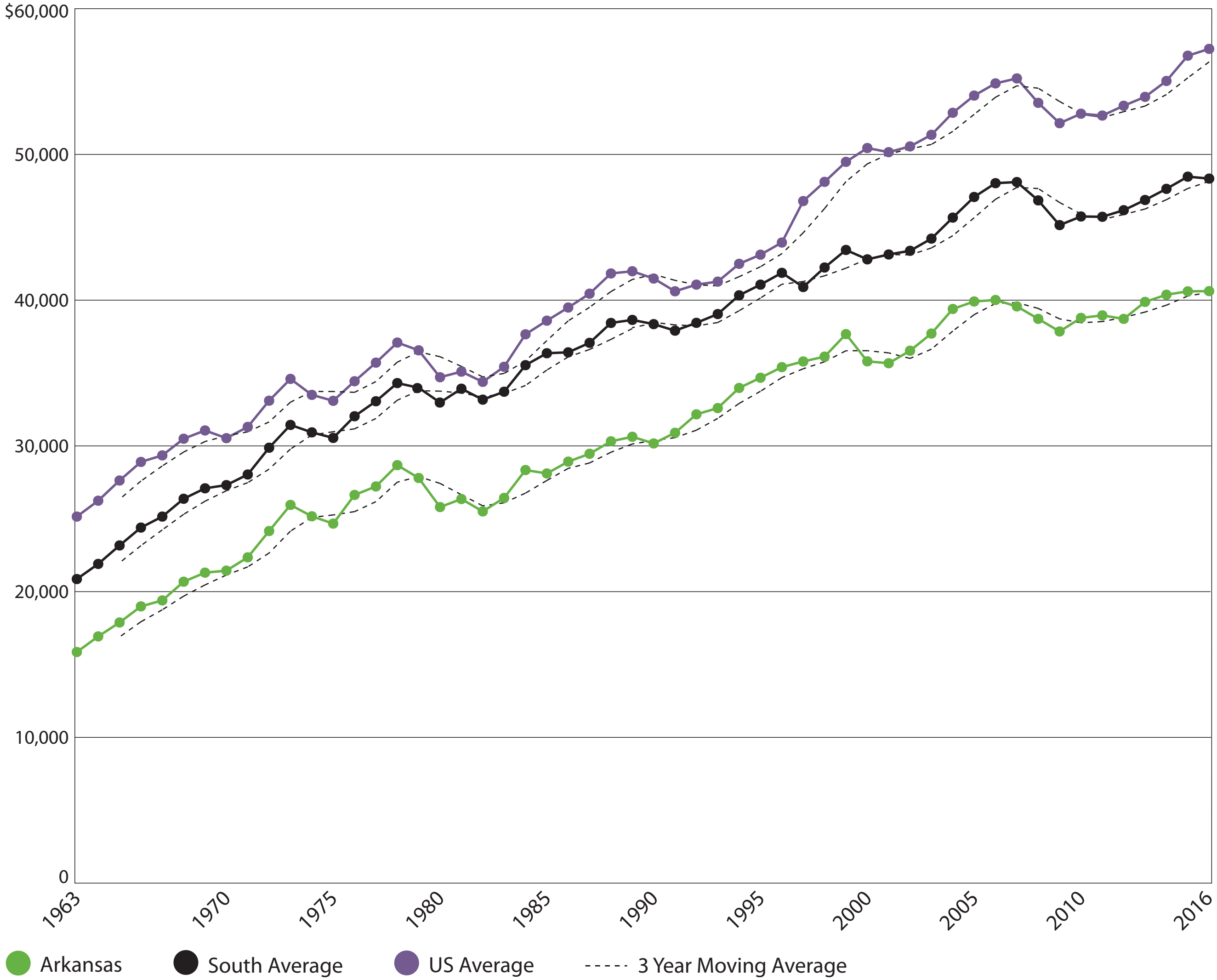
Source: Bureau of Economic Analysis, "Gross domestic product (GDP) by state."

What about population differences across states?

Without adjusting for differences in population, GDP does not allow us to make meaningful comparisons across states. For example, Texas's GDP is much higher than surrounding states', but Texas is also the second largest US state by population, so we would expect its GDP to be much higher.

When we look at GDP on a per person basis, we can get another estimate of average income (slightly different from the personal income discussed in the earlier "Income" section). Using this measure, we see that the average Arkansan has about 71% of the income of the average American. In 1963, Arkansas per capita GDP was only about 63% of the national average, so the gap has closed, although Arkansas was over 80% of the national average in the early 1990s. The gap had been closed to a much larger degree. Arkansas also trails the average for the US South region, which almost equaled the US average in the early 1980s and early 1990s, but today is about 84.5% of the national average.

Real GDP Per Capita, 1963–2016



Source: BEA, "Gross Domestic Product (GDP) by State."

Are there parts of the economy that GDP does not measure?

GDP does not include an estimate of the underground economy (legal, but untaxed or "under the table" transactions) or household production. These two areas are potentially quite large, though they can only be estimated since there is no record of the transactions in the underground economy and no money changes hands in household production (for example, when a family cooks dinner rather than paying a restaurant to cook for them). Rough estimates at the national level for the United States are that about 10% of the total economy is underground,[6] and about 20% of the economy is household production.[7] These numbers can vary across states and across time (such as during recessions).

Is higher GDP always a good sign?

Some forms of production included in GDP may not be desirable or may be signs of societal problems. For example, in a state with high crime rates, people will spend more on locks, guns, and security systems. While people do benefit from these goods, the state's GDP numbers will not be strictly comparable to those of a neighboring state with lower crime rates. Similarly, one state may spend considerable resources cleaning up environmental pollution, contributing to GDP, whereas another state may simply have less pollution to begin with and have a lower GDP as a result.

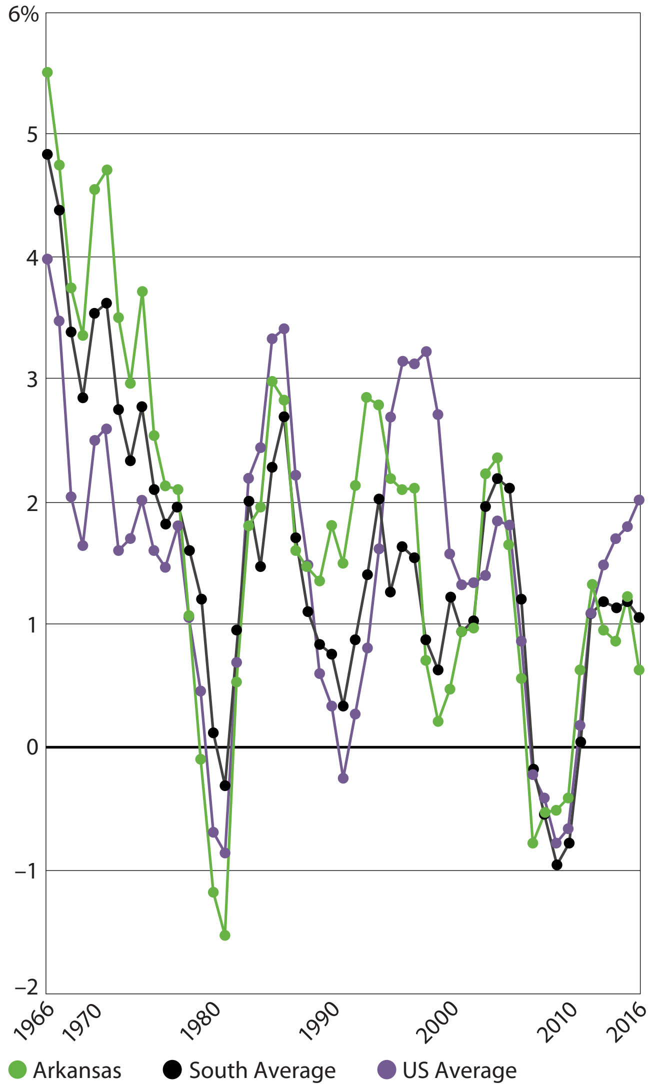
6 See table 4 (p. 11) in Friedrich Schneider and Dominik Enste, "Shadow Economies around the World: Size, Causes, and Consequences," IMF working paper WP/00/26, February 2000, https://www.imf.org/external/pubs/ft/wp/2000/wp0026.pdf, which has estimates of 6.7% to 13.9% for the United States.

7 See estimates in Benjamin Bridgman et al., "Accounting for Household Production in the National Accounts, 1965–2010," *Survey of Current Business*, May 2012, https://www.bea.gov/scb/pdf/2012/05%20May/0512_household.pdf, which suggest that including household production raises GDP by about 26% (implying that it would be 20% of the total economy).

Does GDP include purchases by businesses?

By design, GDP by state does not measure purchases of intermediate goods. Intermediate goods are sold from one business to another in the production process rather than to final consumers. These goods are subtracted from total GDP to prevent double counting, which would occur if they were counted both when a business purchased them and again when they were sold to a consumer as part of a finished product.

Annual GDP Growth Rate, 1966–2016



Source: BEA, "Gross Domestic Product (GDP) by State."

What is the trend in Arkansas's annual GDP?

Arkansas's annual GDP has increased in most years over the past 20 years, with the exceptions of 2000, 2007, 2008, 2009, and 2012 (all in inflation adjusted terms).[8] It has increased by about 34% over the last 20 years, from $90.3 billion in 1997 to $121.4 billion in 2016 (all stated in inflation-adjusted 2016 dollars). To put that 34% number in context, it's also useful to note that Arkansas's population grew by about 15% over that period,[9] and US GDP grew by about 45%, while US population grew by 18.5%.[10] In per person terms, Arkansas grew more slowly than the United States as a whole.

Arkansas's GDP growth rate is also more volatile in some years than the US or the South region. Peaks in GDP growth in the 1960s and 1970s were much higher, but the downside was also much lower, especially in the early 1980s. Since then, Arkansas's GDP growth has been more stable, but in recent years our growth rate has been consistently below the national average.

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8 To view the data we used, go to www.bea.gov, select the "Interactive Data" tab, select "GDP and Personal Income," then select "Begin Using the Data." Select "Annual Gross Domestic Product by State," select "GDP in Current Dollars," select "NAICS (1997 forward)," select "All Industries," select "Arkansas" and "Levels," and select "All Years." Data adjusted from current dollars to 2016 dollars by the author.

9 For Arkansas's population in 1997, see "Time Series of Arkansas Intercensal Population Estimates by County: April 1, 1990 to April 1, 2000," https://www2.census.gov/programs-surveys/popest/tables/1990-2000/intercensal/st-co/co-est2001-12-05.pdf; for US population in 1997, see "Monthly Estimates of the United States Population: April 1, 1980 to July 1, 1999, with Short-Term Projections to November 1, 2000," https://www2.census.gov/programs-surveys/popest/tables/1990-2000/national/totals/nat-total.txt. For Arkansas and US population in 2016, see "Table 1. Annual Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico: April 1, 2010 to July 1, 2017," https://www2.census.gov/programs-surveys/popest/tables/2010-2017/state/totals/nst-est2017-01.xlsx. We use July population data when multiple months are available.

10 Ibid. Search also for United States in addition to Arkansas.

Unemployment and Labor Force Participation

What is the labor force?

The labor force consists of everyone who is willing and able to work. It includes both employed and unemployed individuals.[1] It does not include those who are younger than 16 or who are institutionalized. Institutionalized people live in jails, prisons, hospitals, dormitories, military installations, and religious institutions.[2] And the civilian labor force does not include those who are in the military.[3]

The labor force participation rate tells us how many working-age individuals have a job or are looking for one.[4] It is calculated as the labor force divided by the civilian noninstitutional population.[5]

The unemployment rate is calculated as the number of unemployed people divided by the labor force.[6] To be considered unemployed, an individual must have actively looked for work in the last four weeks and be currently available for work. People who have been laid off temporarily are considered unemployed even though they expect to be called back to their jobs.[7]

Total unemployment counts the number of people who have lost their jobs or quit their jobs, whose temporary jobs have ended, who are looking for their first job, or who are returning to the labor force after an extended absence.[8]

Total employment counts the number of people who are doing any work for pay or profit, whether full time, part time, or temporary and whether they work for someone else or are self-employed. Employed individuals include those who are on vacation, sick, experiencing child care problems, on maternity or paternity leave, on personal leave, involved in a labor dispute such as a strike, or unable to work due to bad

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1 BLS, "Labor Force," Labor Force Characteristics, last updated March 26, 2018, https://www.bls.gov/cps/lfcharacteristics.htm#laborforce.

2 OECD, "Institutional Population," Glossary of Statistical Terms, https://stats.oecd.org/glossary/detail.asp?ID=1375.

3 Investopedia, "Civilian Labor Force," http://www.investopedia.com/terms/c/civilian-labor-force.asp, accessed October 10, 2017.

4 *Washington Post*, "Jobs Report Shows Effects of the Incredible Shrinking US Labor Force," May 4, 2012, https://www.washingtonpost.com/business/economy/jobs-report-shows-effects-of-the-incredible-shrinking-us-labor-force/2012/05/04/gIQAQdBF2T_story.html?utm_term=.dca9bbfe4e02.

5 BLS, "Labor force."

6 BLS, "Unemployment," Labor Force Characteristics, last updated March 26, 2018, https://www.bls.gov/cps/lfcharacteristics.htm#unemp.

7 Ibid.

8 BLS, "How the Government Measures Unemployment," last updated October 8, 2015, https://www.bls.gov/cps/cps_htgm.htm.

weather, regardless of whether they are paid for that time off. People who work at least 15 hours a week for a business or farm operated by a family member are also counted as employed even if they are unpaid.[9] An alternative way the US Department of Labor's Bureau of Labor Statistics (BLS) counts the number of employed individuals is by surveying businesses, rather than households. All other labor force data come from surveys of households.

Unfortunately, we don't have a way to measure how many people are underemployed: working below their skill level or working fewer hours than they'd like. If you have a master's degree in journalism but you're working as a barista, you're considered underemployed. You're also considered underemployed if you want to work full-time for a newspaper but instead you're freelancing part-time.

The US Bureau of Labor Statistics says it is too challenging to develop objective criteria to determine how many people are underemployed: even if these people could be identified, it would be hard to measure the economic loss from underemployment.

9 Ibid.

How does Arkansas's labor market rank nationally?

Arkansas's 3.7% unemployment rate in 2017 is below the national average of 4.4%, and Arkansas had the 16th lowest unemployment rate among the 50 states—a positive sign for the state's labor market. However, Arkansas's labor force participation rate and employment-population ratio are also below the national average, which is a negative sign for our labor market. Only 58.2% of adults in Arkansas were in the labor force in 2017, and only 56.1% of them were employed. Nationally, the comparable figures were 62.8% and 60.1% in 2017. Arkansas had the fifth lowest labor force participation rate and the sixth lowest employment-population ratio in the nation in 2017.[10]

How can Arkansas rank well on one measure, but poorly on other measures of the labor market? Here's one way to think about it: Arkansas doesn't have as many of its adults in the labor force as other states, but of those that are in the labor force, most are able to find jobs. To know if this scenario is an overall good or bad indicator for Arkansas's labor market performance, we would need to know precisely why so many Arkansans aren't in the labor force. If it is

10 BLS, "Civilian Noninstitutional Population and Associated Rate and Ratio Measures for Model-Based Areas," last updated March 12, 2018, https://www.bls.gov/lau/rdscnp16.htm.

due more to personal preference (such as a preference to stay at home with children), it may not be a worrisome outcome.

If, instead, many adults are staying out of the labor force because they don't think they could find a job, this statistic may suggest an underlying problem. We call these people discouraged workers. They are people who want to work and are available to work, and who have looked for a job in the last 12 months, but who have given up looking over the last 4 weeks out of frustration.[11] The BLS doesn't count discouraged workers as part of the labor force.[12] But BLS data show that Arkansas only has about 3,800 discouraged workers, meaning that including them as unemployed would only increase the unemployment rate by 0.2%.[13]

How does Arkansas's labor force compare to surrounding states?

In 2017, Arkansas had the lowest unemployment rate among its neighboring states (tied with Tennessee at 3.7%). But Arkansas also had the second lowest labor force participation rate in 2017 among its neighboring states (after Mississippi), at 58.2%. As discussed in the previous section, we face a challenge in interpreting whether these figures are a good or bad sign for the Arkansas labor market. While a relatively low percentage of the population is actively participating in the labor force, most people who do participate are able to find a job.

Does a decline in Arkansas's unemployment rate mean that things are improving?

Not always. The unemployment rate can decline not just when people are getting jobs, but also when the size of the labor force shrinks.[14] A declining unemployment rate that's based at least in part on a shrinking labor force is not necessarily a good thing, because when the number of people actively seeking work declines, the unemployment rate can go down even though there aren't actually fewer unemployed workers. This can happen when people get discouraged and stop looking for work or are forced into early retirement.

11 BLS, "Discouraged Worker," Labor Force Characteristics, last modified March 26, 2018, https://www.bls.gov/cps/lfcharacteristics.htm#discouraged.

12 BLS, "Not in the Labor Force," Labor Force Characteristics, last modified March 26, 2018, https://www.bls.gov/cps/lfcharacteristics.htm#nlf.

13 BLS, "Alternative Measures of Labor Underutilization for States, 2017 Annual Averages," https://www.bls.gov/lau/stalt.htm.

14 Michael Pakko, "Labor Force Participation," May 22, 2012, https://www.arkansaseconomist.com/?p=3231.

People who get discouraged might also decide to go back to school or stay in school longer. For example, some students who graduated from college during the Great Recession pursued graduate degrees instead of entering the workforce, hoping that the economy would be much better by the time they earned their advanced degrees.

By contrast, a declining unemployment rate that occurs even as the labor force is growing is a good thing. It means the labor market is offering enough jobs to absorb the additional workers.[15]

The labor force could also shrink because people are retiring on schedule, as many baby boomers currently are.

What happens when people drop out of the labor force?

The longer people are out of work, the harder it becomes for them to get a job because they lose motivation, their skills erode, and they lose work contacts.[16] These people become unemployed long-term (more than 27 weeks, by the government's definition)[17] or permanently, which can strain state government resources. For example, people who retire early because they can't find a job might not have enough retirement savings, meaning they need to rely more on public assistance for food, housing, and health care.

How do seasonal changes affect the labor force?

The economy has regular hiring and layoff patterns based on seasons and weather. For example, businesses hire more workers during the Christmas shopping rush and the summer vacation season. These jobs are often temporary and result in layoffs when the season ends. The same is true for farm jobs, which are more plentiful during harvest season.

When we look at month-to-month changes in employment, it's hard to tell whether the economy has fundamentally changed or the change is merely seasonal. That's why the BLS uses a statistical technique to generate seasonally adjusted unemployment rates.[18] This allows us to look at month-to-month changes and see if the unemployment situation is getting better or worse, as opposed to observing regular seasonal fluctuations.

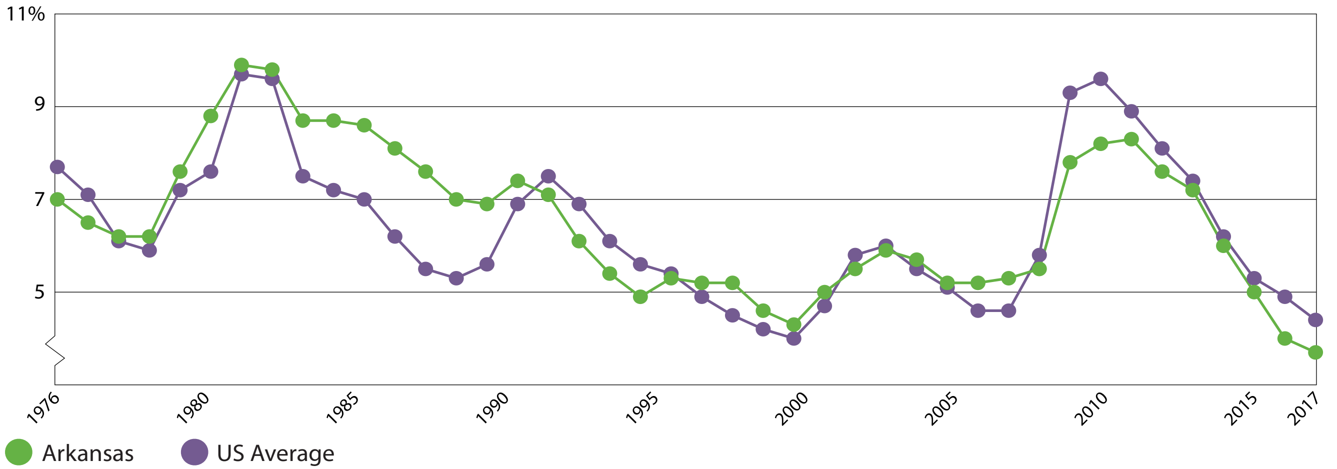
15 Ibid.

16 *Washington Post*, "Jobs Report."

17 BLS, "An Analysis of Long-Term Unemployment," July 2016, https://www.bls.gov/opub/mlr/2016/article/an-analysis-of-long-term-unemployment.htm.

18 BLS, "Labor Force Statistics from the Current Population Survey," last modified October 8, 2015, https://www.bls.gov/cps/faq.htm.

Unemployment Rate and Labor Force (CPS), 1976–2017



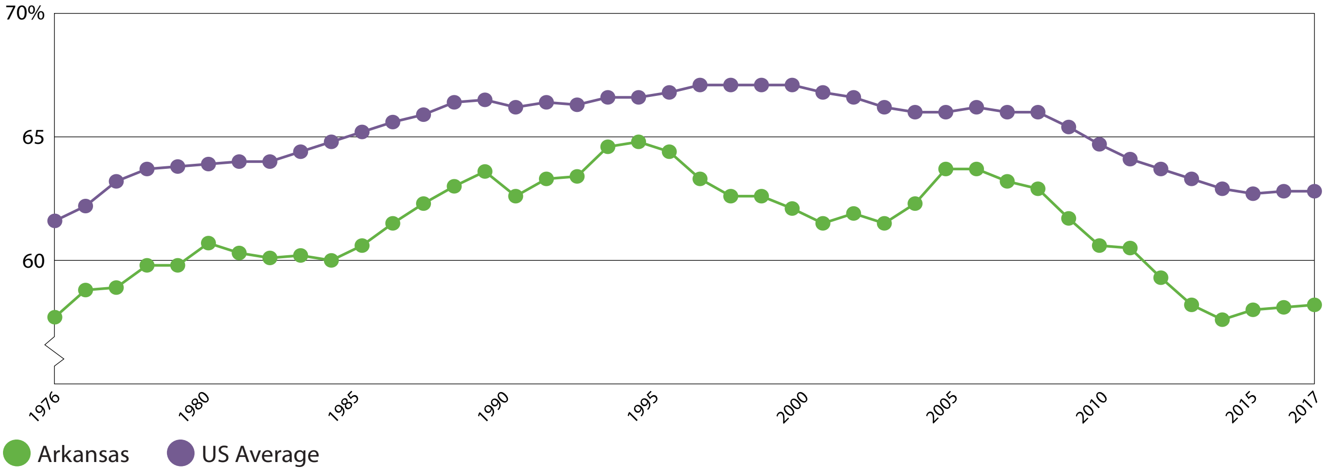
Source: BLS, "Local Area Unemployment Statistics," https://www.bls.gov/lau/rdscnp16.htm.

What are the trends in Arkansas's labor force?

Arkansas's unemployment rate is currently at its lowest level since the BLS began publishing this data series in 1976. A low unemployment rate is good news, and a sign that most individuals looking for a job are able to find one. However, when we look at the labor force participation rate, we see that for the past several years it has been at about 58%. The only time the labor force participation rate was lower was 1976, when it was slightly below 58%. Arkansas's labor force participation rate has always been below the national rate. For the past few years, it has been almost 5 percentage points lower; the gap between Arkansas's rate and the national rate is as large as it's ever been. Putting these two statistics together, we have a more complete picture of the Arkansas labor force: compared with the US as a whole, a smaller share of Arkansans are actively in the labor force, but of those in the labor force we are performing better than the national average at finding them a job.

During the most recent recession, Arkansas's annual unemployment rate only went as high as 8.3%, which was well below the national peak of 9.6%. Since then, Arkansas's unemployment rate has continued to fall and is currently below the national average. But the labor force participation rate has

Labor Force Participation Rate, 1976–2017



Source: BLS, "Local Area Unemployment Statistics," https://www.bls.gov/lau/rdscnp16.htm.

also fallen dramatically since the recent recession, by about 4.7 percentage points. Partially this is due to changing demographics (more retirees as a percentage of the labor force) and national trends, but the national labor force participation rate has only fallen by 3.2 percentage points over the same time period. While we can attribute Arkansas's lower labor force participation rate over the entire time period to cultural differences (such as more families with a stay-at-home spouse), the fall in recent years could be a sign of a weaker labor market.

What are unemployment rates for counties in Arkansas?

As of February 2018, the counties with the lowest unemployment rate were Washington (2.8%), Benton (3.2%), Grant (3.4%), and Madison (3.4%), according to the BLS. The counties with the highest unemployment rate were Chicot (9.0%), Phillips (7.8%), and Jackson (7.0%).[19] The county rates are not seasonally adjusted, and are thus not comparable to the statewide and national unemployment figures.

19 Arkansas Department of Workforce Services, "Arkansas Labor Force by County," February 2018, not seasonally adjusted; preliminary estimates, http://www.discover.arkansas.gov/Employment/Labor-Force-by-County.

Conclusion

We hope this data book has answered some of your questions about why Arkansas's economy is where it is. We also hope we've given you some ideas about how we can make our state a better place to live and work. From all the data we've collected, here's what we've learned about Arkansas's economy.

One of Arkansas's greatest strengths is that it ranks 11th in the country for the highest concentration of *Fortune* 500 companies. These companies, which include Walmart, Tyson, Murphy USA, and JB Hunt Transportation Services, provide jobs, tax revenue, and charitable donations to our communities.

However, our state's biggest companies are all old companies, making us wonder what it is about Arkansas that seems to be discouraging entrepreneurship. It might have something to do with our state's tax code, which is almost 50 years old. Our individual and corporate tax systems are especially uncompetitive, putting Arkansas at number 39 among the states when ranking them by business tax climate, according to the Tax Foundation. The top marginal individual rate is 6.9%, the second-highest in the Southeast behind only South Carolina, and the top marginal corporate rate is 6.5%. Lowering taxes, in line with the best academic research on which taxes are most harmful, could help ensure that Arkansas continues to attract large, successful companies and the people who want to run them and work for them.

What we don't want to do is use poorly structured business tax credits to attract new companies. Fortunately, Arkansas recently repealed InvestArk, the state's largest business tax credit, because it unfairly favored large, established businesses and provided a temporary solution for a flawed tax on business inputs. Other steps in the right direction include lower income taxes for low-income filers (effective in 2019) and a task force to provide recommendations to the legislature on how to improve the state's tax code.

Arkansas's Revenue Stabilization Act of 1945 prevents budget deficits by ensuring that programs aren't funded if there isn't enough tax revenue to pay for them. While it's good that Arkansas has a mechanism to prevent deficits, it's a problem that tax shortfalls like the one we experienced during the Great Recession can result in funding cuts to human services, higher education, the state's general fund, and K–12 public schools. State spending appears to have become less efficient in Arkansas since the early 1990s, and that's an area where Arkansas could improve. Further, the more than doubling of state spending in recent years, from about $3,400 in 1991 to over $7,000 per capita in 2015, means Arkansans will continue to have a high tax burden.

Arkansas ranks poorly in measures of economic freedom, especially state taxes, size of government, and labor market freedom. Reducing barriers to work when regulations are designed not to protect public health and safety but to restrict competition would create more job opportunities for workers and decrease prices for consumers. Arkansas has the nation's seventh highest poverty rate, and our rate is 3.2 percentage points higher than the national average. Our neighbors Louisiana and Mississippi have the nation's highest poverty rates. We might help lift residents of all three states out of poverty through occupational licensing reforms that improve labor market freedom.

While the state's 17% poverty rate is abysmal—especially considering that the 2016 poverty threshold for a family of four with two children is a mere $24,339—it has improved slightly in recent years thanks to increasing economic growth and decreasing unemployment. Still, only six states are poorer than Arkansas. In 2016, Arkansas's per capita personal income was $39,722: 43rd in the nation. It's far higher in prosperous Northwest Arkansas, at $55,729, but lower in beleaguered Pine Bluff, at $32,227. Arkansas's median household income, adjusted for regional living expenses, ranks 44th nationally.

Arkansas's state minimum wage, at $9.25 per hour, is higher than the federal minimum of $7.25. However, as of 2016, at $14.48 per hour, Arkansas had the second-lowest wages among its neighboring states after Mississippi. Further, Arkansas's real median wage increased by a pitiful 8 cents between 2007 and 2016. This measurement aligns with other income measurements showing that Arkansas is poor. It may even suggest that our current political-economic system is leaving behind the typical worker more than headline numbers indicate.

While Arkansas is undeniably poor, our state's employment numbers have finally recovered from the Great Recession, and we've experienced job growth every year since 2010. Arkansas could be doing better, though: its employment growth rate is about 6 percentage points lower than the national rate. Our state's total nonfarm payroll increase from May 2017 to May 2018 was also the lowest of our neighboring states.

The lack of employment growth could have something to do with why Arkansas's labor force participation rate was the 5th lowest in the nation in 2017. Arkansas's 2017 unemployment rate was below the national average, but that might be because fewer Arkansans are in the labor force. We don't know if they're out of the labor force by choice or because they've given up on looking for work.

Another way to improve employment, income, and entrepreneurship in Arkansas might be to improve educational attainment. Arkansas is close to the national average in terms of residents with a high school diploma or the equivalent, yet we rank 42nd in the nation. And we're 49th when it comes to the number of residents with a four-year college degree, about 9 percentage points below the national average. Getting residents to and through high school and college starts early, and that means we have to do something about our eighth-graders' miserable math and reading proficiency scores. Having only about one quarter of students up to speed is not acceptable. We've made big improvements since the 1990s, though, and we can keep building on those. How? Research suggests that both public charter schools and private school choice improve high school completion, college enrollment, and college persistence.[1] Research also suggests that private school choice leads to small but positive effects on test scores.[2]

Those students who do earn a high school diploma don't always want to stick around. While Arkansas has a net inflow of migrants—about 1,000 from 2015 to 2016—the state still lost about 60,000 individuals over that period. Parents have seen their children move away for jobs; classmates have seen their brightest peers go to Texas after graduation. Keeping talented residents in state and attracting talented individuals from other states could help make Arkansas more economically productive and increase the state's living standards.

Arkansas's GDP has increased in 15 of the last 20 years, with a total increase of about 34% over that period. This growth is a positive thing, to be sure, but US GDP grew by about 45% over the same period. Even after adjusting for population growth, Arkansas's GDP has grown at a slower pace than US GDP.

You've probably noticed the recurring theme: Arkansas isn't up to par with national averages, and our state has plenty of room to improve on almost every measure of economic performance. Does that mean we're down on Arkansas? Far from it. We at ACRE know how much untapped potential our state has. We have a vision for how to become more competitive, especially in our areas of expertise: K–12 education, labor market regulation, targeted incentives, taxes and spending, protection of private property rights, and government transparency. The numbers we've presented in this book are only a starting point.

1 See Leesa M. Foreman, "Educational Attainment Effects of Public and Private School Choice," *Journal of School Choice*, vol. 11 (2017): 642–54, https://www.tandfonline.com/doi/abs/10.1080/15582159.2017.1395619.

2 See M. Danish Shakeel, Kaitlin Anderson, and Patrick Wolf, "The Participant Effects of Private School Vouchers Across the Globe: A Meta-Analytic and Systematic Review," EDRE Working Paper No. 2016-07, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2777633.

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The Arkansas Center for Research in Economics (ACRE) is an Arkansas focused research center housed in the College of Business at the University of Central Arkansas. ACRE scholars and policy analysts use research and analysis to find solutions for Arkansas's problems. Our research focuses on barriers to employment, taxes and subsidies, K–12 education, government transparency, and property rights. We educate and provide resources for students, teachers, voters, activists, legislators, and business leaders.

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