ARKANSAS capital SCAN 2022

Northwest Arkansas Council

UNIVERSITY OF ARKANSAS | Entrepreneurship and Innovation

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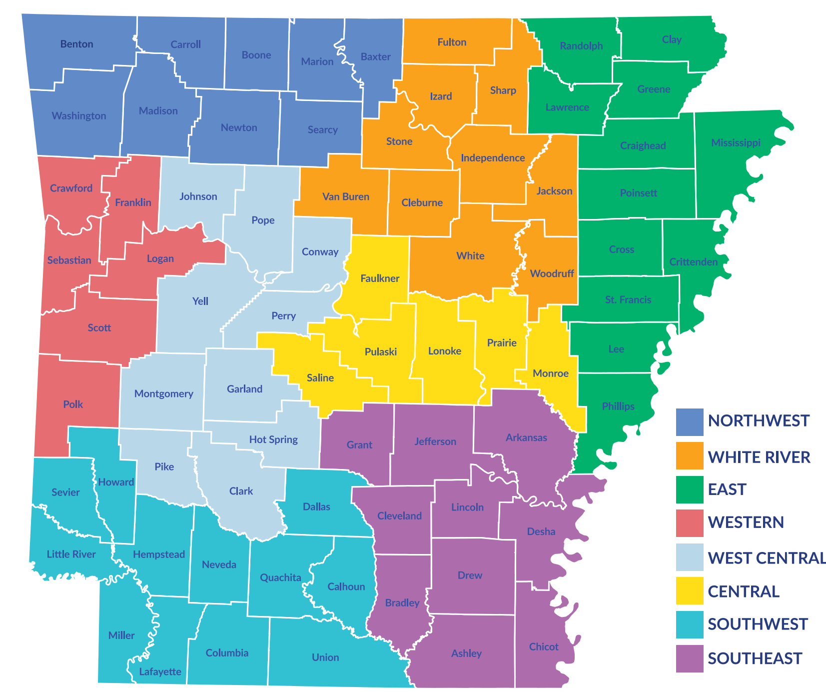
METHODOLOGY

For this report, the majority of data on angel/seed and venture capital investments was obtained from PitchBook (www.pitchbook.com), which is among the most comprehensive sources of capital flows to startup companies. We follow Pitchbook's methodology for classifying deals in angel, seed, or venture stages, except where that classification differs from a founder's self-reported classification.[1] However, as a data source, Pitchbook is not perfect. Relatively few individual angel investors are identified in PitchBook by name, and much of the data is provided in "rounds" instead of single investments, making it difficult to assess how many investors are funding and at what levels. Given this challenge, the Capital Scan supplements data from Pitchbook with research conducted by University of Arkansas staff and students.

Additionally, the Arkansas Capital Scan team worked with knowledgeable investors in the state to review the data and capture any angel, seed, or venture capital deals that were unavailable in PitchBook. The team also surveyed entrepreneurs about their 2022 fundraising activities. When data reported by a founder or investor differed from Pitchbook data, the report defers to the self-reported data.

The investor data here should be evaluated as generally reflective of the activity in Arkansas, but not exhaustive in nature. For the data comparing investments in Arkansas to other states, it is important to note that the comparator states' data only comes from PitchBook and could be missing deals or have inaccuracies as outlined above.

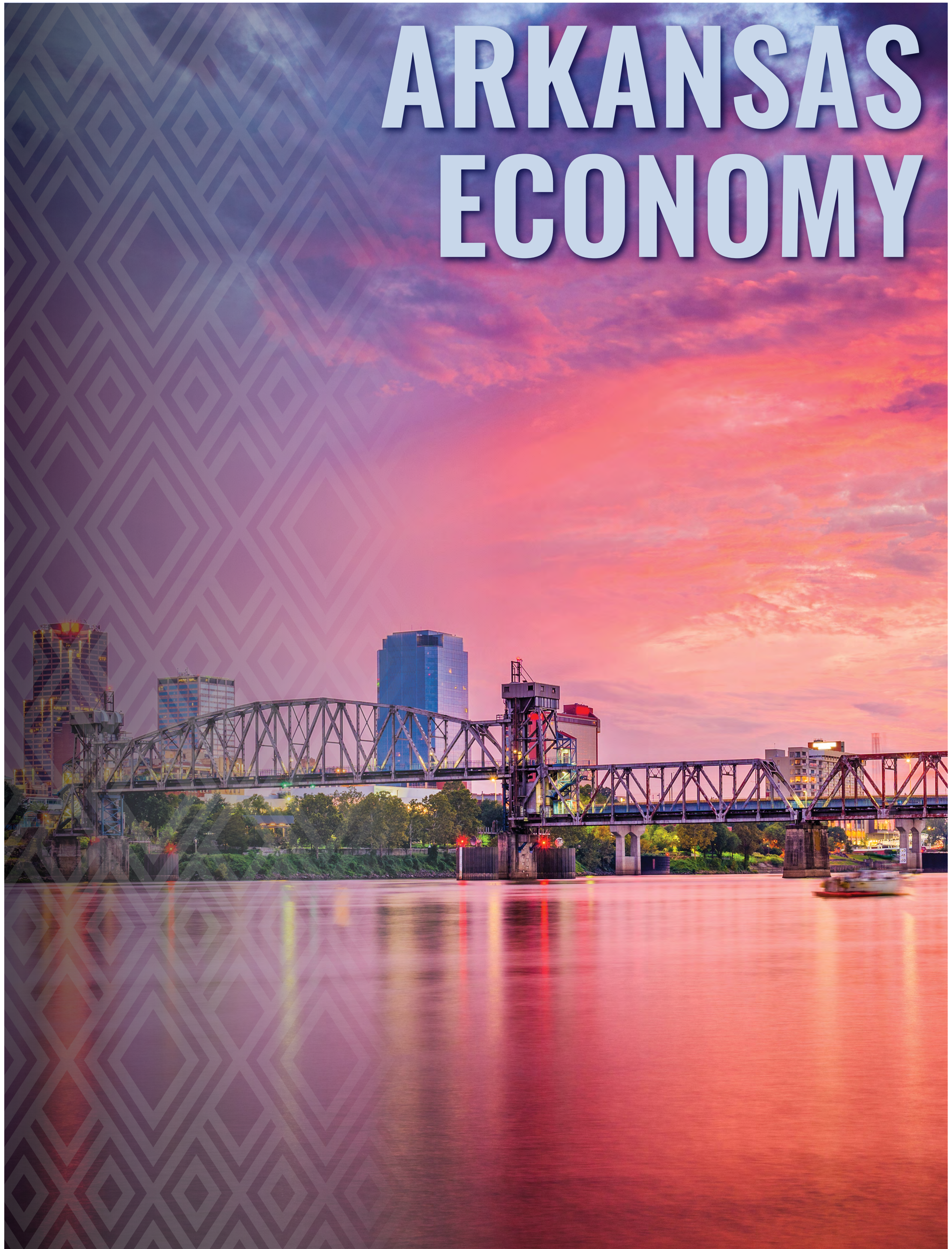


ARKANSAS ECONOMIC REGIONS

Whenever possible, the analysis of data for the Arkansas Capital Scan includes information disaggregated by economic region. The state of Arkansas is split up into eight economic development districts that each cover between six and 19 counties. Each district creates its own regional development strategy, called the Comprehensive Economic Development Strategy (CEDS), based on the strengths and opportunities of that region.

More information about the economic planning and development districts of Arkansas can be found at: https://arkansaseconomicregions.org/.

See Data Sources for further information on data in all sections of this report



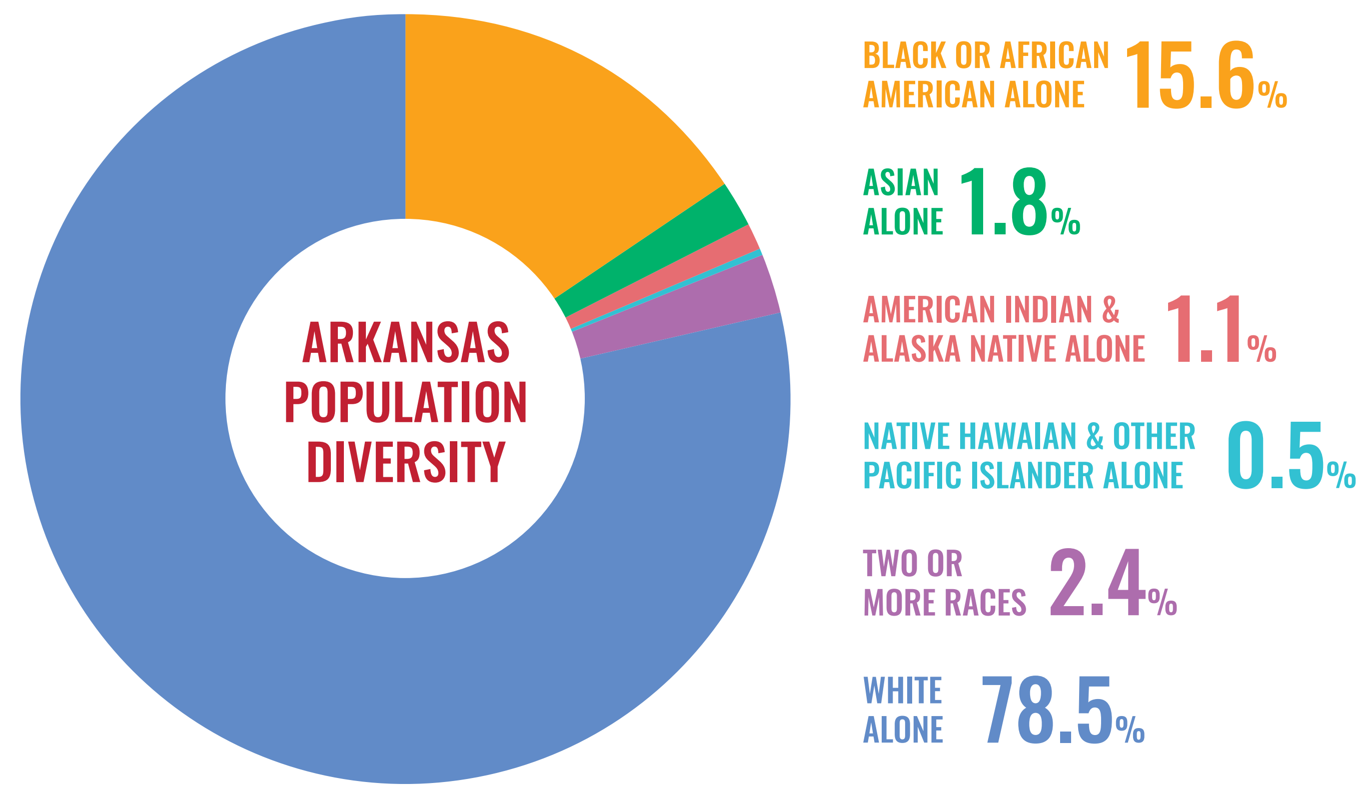
Two years out from the start of the Covid-19 pandemic, Arkansas continued to experience economic growth even after the recovery boom of 2021. Business investments in Arkansas in 2022 supported a wide range of industries and sectors, strengthening Arkansas' already diverse economy.[2] The year saw exceptional growth in the state's mobility and fintech sectors. The state's Council on Future Mobility and companies like Walmart, J.B. Hunt, and Tyson Foods drove dialogue, investments, and innovations in mobility.[3] Meanwhile, Little Rock's FIS Fintech Accelerator fueled a growing number of fintech companies as they established and maintained roots in Arkansas.[4] The 2022 Arkansas Capital Scan showcases the growth of these key sectors, as well as business growth in Arkansas in general, showing continued economic expansion despite challenges like rising inflation.

ARKANSAS DEMOGRAPHICS

Arkansas has a population of just over three million. The state had a 0.58 percent growth in 2022, making the state the 17th fastest-growing state and the 33rd largest.[5] Arkansas' business growth rate is also steady, at 2.5 percent per year. IBISWorld ranks Arkansas 26th of out 50 states for business growth.[6]

Demographically, Arkansas is largely white, with 78.5 percent of the population identifying as white alone. Arkansas ranks 12th among all states in terms of the size of its Black or African American population, with 15.6 percent identifying as Black or African American alone. The state's Hispanic/ Latino population is 8.6 percent, up significantly in the 2020 census from 6.4 percent in 2010, despite the limitations that Covid-19 placed on the count. Benton County, in Northwest Arkansas, has the most Hispanic residents, with 50,540, or 17.8 percent, of the county's population, and is forecasted to grow to 19 percent by 2026.[7]

Similar to other states in the region, Arkansas has seen its population slowly diversify, with the share of the population identifying as something other than white growing from 23 percent to 29.8 percent between 2010 to 2020.[8]

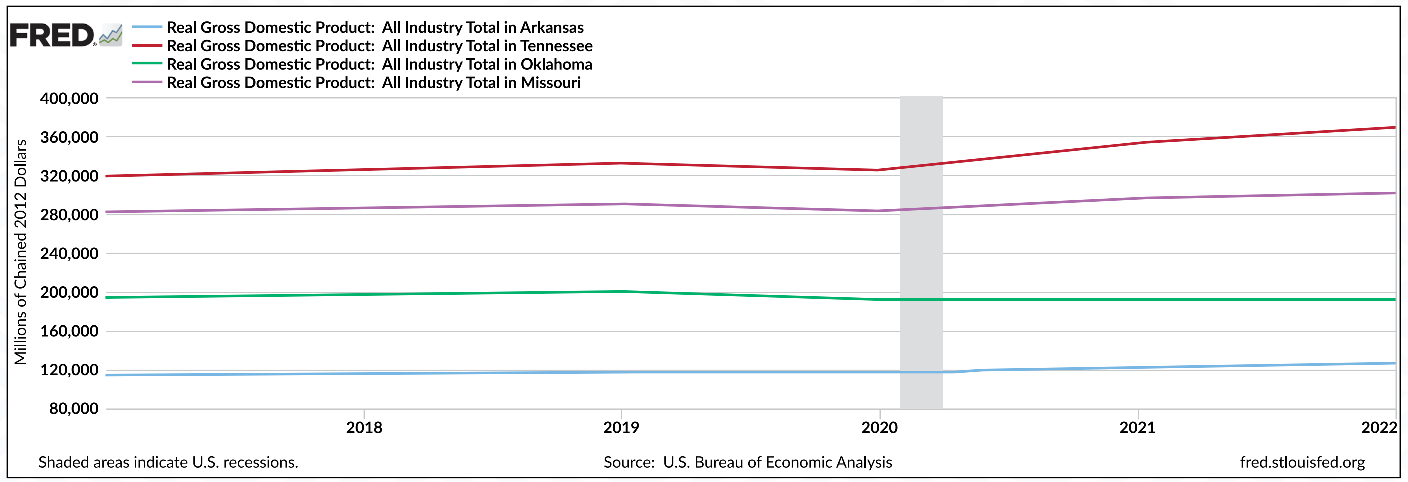


Hispanic or Latino - 7.8% White Alone, Not Hispanic or Latino - 72%

GROSS DOMESTIC PRODUCT

In 2022, Arkansas' inflation-adjusted GDP was $126 billion, up 2.5 percent from $123 billion in 2021.[9] Combined with 2021's 8.7 percent growth, Arkansas' GDP growth in 2022 is evidence of the state's recovery from the Covid-19 pandemic. Arkansas' five-year GDP growth ranks it 22nd out of the 50 U.S. States.[10]

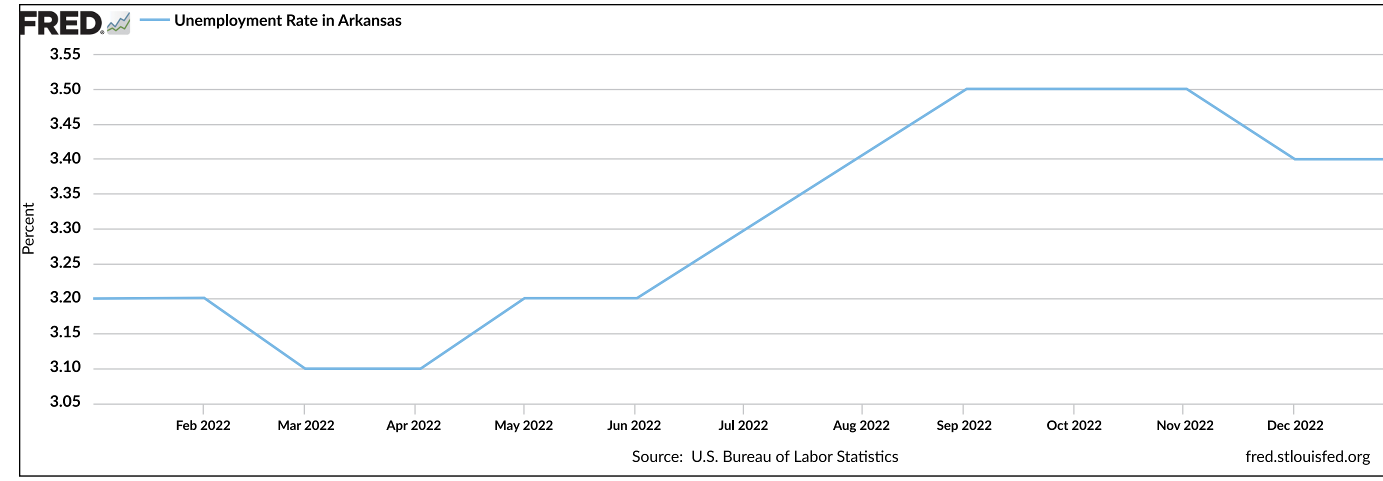
Arkansas' GDP growth rate in the past year was higher than Oklahoma's, a neighboring state used as a comparator for this report. But it was lower than our two other comparator states–Tennessee and Missouri. Tennessee's GDP increased at the highest rate among the four states–growing by 4.16 percent in 2022 alone.



The manufacturing sector is the largest contributor to Arkansas' GDP, with an annualized growth rate of 2.9 percent. Combined with manufacturing, the real estate, healthcare, and social assistance sectors contributed the most to Arkansas' GDP in 2022, representing a combined 38.4 percent of the state GDP.[11] Manufacturing growth can especially be seen in the major investments in that sector in 2022. For example, in January 2022, Arkansas announced the largest economic development investment project in the state's history, with U.S. Steel pledging to invest $3 billion to construct a state-of-the-art steel mill in Osceola in Mississippi County.[12] Other manufacturing investments include a new warehouse by Amazon in Lowell, a new factory by Compass Cold in Heber Springs, and a new headquarters and manufacturing plant by Envirotech Vehicles in Osceola.[13]

EMPLOYMENT

Businesses in Arkansas employed a total of 1,236,383 people in 2022, with average annual employment growth over the past five years of 1 percent. Unemployment in 2022 hovered at just over 3 percent all year, showing the state's strong recovery from the Covid-19 pandemic. The unemployment rate rose to 3.4 percent in December as the state faced the oncoming recession, which was comparable to the national unemployment rate of 3.5 percent at the close of 2022.[14]



When unemployment rates are very low (under 5 percent) it can have negative effects on inflation, productivity, and the labor market.[15] However, unemployment rates in 2022 may also be the result of the pandemic's lingering impact on the reduced number of people seeking full-time, traditional employment. Unemployment figures also overlook workers who left full-time employment to participate in the nation's growing "gig" economy, which is crucial to empowering many entrepreneurs to launch their own businesses. The availability of "gig" economy jobs has been shown to impact the growth of entrepreneurship in cities with lower than average incomes and education levels.[16]

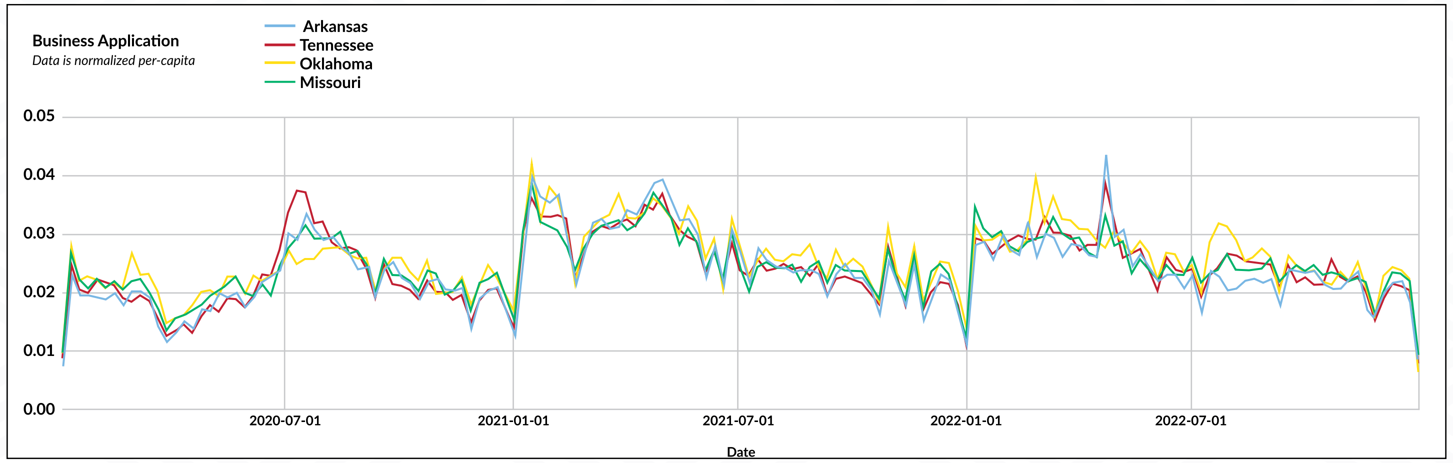
According to the National Bureau of Economic Research, "the expansion of the gig economy increases entrepreneurial activity by making it less costly for entrepreneurs to supplement their incomes while developing their own businesses. The gig economy provides an income fallback if an entrepreneurial business fails."[17] However, since many gig jobs do not pay family-supporting wages, gig work's potential to empower entrepreneurs to create successful businesses that grow jobs in economically distressed regions–especially rural areas, such as Arkansas' many small towns and farming communities–remains to be seen.[18] Nearly half of the nation's gig workers also have full-time jobs, 24 percent of gig workers lack health insurance, and 29 percent earn less than their state's minimum wage.[19]

BUSINESS CREATION AND ECONOMIC GROWTH

In 2022, Arkansas passed significant changes to state tax regulations that were designed to spur economic growth. In December 2021, then Governor Hutchinson signed into law a tax cut that reduced the top individual income tax rate from 5.9 percent to 4.9 percent and the corporate income tax rate from 5.7 percent to 5.3 percent by 2025. Currently, Arkansas has the fourth-lowest cost of doing business in the country.[20]

Due to these changes, as well as the post-pandemic growth in Arkansas in general, there were 47.9 percent more business applications in Arkansas in 2022 than in 2019.[21] According to the U.S. Chamber of Commerce, 37,756 new businesses applied to start in Arkansas in 2022. Pulaski County (Greater Little Rock) had the most, with 9,770.

However, within the larger national context of record-breaking business applications for the past three years, Arkansas was ranked 30th out of 50 states in terms of per-capita business applications.[22] Furthermore, as the next graph shows, similar to the three comparison states, Arkansas' rates of business applications (normalized per capita) remained aligned throughout the economy's rises and falls during 2020-2022



MINORITY-OWNED BUSINESSES

According to a 2019 report by the Ewing Marion Kauffman Foundation, “entrepreneurs of color start their businesses with almost three times less in capital than white businesses.”[23] This is especially true for women of color. To that end, we aim to disaggregate data wherever possible so we can capture any differences in realized investments by founder race, gender, or ethnicity.

As the angel/seed funding section of this year’s Capital Scan shows, 2022 saw significant declines in the amount of capital invested in new businesses started or owned by people of color in Arkansas. While investors may attribute this decline in funding to inflation and the threat of a recession, the decline is not uniform: as economic conditions worsen, the decline in funding for entrepreneurs of color is far larger than the decline for white entrepreneurs, especially white men.

Several organizations in Arkansas are working to provide support systems for small businesses owned by people of color. In Northwest Arkansas, a diversifying region,[24] the organization Black-Owned NWA (BONWA) holds business expos and curates a guide to Black-owned businesses. Jasmine (Jazz) Hudson and J’Aaron (Jae) Merchant founded BONWA to “make living in Northwest Arkansas easier for the Black Diaspora by highlighting black businesses, events, and resources beneficial to the community.”[25] BONWA has brought more attention not only to Black-owned businesses in the NWA region but also to non-traditional sources of capital for small businesses, such as Huntsville, Arkansas’ Forge Community Loan fund, which provides businesses in low-income and rural communities with pathways to credit, and KIVA NWA, a rapidly growing crowdfunding loan platform working to unlock capital for underserved populations, especially women of color (see data on KIVA NWA’s success in the Crowdfunding section of this year’s Capital Scan).[26]

The NWA Council is also working through its EngageNWA program to document and publicize data on systemic racism in the region and to act as a convener to engage small businesses and regional leaders in taking action to undo those inequities. The 2022 *Engage the Future* report “documents the region’s diverse population growth over the last several decades, provides comparative analysis with several peer regions, zooms in on the demographics of our regional school districts and highlights local organizations that are making diversity, equity and inclusion a priority.” Another NWA Council program, Diversity NWA, publishes the *Northwest Arkansas Diversity Resource Guide*, a continuously updated online guide to diverse-owned businesses and organizations across the region.

ANGEL AND SEED INVESTMENT

INTRODUCTION

Following the informal "friends and family" round that often capitalizes new startup companies at their earliest stages, angel investment is typically the first accessible form of equity funding for a business. Angel investors are usually high-net-worth individuals who qualify for accredited investor status by meeting criteria governed by the U.S. Securities and Exchange Commission. Many accredited investors find investment opportunities through part of a network that vets businesses and provides professional management services. In Arkansas, angel investment networks have periodically formed and deployed organized capital into the entrepreneurial ecosystem over the last 15 years, with the most recent being the Ark Angel Alliance (established in 2020) and 412 Angels (2022).

NATIONAL TRENDS

Globally, in 2022 there was a 35 percent decline in equity-based investments (this total includes angel and seed investments as well as venture capital investments) after 2021's record high of $681 billion. In 2022, the global equity-based investment total was $445 billion.[30] This was still $100 billion more than investors spent in 2020. In many ways, 2022 was a return to pre-pandemic patterns of investment growth.

Nationally, the equity investment deal count in 2022 fell by 14 percent. Total equity investments in U.S. companies were 30 percent less than in 2021, reducing from $344.7 billion to $238.3 billion.[31] These declines steepened over the course of 2022, with the most significant dips occurring in Q3 and Q4.

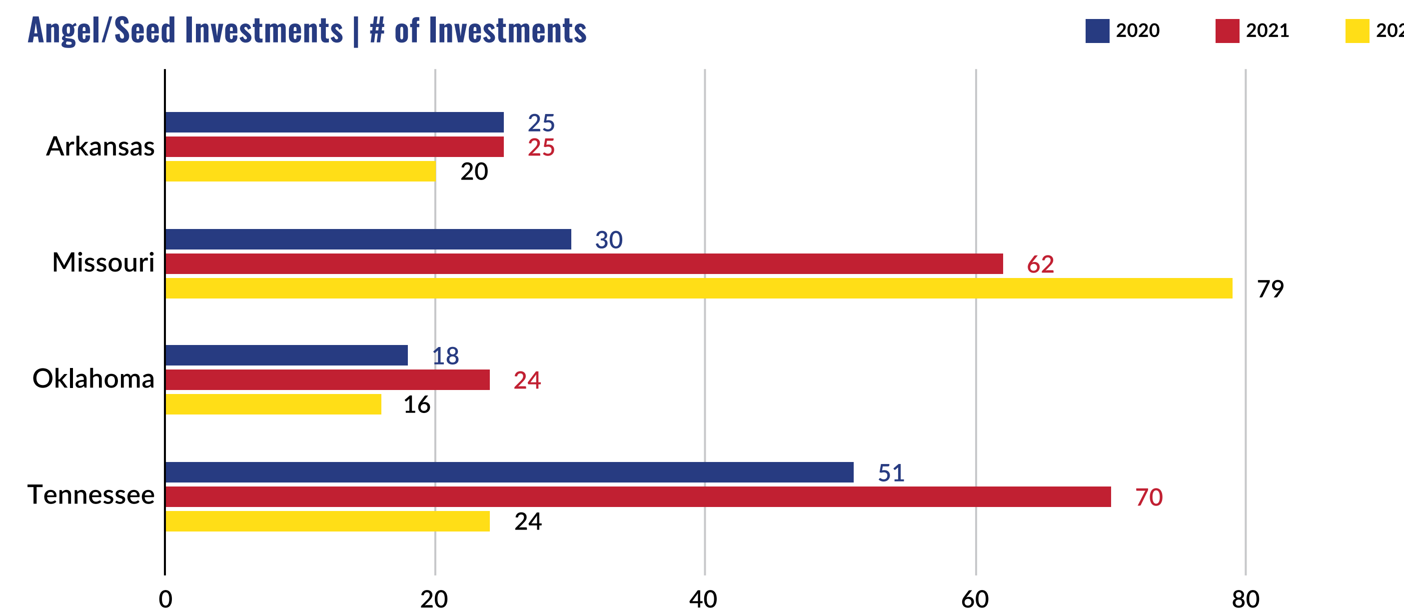
Within these global and national trends, angel/seed funding was the least impacted. In fact, nationally, angel/seed funding reached an all-time high in 2022.[32] Pitchbook attributes this growth to "the sustained strength of deal value to the increasing robustness of the pre-seed market, expansion of seed-stage investor participation and the prolonged time between startup foundings and seed rounds giving rise to more mature startups."[33]

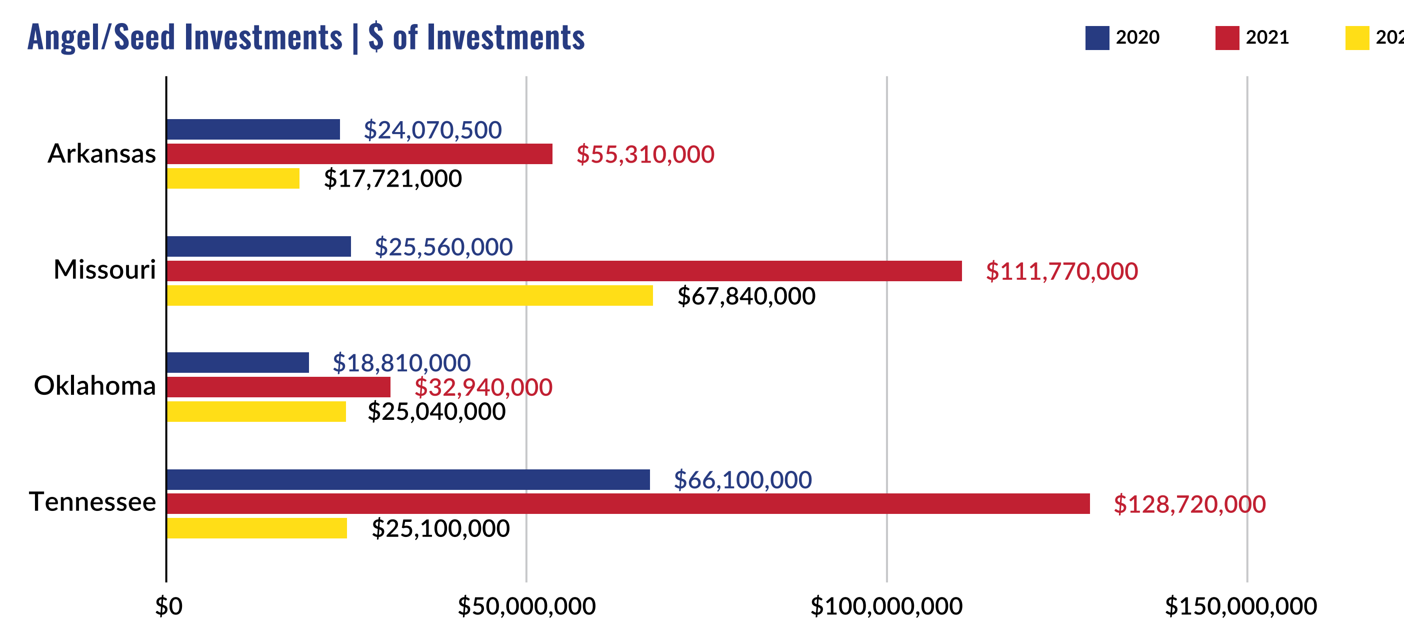
According to *Venture Beat*, a key reason for overall equity funding declines was the fact that nontraditional investors "slow[ed] their capital deployment to VC amid less attractive risk/return profiles." But even as venture investor numbers shrunk in 2022, more and more investors globally were drawn to seed-stage deals.

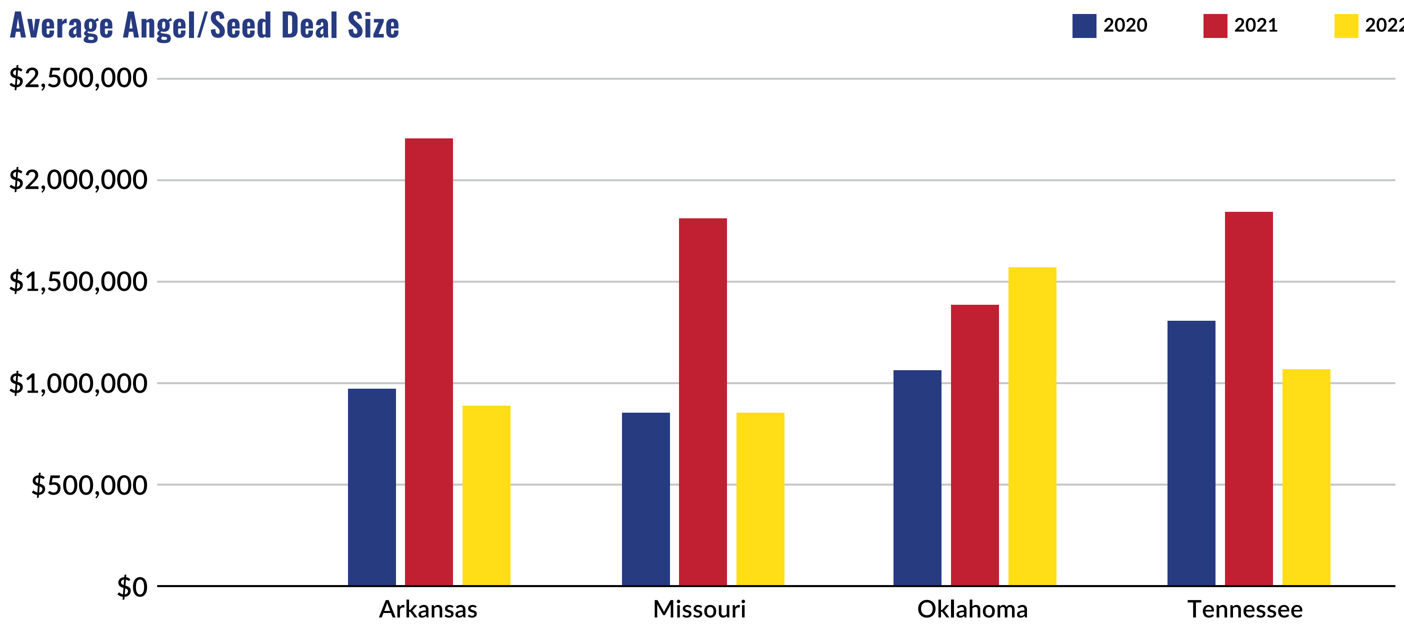
By contrast, in Arkansas and the three states used as regional comparisons in this report–Tennessee, Missouri, and Oklahoma–angel/seed funding activity significantly declined in 2022. The opposite was true of later-stage venture capital; while venture-stage deals decreased across the nation, globe, and region, venture-stage funding in Arkansas increased in 2022 (see the venture capital section of this report).

In 2022, angel/seed investment totals saw a decrease of 67.9 percent over one year, falling below 2020 levels. Arkansas companies received $17.7 million in angel/seed funding in 2022 (compared with $55.3 million during 2021's outsized investment year, and $24 million in 2020). Five fewer (20 percent) Arkansas companies were funded in 2022 than in 2021 and 2020. Deals in Arkansas averaged $886,050 in 2022, compared to 2021's outsized average of $2,212,400 (a 60% decrease). The average angel/seed deal size in 2022 was also nearly 8 percent less than in 2020.

Within our four-state comparison region, only Missouri saw an increased number of deals. However, total angel/seed funding by volume in Missouri fell by 39.3 percent, down from $111.8 million to $67.8 million. In fact, individual deals in Missouri were, on average, $1 million lower than in 2021 ($858,734 compared to $1,802,742). More state-by-state comparisons follow, below.







Future analysis of angel/seed funding trends in 2023 will allow for deeper understanding of the apparent dip in 2022. This may have been a temporary, regional phenomenon that resulted from investors seeking to provide follow-on VC funding for the companies in which they invested in 2021. Or it may be a signal of a longer-lasting investment trend favoring more established businesses.

Crunchbase suggests that (on a global scale), late-2022 declines in angel/seed funding indicate a more difficult climate for funding "ideas." As the percentage of unicorn companies declined in 2022 and as the stock market became more volatile, investors began to look for more momentum in the companies to which they directed their biggest resources.[34]

In a survey of founders across the state, respondents frequently cited a "lack of access to a formal fundraising ecosystem" in Arkansas and a "gap in local VC and Angel investors." One noted that there is "Not much funding support for pre-seed, seed, and series A stage companies." Another argued that "Many of the funds are set up to bring companies into Arkansas, and are not set up to fund companies who started in the area."

ANGEL/SEED INVESTMENTS IN ARKANSAS AND BY ARKANSAS INDUSTRY

The largest angel/seed-stage investment in Arkansas in 2022 ($5.2 million) went to Infinite Enzymes, a biotech enzyme company in Jonesboro. By comparison, 2021's largest angel/seed-stage investment was $9.7 million to Good Day Farms, a cannabis business. This deal is an outlier compared with a typical Arkansas startup angel investment, due to the regulatory constraints on competition in cannabis farming in Arkansas. The Infinite Enzyme deal was the only deal in the eastern part of the state (see regional comparisons below).

Other large deals were as follows: $2.38 million to Easybins, a micro-distribution product delivery company in Springdale, $2.1 million to L Rock Manufacturing, a pharmaceuticals company in Little Rock, and $2 million to Roadway Management Technology, a fleet management and paveway performance analytics company, also in Little Rock.

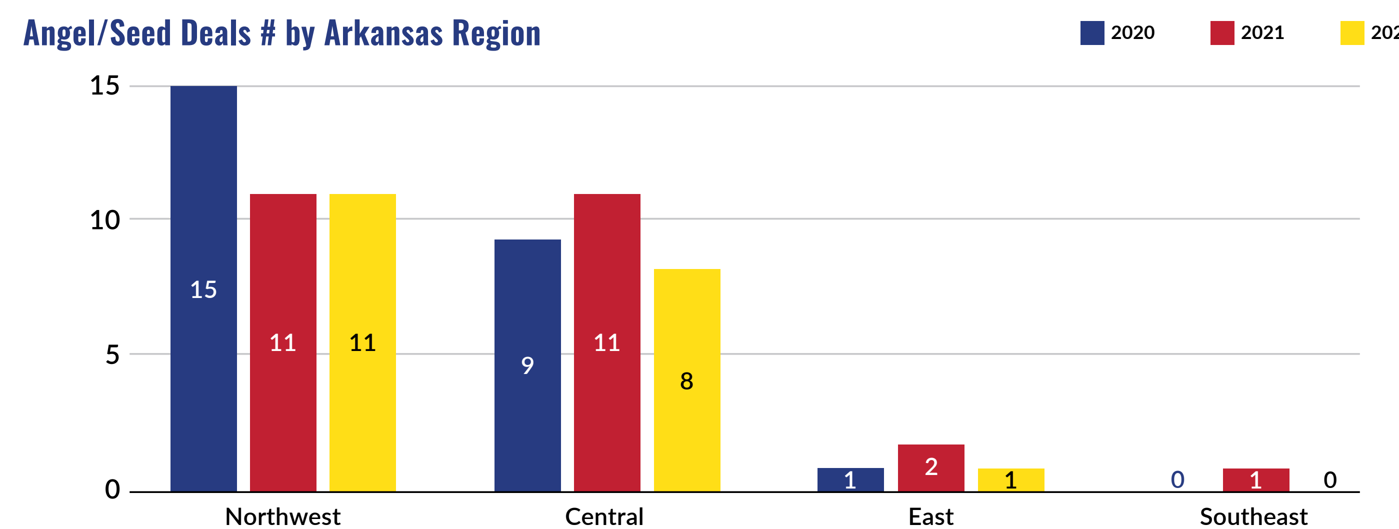
Angel/seed investments were, for the most part, equitably distributed among Arkansas' diverse industry sectors. The largest number of investments (40 percent) went to consumer products and

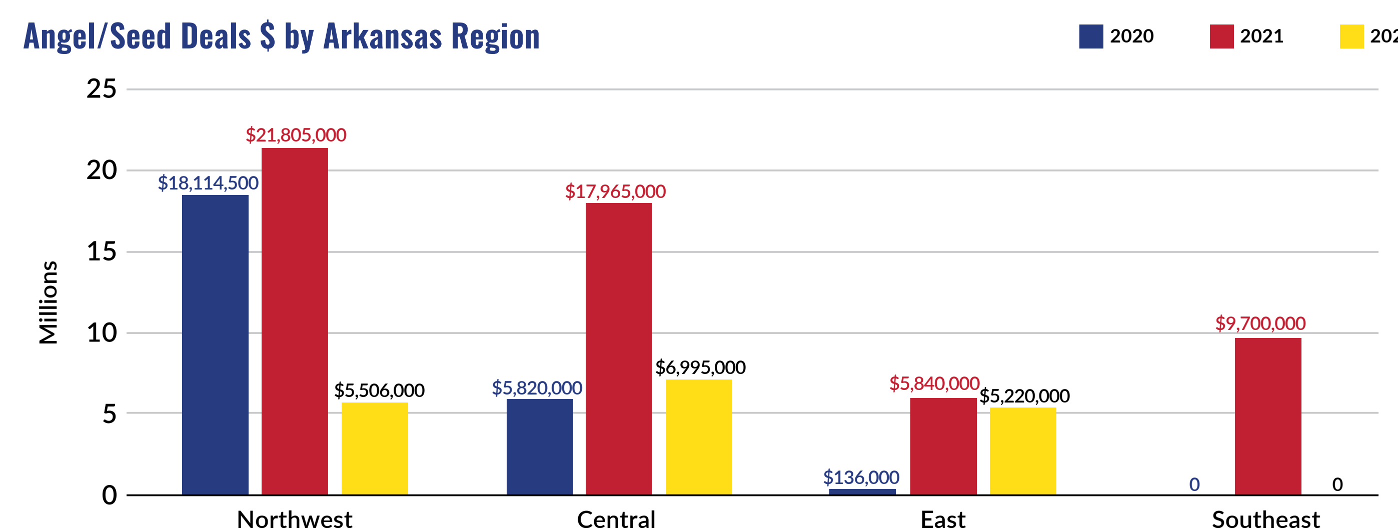
services companies, representing approximately 55 percent of the funding invested.[35] Many of these investments were related to the state's thriving agriculture and agriculture-adjacent industries. Information technology (IT) followed as the sector with the next highest amount of angel/seed deals in 2022. IT received 25 percent of deals, but only 5.6 percent of funding. Three healthcare companies received angel/seed investments. These three healthcare investments made up 28.4 percent of the state's total funding. Business products and services also received three deals, but together these deals made up just over 11 percent of total funding.

ANGEL/SEED INVESTMENT COMPARISONS BY ARKANSAS REGIONS

In 2022, as in the previous two years, Northwest and Central Arkansas dominated the angel/ seed investment scene. Together, these regions received 95 percent of all deals in the state: NWA received 55 percent, and Central Arkansas received 40 percent. Companies in NWA received 31.1 percent of all dollars invested. Central Arkansas companies received 39.5 percent. Deals in Central Arkansas tended to be larger than those in NWA, especially deals going to the healthcare industry.

Eastern Arkansas received the remaining 5 percent of 2022's total angel/seed deals (and 29.4% of total funding). As noted above, this was for the large deal to Infinite Enzymes.





All of the above regions saw a decline in angel/seed funding in 2022, but the decline in NWA was the most significant. Because investment amounts were so outsized in 2021, it is useful to analyze this decline using 2020 as a baseline for "normal" growth. For instance, even though NWA continued to lead the state in angel/seed funding in 2022, it will require dialogue between entrepreneurial support organizations, investors, and founders to understand why the region experienced a 74.8 percent decline in funding compared to 2021 (and a 69.6 percent decline compared to 2020).

By comparison, Central Arkansas saw a one-year decline of 61 percent but a two-year gain of 20 percent. Eastern Arkansas saw a one-year decline of 10.6 percent, but an outsized two-year gain of 3,738 percent (again, because of one deal to one company in 2022).

The decline in the Southeast was actually the steepest: that region went from one massive deal in 2021 (to Good Day Farm, a medical cannabis company that has since moved its headquarters to Little Rock) to none in 2022. A loss of one deal (or, on the flip side, the gain of one deal, as we saw in Eastern Arkansas) does not seem as significant as the loss of nearly 70 percent of angel/seed funding to the state's typically highest-invested-in region.

As noted in the venture capital section of this report, total equity investments in Arkansas startups did not decline. In light of the economic uncertainties in 2022, investors who made outsized angel/seed deals to NWA companies in 2021 may have elected to continue to invest in those same companies via VC deals in 2022.

PERSPECTIVE:

JEFF AMERINE, PMP

Founder & Managing Director
Startup Junkie Consulting

The angel and venture investment scene in 2022 was challenging and the situation hasn't improved much in 2023. With high interest rates, high inflation, a significant tech slump in the public market, and geopolitical worries, angel investors and venture investors became significantly more cautious. We've seen downward pressure on valuations, difficulty in raising follow-on rounds for established ventures, and a genuine re-focus on fundamental economics and profitability. My view is these factors have caused the red-hot pandemic angel & venture investing boom to cool, and that is probably a good thing. Building businesses focused on solid unit economics with a realistic pathway to profitability makes sense.

Beyond that, in the early stage of ecosystem development and growth, the year-to-year investment volume is going to be lumpy and episodic. Until Arkansas has multiple high visibility exits per year (like what happened with Apptegy in mid-2023), we won't see consistent linear growth in angel or venture investing. We need the virtuous flywheel from venture exits and reinvestment to be constantly fueled and refueled.

The state is making incredible progress across the spectrum of activities required to build a sustained venture ecosystem, but we are still in the early days of a multi-generation journey that will have plenty of ups and downs.

ANGEL/SEED INVESTMENT COMPARISONS BY ARKANSAS DEMOGRAPHICS

In 2022, 15 of the state's 20 deals (75 percent) went to companies owned by white male entrepreneurs. Four deals (20 percent) went to companies owned and started by white women (up from 1 deal and 4 percent of total deals in 2021).

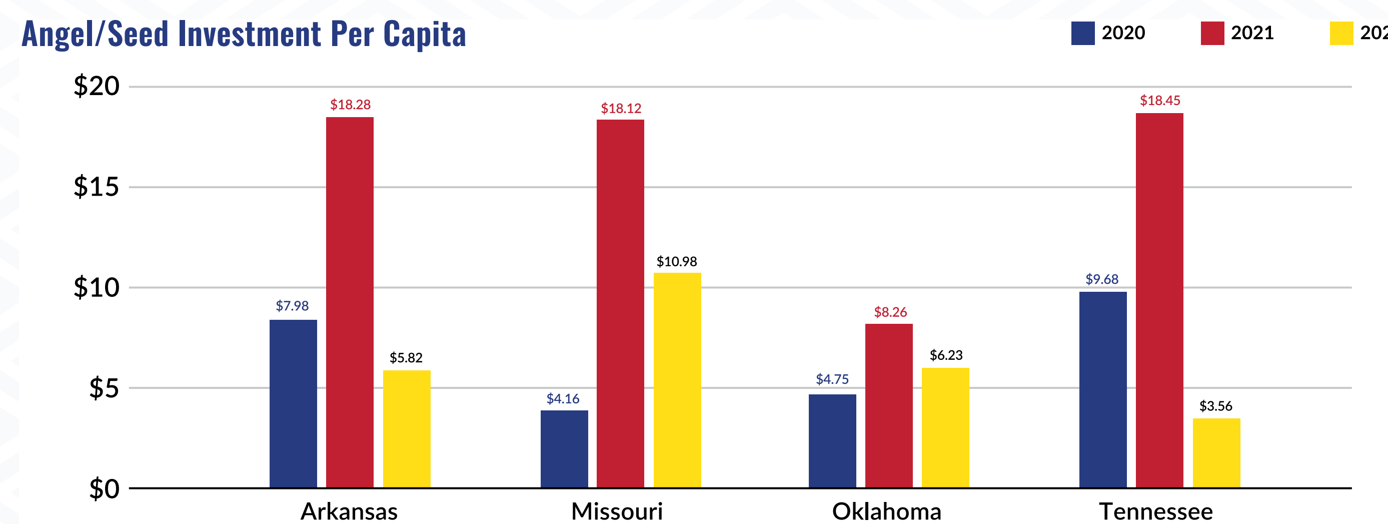
In 2022, only one angel/seed-stage deal in Arkansas went to a company owned by a person of color, for $120,000, constituting less than 1 percent of the state's total angel/seed funding deployed. In 2022, companies founded by women of color did not receive any angel/seed funding in Arkansas. In 2021, by comparison, four companies founded by women of color received angel/seed funding–one deal was large–$3.5 million–to Ox (see our discussion of Ox's follow-on 2022 deals in the venture capital section).

White male founders' share of investment dollars decreased slightly in 2022–from 89.4 percent in 2021 to 86.2 percent in 2022. By contrast, white women founders' share of investment dollars increased significantly, from 3.9 percent in 2021 to 13.2 percent in 2022. White women founders' total deal amounts stayed about the same over both years.

COMPARISON BY PER CAPITA RATES OF INVESTMENT

When data is examined per capita, every state included in this report saw a decrease in angel/seed stage investment between 2021 and 2022. Tennessee saw the biggest decrease–over 80 percent.

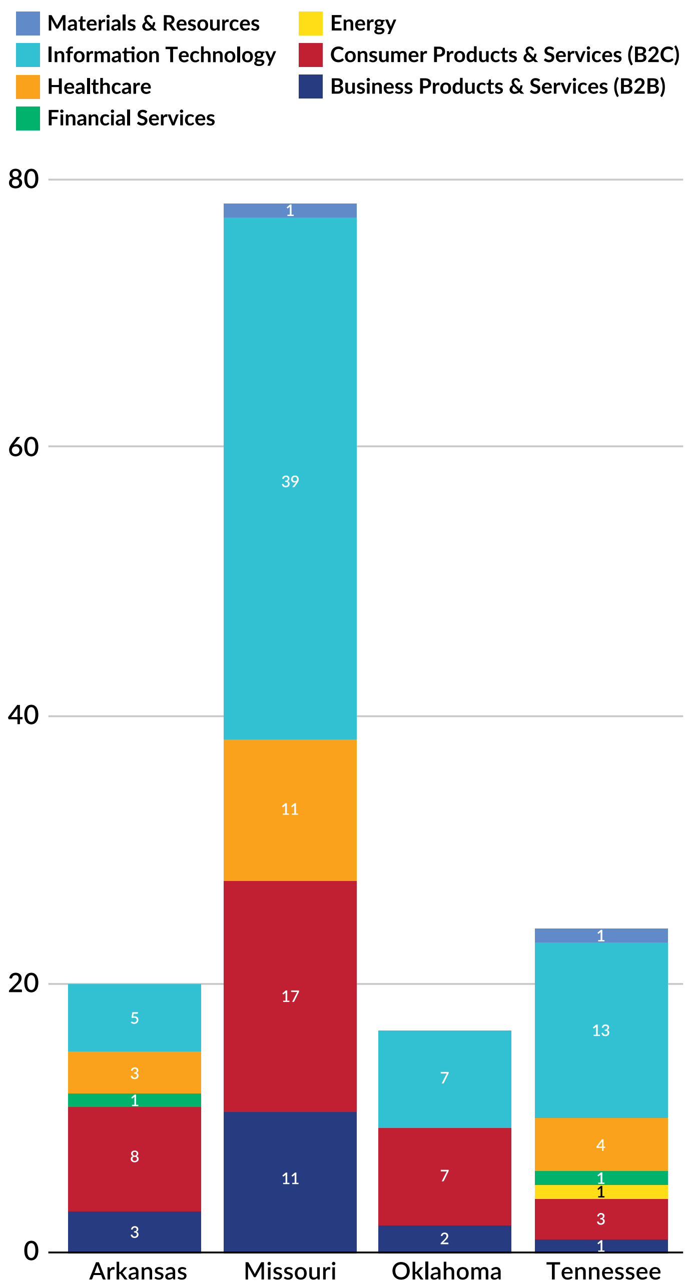
At $5.82 per capita (a 68.2 percent reduction since last year), Arkansas ranked third among these regional comparators in 2022.



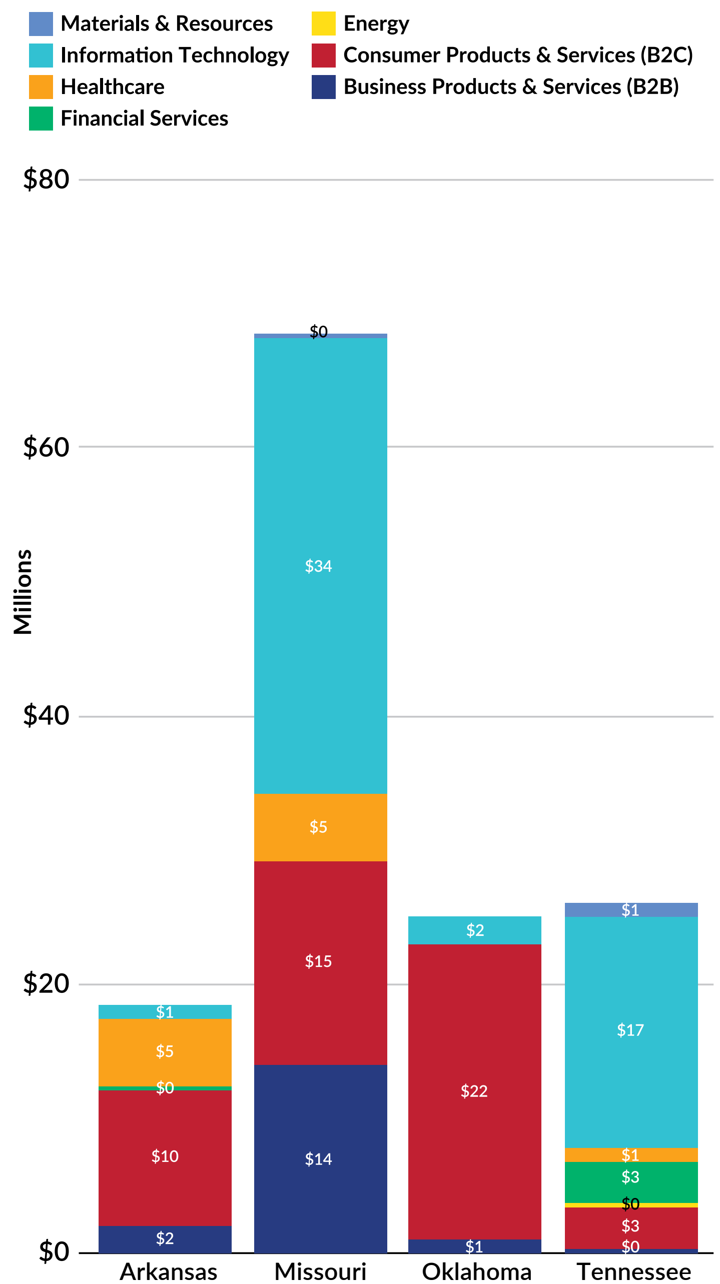
COMPARISON BY INDUSTRY

As with 2021, angel/seed investments in Arkansas in 2022 were spread out more evenly among industries than in the comparison states. As discussed above, in Arkansas the largest percentage (40 percent) of deals went to companies in the consumer products and services sector. In all the other states, the majority of investments went to information technology companies, which drove 44-54 percent of all deals in Missouri, Tennessee, and Oklahoma, but only 25 percent in Arkansas. In Missouri and Tennessee, IT accounted for the majority of the money raised, as well (50 and 68 percent respectively).

Angel/Seed Investments # by Industry and State



Angel/Seed Investments $ by Industry and State

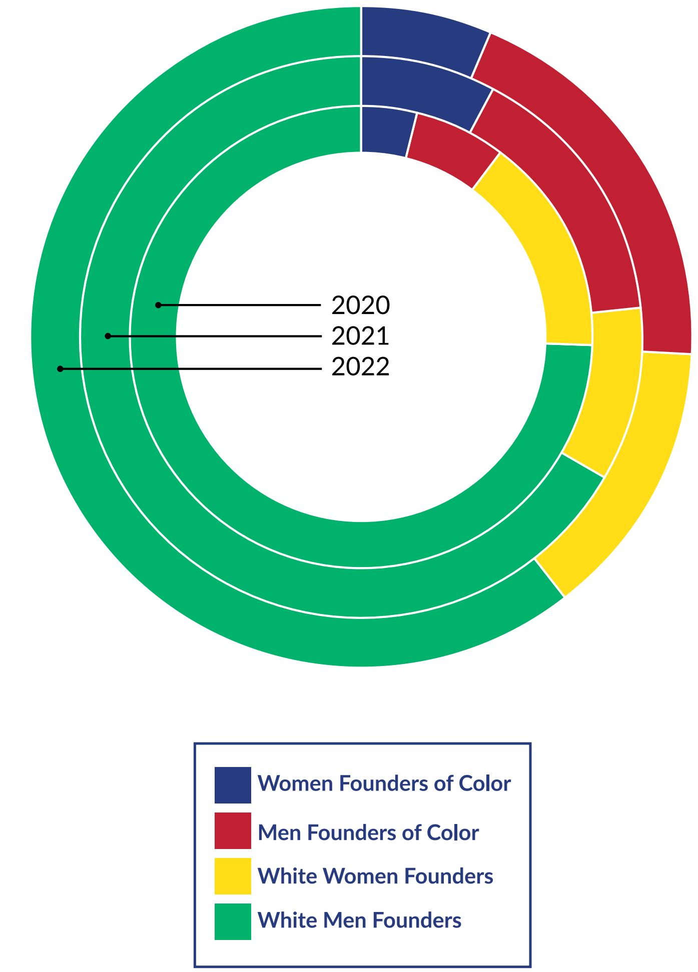


COMPARISON BY DEMOGRAPHIC

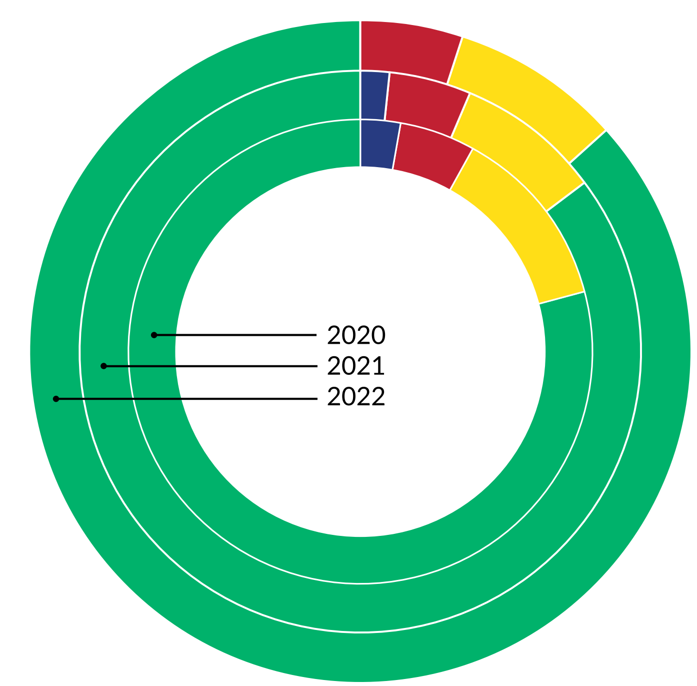
When we look at the demographic breakdown across all comparator states, we find a similar trend to what we saw in Arkansas. Women founders of color received 36 percent fewer deals and 93 percent less in funding than in 2021.[36] Across the four-state region, only nine women founders of color received angel/seed funding in 2022, compared to 14 in 2021 which represents a 35.7 percent reduction.

Across the region, founders of all demographics saw losses in 2022: white women saw a 60.6 percent loss in angel/seed funding, men of color founders saw a 51.1 percent loss, and white men saw a 58.1 percent loss. But this extreme loss for women founders of color–92.6 percent of total funding–is disproportionate, considering that 2021 levels of funding were also very poor. In 2021, female founders of color received only 1.83 percent of the region's total funding.

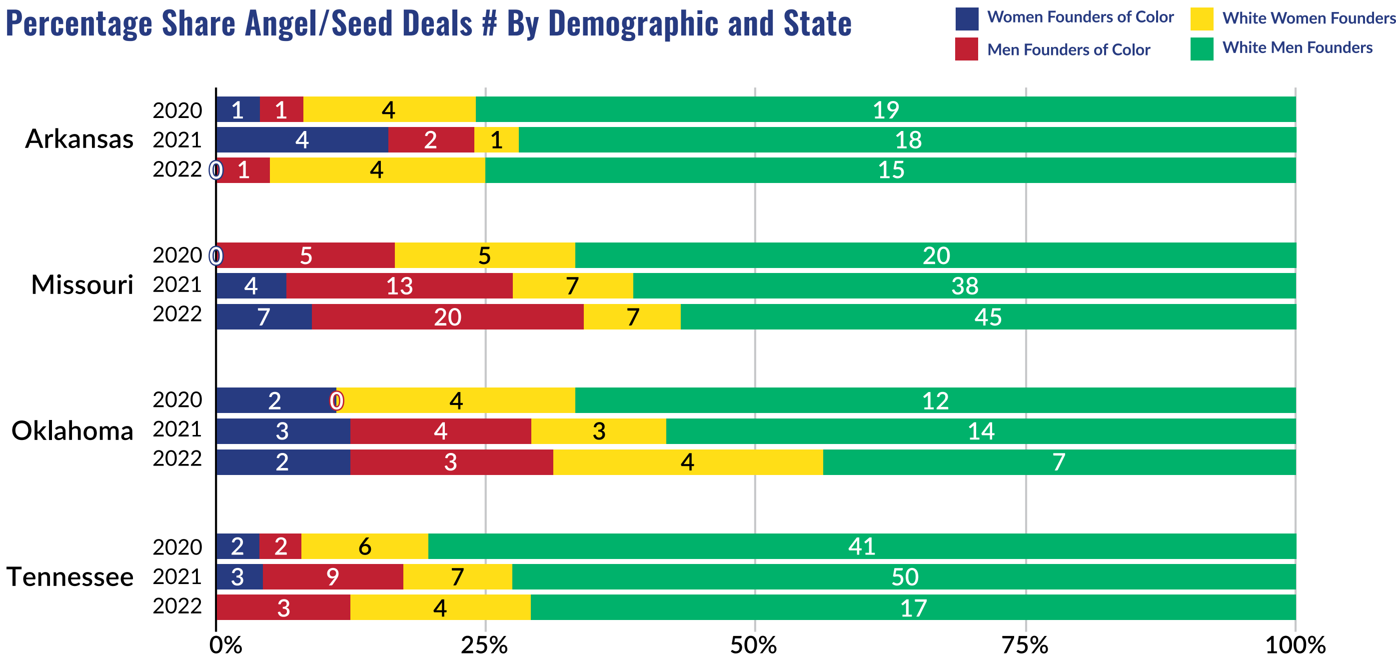
Angel/Seed Investments # by Ownership Across All Comparable States



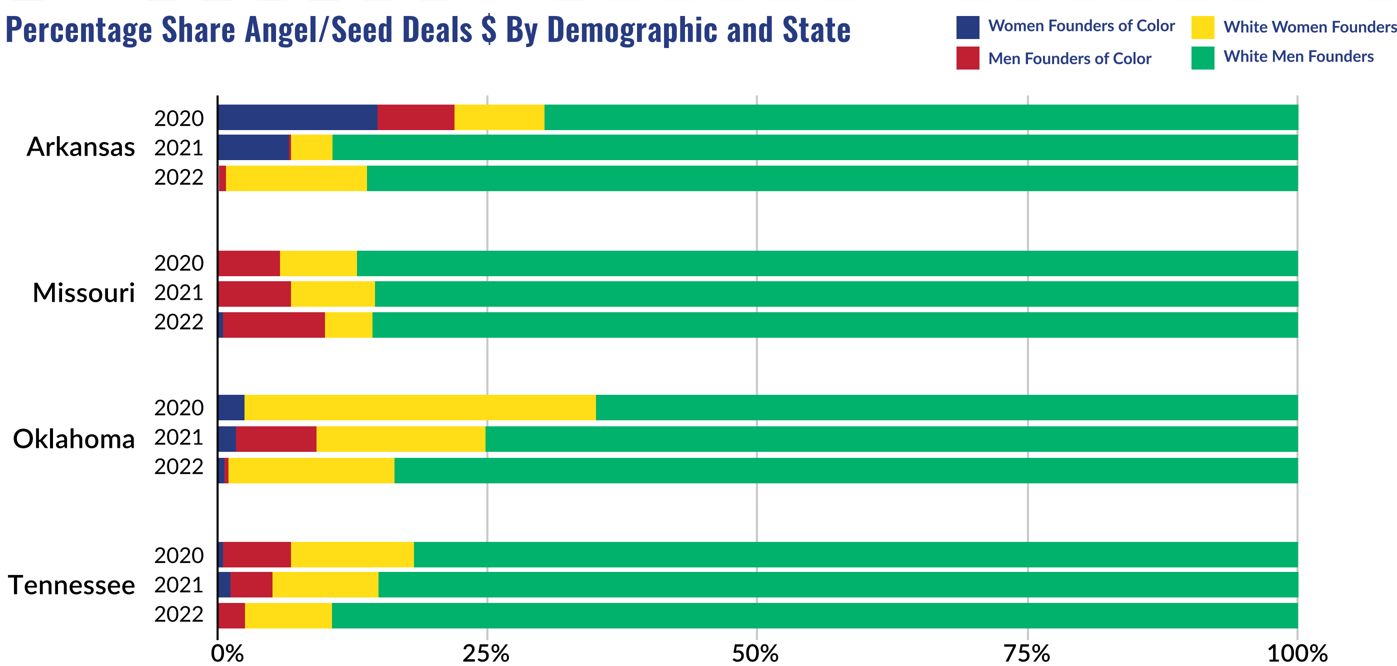
Angel/Seed Investments $ by Ownership Across All Comparable States



Percentage Share Angel/Seed Deals # By Demographic and State



Percentage Share Angel/Seed Deals $ By Demographic and State



Angel/Seed Investments Case Study:

Residents of Helena, Arkansas, a small, predominantly Black city on the Mississippi River in the heart of the Arkansas Delta, have a long history of creative innovation within the context of limited resources. When farms industrialized in the 1940s and 50s, many African American farmers and sharecroppers moved to Helena to look for jobs. Rural transplants soon created the city's thriving blues industry, legendary because of the city's "King Biscuit Time" radio show, which attracted B.B. King, Muddy Waters, and other famous musicians to the town's small clubs. Today, Helena is the site for the annual King Biscuit Blues Festival, one of the largest blues festivals in the world.[37]

Helena has struggled to keep its downtown alive. But these days, more and more visitors make their way to Helena's historic Cherry Street to partake in the award-winning craft distillery products coming out of **Delta Dirt Distillery**, a Black-owned, farm-to-bottle craft distillery whose roots in the Delta are five generations deep.

CEO Harvey Williams and his wife and business partner Donna co-founded Delta Dirt Distillery as an extension of the 86-acre farm that originally belonged to Harvey's great grandparents, who were sharecroppers on the land. In 1949, Harvey's grandfather U.D. Williams managed to buy the farm with money he earned both from cotton harvest and a side business in homemade, corn-liquor moonshine. Harvey's father added sweet potatoes and other vegetables to the farm but still struggled to make a living on relatively few acres and limited access to capital for vegetable farming. In 2017, Harvey, an agricultural engineer, returned to the area and began working with his father and brothers to diversify the farm's products even further, thus the birthing of Delta Dirt Distillery.

In 2020, Harvey, Donna, and son, Thomas Williams (Head Distiller), released their first premium sweet potato vodka, which has gone on to win multiple awards, including double gold at the San Francisco World Spirits Competition, triple gold at the Microliquor Spirit Awards, and gold and best-in-class for vodka with the American Craft Spirits Association. The distillery has since raised angel funding from Pronghorn and has participated in accelerator/incubator programs. Their work has been featured in local and national news and media outlets, including Heinz's Black Kitchen Initiative podcast, the *Arkansas Times*, Arkansas Money and Politics, and Matter of Fact with Soledad O'Brian.

Delta Dirt Distillery is a family business. Harvey's brothers primarily run the farm operations. Harvey and Donna's other son, Donavan Williams, is Operations Manager and Director of National Sales. Delta Dirt is the only Black-owned farm-to-bottle distillery in the US, which means the products they use to create their vodka are grown on their farm. The distillery also makes gin and is developing a sweet potato bourbon to be released within the next year.

The distillery's popular tasting room sits in a once-rundown building on the National Register of Historic Places. It features a massive tasting room with a plush sitting area and a huge glass window giving visibility to the impressive copper still and stainless tanks. Earlier in 2023, the distillery won the prestigious statewide Tourism Attraction of the Year, awarded during the Arkansas Governors' Conference on Tourism.[38] By "catalyzing" Helena as a destination for craft liquors,[39] the Williams' are not only helping to revitalize their hometown but also inspiring a growing number of entrepreneurs of color in the Delta to develop and launch businesses that reconnect them with the land, family histories, authentic foods, and ancestral recipes that bring them pride.

PERSPECTIVE:

ANDREW GIBBS-DABNEY, LIVSN DESIGNS

Northwest Arkansas continues to be a great place to start and scale a business, but there are gaps that still need to be filled when it comes to sources of capital. My experience raising money in the state echoes this sentiment. I have been successful in raising from accelerators, angel investors, and equity crowdfunding but have had a harder time in other areas.

In Arkansas we are fortunate to have an amazing group of homegrown angel investors who are eager to invest in entrepreneurs in their backyard. The phrasing of "invest in entrepreneurs" is intentional. Early investors invest in founders and that investment is based on a personal relationship that establishes trust and unearths passion. Our down-to-earth style of doing business leads to great success in stoking these relationships. Groups such as Ark Angels, 412 Angels, Startup Junkie, and others are doing a great job of connecting people and it's something I'm excited to see continue to grow.

The gap I've witnessed is for larger early-stage investments, such as investments of $500k-$3M into Seed and Series-A stage companies. If you need $200k in pre-seed capital from angels or $10M in growth equity from PE, our state has the resources to get those rounds done, but it's the middle where we struggle to build infrastructure. There's a bit of a chicken-or-the-egg situation here where we need the companies to attract the capital, and the capital to attract the companies. This isn't a new issue for emerging markets, however, and I'm confident our community will solve for the gap very soon.

One creative option for founders is to pursue an equity crowdfunding campaign through Wefunder, in 2022, it was out of the desire to bring our biggest fans into the company as investors. I think there's something special in the alignment of incentives between owners and customers, and equity crowdfunding gives a unique method of doing just that. We ultimately raised just under $420k from over 400 of our customers, friends, and neighbors. I love it when I meet someone locally who tells me they're an owner in LIVSN.

One thing I know for certain is that I can't predict the future, but the spirit of optimism that permeates our corner of the state is contagious and I believe we are at the beginning of a long bull run for Arkansas startups. If anyone is reading this and wondering if there's enough support here to start their business, my answer is a resounding yes. If you had told me five years ago that we have been able to raise nearly $2M from Arkansas investors, I'm not sure I would've believed it, but it happened for us and it can happen for you too. Here's to the future, and many more problems to solve.

IMPORTANCE OF ENTREPRENEURSHIP AND VENTURE CAPITAL IN ECONOMIC DEVELOPMENT

ARKANSAS SECRETARY OF COMMERCE, HUGH MCDONALD

Entrepreneurship has a long history in Arkansas. Stretching back to the early 19th century and the founding of the Rose Law Firm to the creation of Walmart by Sam Walton, to up-and-coming technology startups like Apptegy and AcreTrader, Arkansas has served as a base for entrepreneurs to launch successful businesses.

Today, we aim to continue that tradition and build on it.

In Arkansas, we have a growing ecosystem of entrepreneurial support organizations, business accelerators, and other resources that are helping entrepreneurs start, capitalize, and run their companies.

Entrepreneurs and small business owners are the lifeblood of the economy, bringing new ideas and products into the marketplace. According to the U.S. Small Business Administration's 2022 Arkansas Small Business Profile, there were 264,245 small businesses in Arkansas—making up 99.3 percent of the state's businesses. These businesses employed 497,605 workers, or 47.2 percent of the state's workforce.[40]

Based on the Ewing Marion Kauffman Foundation's latest State Report on Early-Stage Entrepreneurship in the United States, Arkansas had a 93.1 percent opportunity share—the highest in the nation. This statistic reflects the number of entrepreneurs who created businesses out of choice rather than necessity.

Arkansans want to start new businesses—and they are making it happen. We just need to make it easier for them to start and grow their ventures. One of those ways is increasing access to venture capital in the state.

Venture capital has long been concentrated on the coasts—Silicon Valley, New York, Boston and other metro areas—and it still is, but Arkansas is making headway in attracting more VC investment.

In 2022, Arkansas companies raised $201.2 million in venture capital – a record for the state and an 87 percent increase from 2021's total of $107.6 million. However, this is only a small slice of the $238.3 billion of venture capital that was deployed in the U.S. in 2022.[41]

At the state level, we are deploying programs that will help Arkansas entrepreneurs and business owners access capital to grow their businesses.

Arkansas has received $81.6 million from the U.S. Department of the Treasury for the State Small Business Credit Initiative (SSBCI) program, which helps small businesses access capital and will support entrepreneurship growth in our state. We are allocating $35.6 million to small business programs, including $15 million to a loan guarantee program and $7.5 million to a loan participation program to reach underserved businesses in Arkansas.

The Arkansas Development Finance Authority (ADFA) has equity and venture capital programs with an allocation of $46 million that will target investment in high-growth companies based in Arkansas. ADFA will be capitalizing seed and early-stage venture funds that are focused on investing in Arkansas-based companies.

These programs will support Governor Sarah Huckabee Sanders' large-scale efforts to prioritize entrepreneurship, small business support, and workforce development; cultivate a business-friendly environment; and stimulate aggressive economic growth.

The Arkansas Department of Commerce is committed to making entrepreneurship a key component of our economic development strategy. This is a long-term approach that will help lift our state as a whole.

In Arkansas, we know how to work together. That collaborative culture combined with our spirit of entrepreneurship are the necessary ingredients to build a new future in The Natural State.

NATIONAL TRENDS[42]

In 2022, $238.3 billion in venture capital funding was invested across the U.S.[43] As noted in the angel/seed section, this was a decline compared to 2021's record $344.7 billion.[44] In 2022, companies across the world received 37 percent less in venture capital funding. Despite this significant dip, 2022 was the second-highest year on record for venture capital activity.[45]

According to Pitchbook, 2022 saw a shift from a startup and founder-friendly investment environment to a more investor-friendly one. This was due to "capital demand outstripping supply, and a decline in valuation step-ups."[46] After the surge of activity in 2021 and the first nine months of 2022, in Q4, VCs became more cautious and slowed their pace of investment in the face of inflation, global geopolitical tensions, and banking sector turmoil. Q4 saw a 6 percent decline in VC funding compared to Q3 (and down 59 percent from Q4 in 2021) making it the lowest quarter of investment since Q1 2020.[47]

By returning to pre-pandemic growth norms, on the national scale the steady decline in venture capital investment at the close of 2022 makes 2021 look like an "outlier" investment year.[48] Arkansas, however, paints a different picture: contrary to the national trend (and contrary to angel/seed funding trends in Arkansas), 2021 was a precursor to the even higher rates of venture capital investment that followed in 2022, when venture capital investments significantly eclipsed 2021 and 2020–both in number and size.

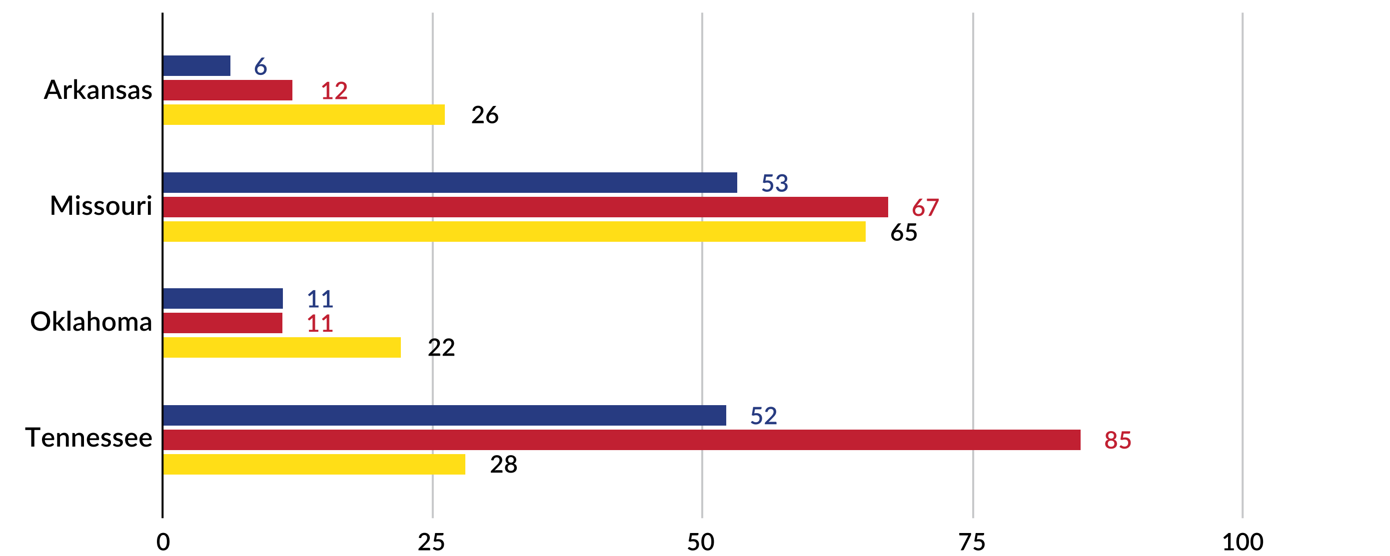
Despite this growth, the infusion of capital that venture funding has brought into the state has not been equally distributed. As in 2021 and 2020, businesses founded by women and people of color received far less funding in 2022 than businesses founded by white men. Similarly, the Northwest region of the state has seen more venture capital growth than other parts of Arkansas (an important note, given that in 2022 NWA saw the steepest declines in the state in terms of angel/seed funding).

2022 VENTURE CAPITAL INVESTMENTS IN ARKANSAS

In 2022 in Arkansas, $270,760,000 in VC funding was deployed across deals for 26 companies. This was a 117 percent increase over investments in 2021, which alone saw an increase of 676 percent over 2020. While growth was smaller in 2021, companies in Arkansas continued to experience a significant upward trajectory in venture capital funding. Even more impressive than the increased totals, the number of venture capital deals in Arkansas in 2022 more than doubled from 2021–from 12 to 26 (up from 6 in 2020). The average size of investments in 2022 did not change much from 2021. In 2022, Arkansas moved significantly ahead of Tennessee, formerly the regional leader, in terms of the total amount of funding: Arkansas' $270.8 million in VC investments was 43 percent higher than Tennessee's $188.3 million. That is partly because Tennessee had 67 percent fewer deals than in 2021–falling from 85 to just 28. The number of investments in Arkansas were also on par with the number of investments in Oklahoma. However, the total number of deals in Arkansas was significantly less than those in Missouri (26, compared to 65).

The growth in the number of venture capital-stage investments in Arkansas is a logical follow-up to the past few years' growth in angel/seed investments. Many of the angel/seed investments our report analyzed in 2020 and 2021 laid the groundwork for venture capital investments in 2022, including those of AcreTrader, CardioWise, Cooks Venture, Good Day Farm, Lineus Medical, Tesseract, and Zebra Analytix. Notably, the top 10 companies receiving venture capital funding in 2022 are, on average, only eight years old.

Venture Capital Investments | # of Investments



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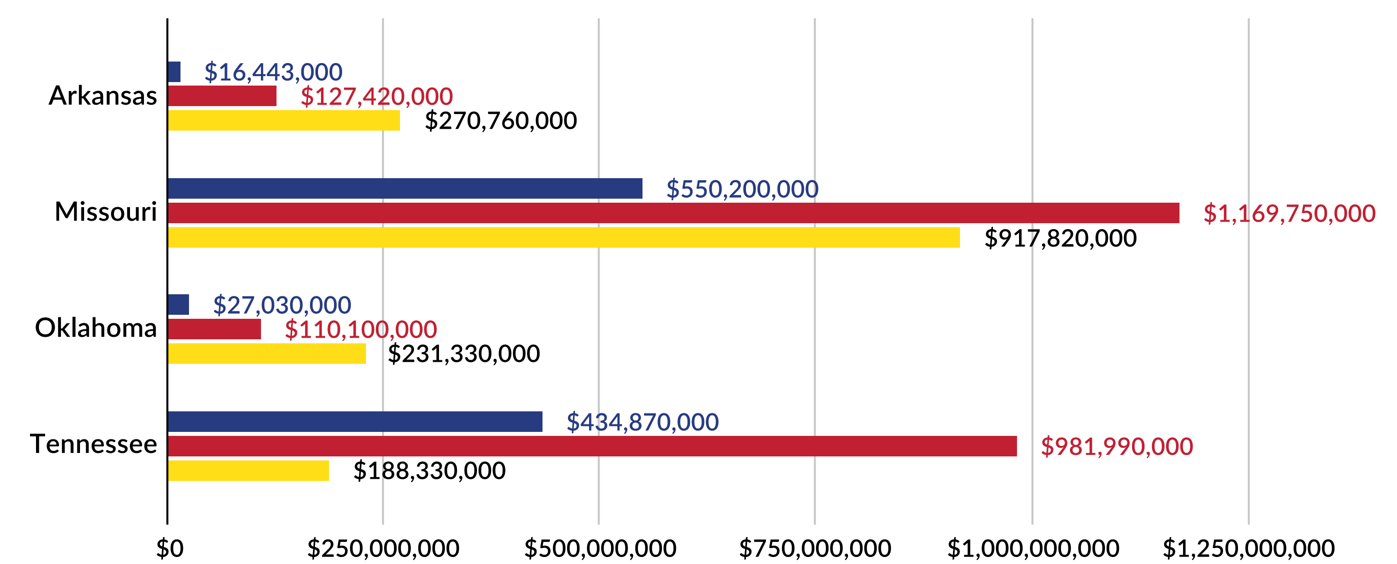
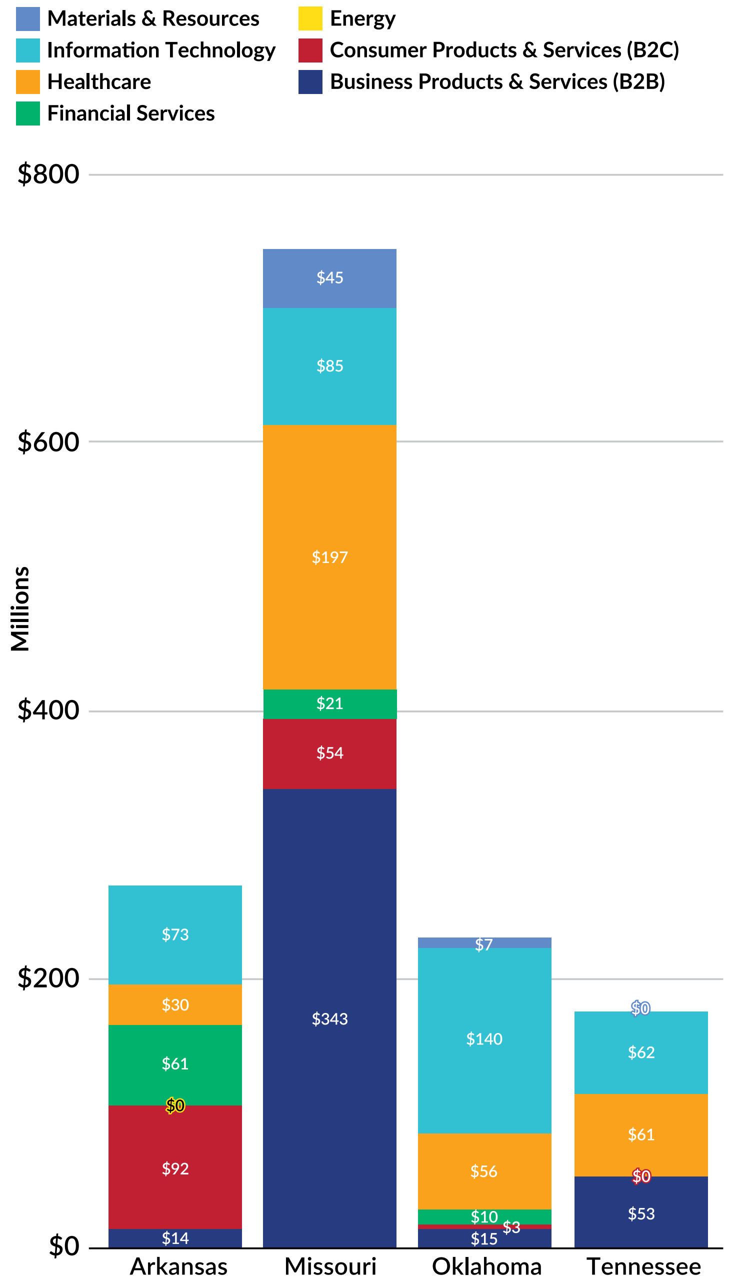


VENTURE CAPITAL INVESTMENTS BY ARKANSAS INDUSTRY

As in 2021, a majority of the investment value in 2022 was driven by a small number of businesses, with the top five businesses representing 71.7 percent of everything raised. These businesses were the same Agricultural and Agricultural adjacent companies as last year. The top three–Acre Trader ($60.8 million raised), Good Day Farm ($56.5 million raised), and Cooks Venture ($35.4 million raised) were categorized as agricultural companies last year and represent 66.9 percent of everything raised.[49]

However, agriculture isn't the only industry receiving venture funding. As the chart shows, venture capital investments are reaching diverse sectors in Arkansas.

Venture Capital Investments $ by Industry and State



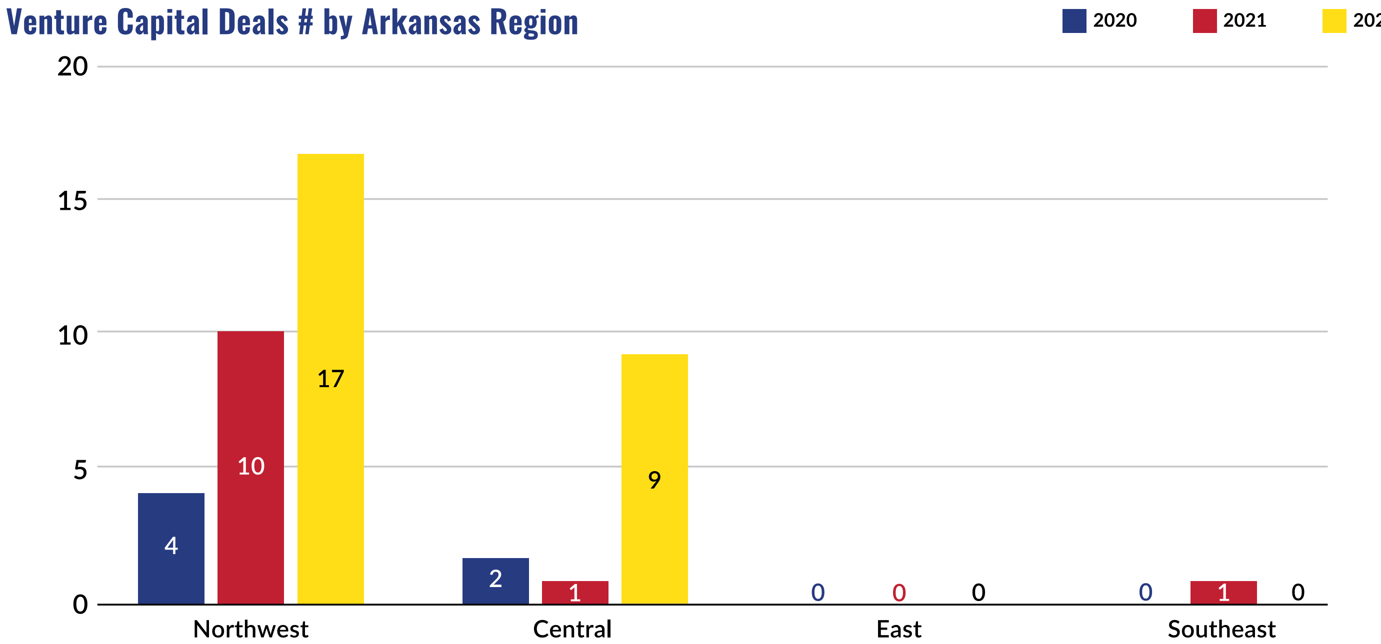
VENTURE CAPITAL INVESTMENTS BY ARKANSAS GEOGRAPHY

Northwest Arkansas continues to drive the majority of the state's venture capital funding, with 65.4 percent of all deals in the state (17 out of 26), representing 76.8 percent of all funding. However, there were nine venture capital deals in Little Rock and North Little Rock in 2022, compared to only one deal in 2021 and two in 2020 (an 800 percent two-year increase). Central Arkansas deals made up 23.2 percent of the state's total venture capital funding in 2022. Taken together, NWA and Central Arkansas dominated VC investments in 2022. In fact, research yielded no post-seed stage venture capital deals in other Arkansas regions.

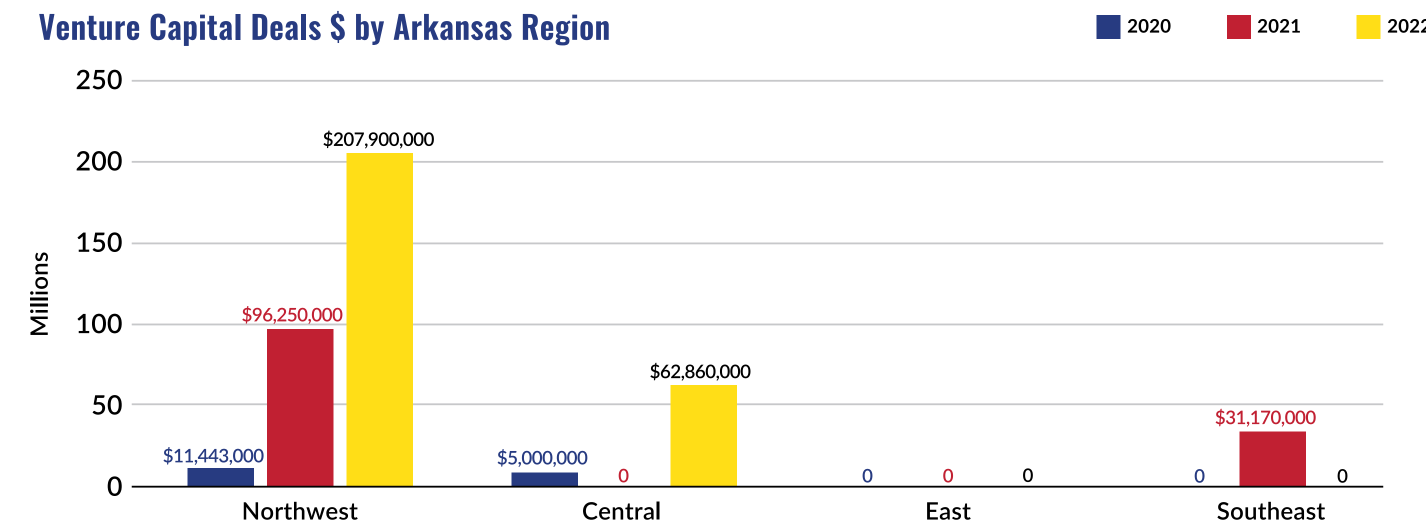
Notably, in 2022, none of the top 10 deals were first-round venture investments. The top deal–$60.8 million to Fayetteville's Acre Trader–was a Series B deal. The second-highest deal (Good Day Farm, $56.5 million) was a Series C deal. And the third highest deal ($35.4 million to Cooks Venture) was a fifth-round deal.

These statistics show that when Arkansas companies graduate from angel to seed to series A, they have the highest potential to drive investment and economic growth in the state, as exhibited by the fact that 2022's top ten venture capital deals all went to young Arkansas companies that, collectively, already employ 780 employees.

Venture Capital Deals # by Arkansas Region



Venture Capital Deals $ by Arkansas Region



Venture Capital | Deals $ by Region

Region	2020	2021	2022	% of Change
Northwest Arkansas	$11,443,000	$96,250,000	$207,900,000	116.00%
Central	$5,000,000	$0	$62,860,000	-
East	$0	$0	$0	-
Southeast	$0	$31,170,000	$0	-100.00%
Sum Total	$16,443,000	$127,420,000	$270,760,000	112.49%

VENTURE CAPITAL INVESTMENTS BY DEMOGRAPHIC

In 2021, Arkansas saw a 674 percent increase in venture capital funding that resulted in an influx of funds that went almost exclusively to white male business owners. 2022 continued to see the vast majority of venture capital investments go to businesses owned by white men, but there were some improvements.

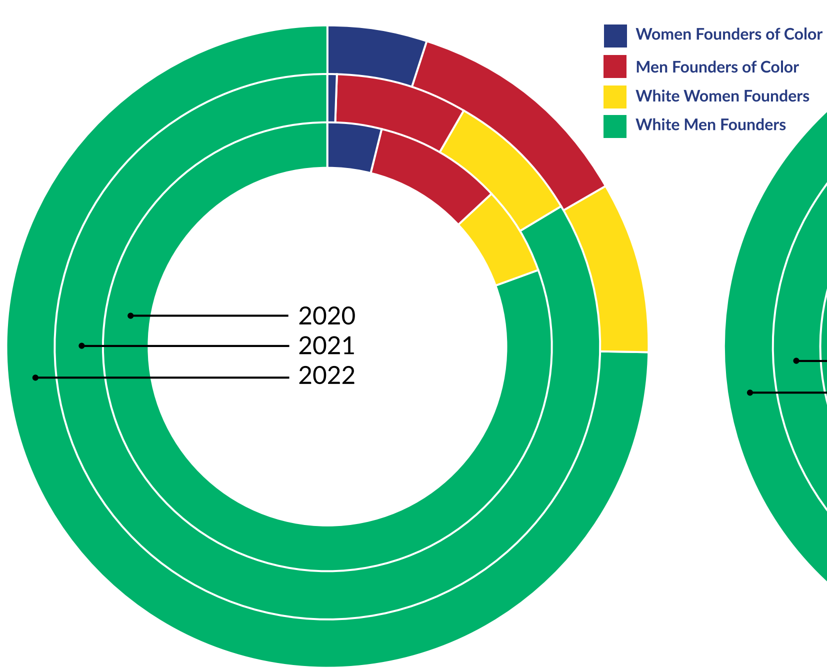
In 2022, 19 out of 26 (73 percent) of Arkansas' venture capital deals went to businesses owned by white men, an improvement over 2021's 91.7 percent or 11 out of 12 deals. In terms of total dollars invested, in 2022, 84.3 percent of total venture capital funding went to businesses owned by white men, an improvement over the fact that in 2021 99 percent (and, in 2020, 100 percent) of VC funding went to white male-owned businesses.

By comparison, two deals and $12.3 million (4.53 percent) of Arkansas' 2022 venture capital funding went to companies owned by white women (compared to zero in 2021). Three deals and $27.8 million (10.3 percent) went to companies owned by men of color (up from $500,000 and 0.4 percent of total funding in 2021), and one deal, for $2.43 million (0.9 percent of total), went to companies owned by women of color (also up from zero in 2021). This single venture capital investment in a company owned by a woman of color in Arkansas went to Ox, a supply chain automation company headquartered in NWA. Ox's $2.4 million raised was Arkansas' ninth largest deal in 2022.

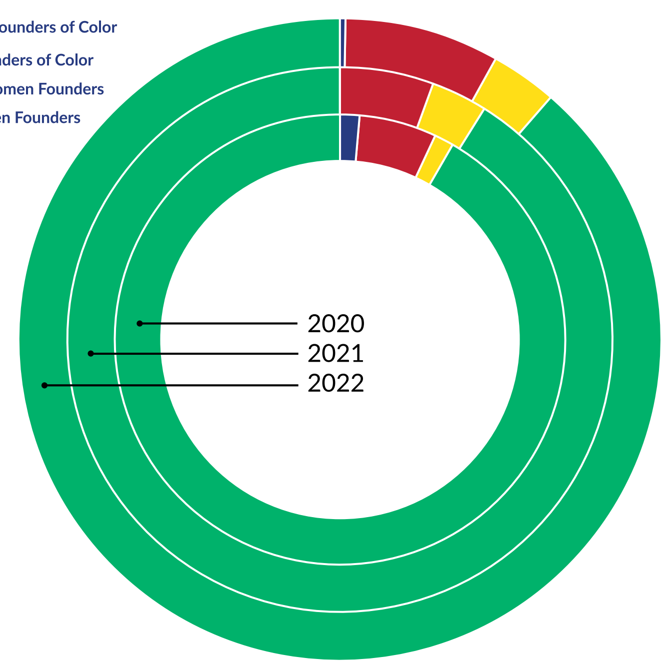
As the charts show, Arkansas remains behind both Missouri and Oklahoma in terms of the percentage of venture capital deals going to minority and women business owners.

When it comes to the size of deals, however, a larger percentage of total venture capital funding is going to women- and minority-owned companies in Arkansas than in Missouri and Oklahoma (15.7 percent of all VC funds,compared to 8.8 percent in Missouri and 7.8 percent in Oklahoma). In Tennessee, 19.2 percent of deals and 20.8 percent of total VC funding went to companies owned by people of color or white women.

Venture Capital Investments # by Ownership Across All Comparable States

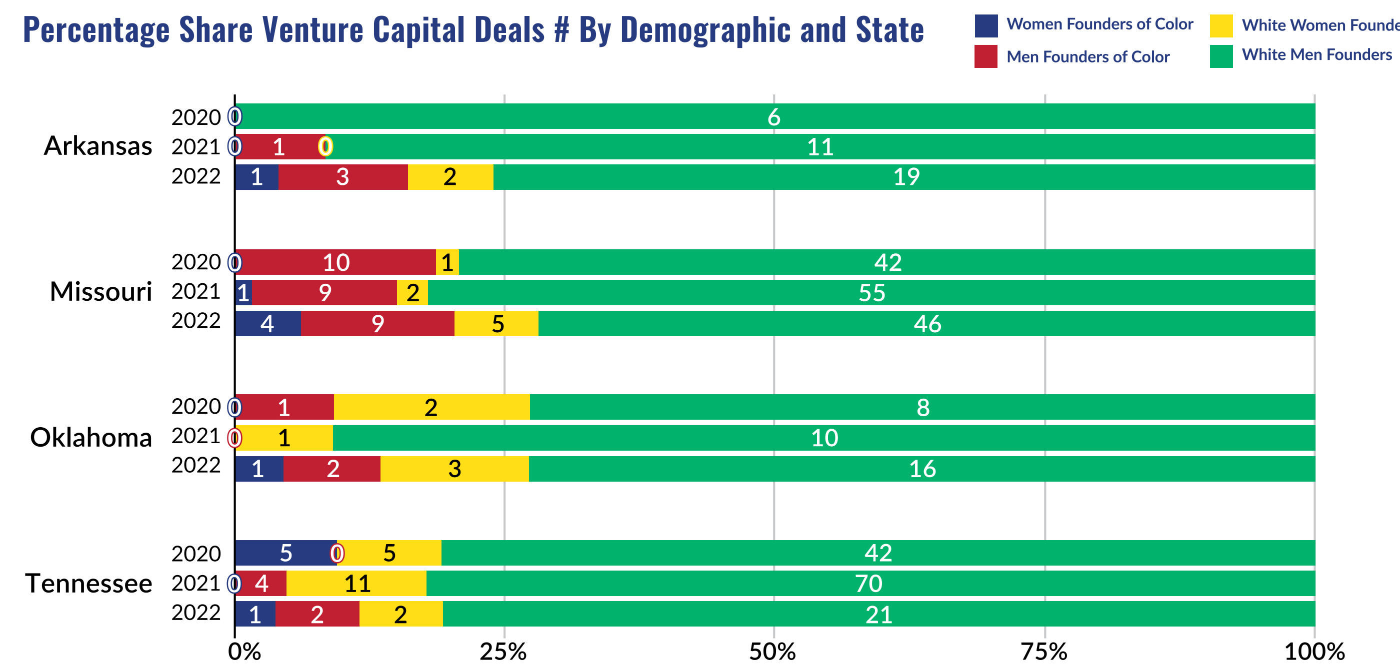


Venture Capital Investments $ by Ownership Across All Comparable States

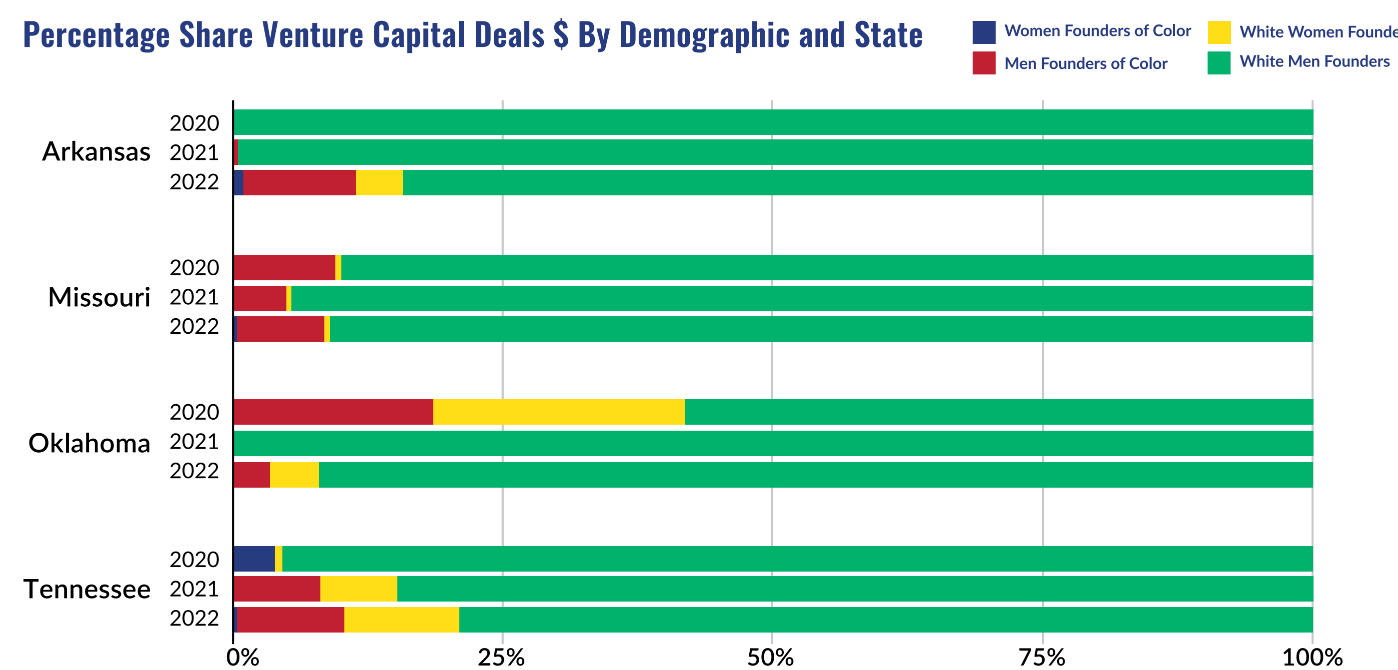


Among the four comparison states, 2022 saw a significant improvement in the amount of venture capital deals going to businesses owned by women of color. Seven deals total went to businesses owned by women of color, for a total of $4.71 million. This is 0.33 percent of the total $1.4 billion in VC funding invested in all four states.

Percentage Share Venture Capital Deals # By Demographic and State



Percentage Share Venture Capital Deals $ By Demographic and State



PERSPECTIVE:

BJORN SIMMONS, EXECUTIVE DIRECTOR OF THE MULTICULTURAL BUSINESS XCELLERATOR AT WINROCK INTERNATIONAL

Failure is Not an Option: Unlocking the Full Potential of Arkansas

Arkansas, the cradle of eminent African American entrepreneurship, echoes the words of John H. Johnson, founder of *Ebony* and *Jet* magazines, "Failure is a word I don't accept." This spirit of perseverance shapes our commitment to nurture economic inclusion and prosperity within the state. At the heart of any thriving business ecosystem lies an equitable distribution of capital, which acts as a catalyst for innovation, job creation, and economic growth. However, generational disparities in capital distribution, especially for founders of color, signal a hurdle that we cannot continue to accept. If we are to ever truly unlock the abundant potential within Arkansas, addressing this glaring inequality is a mission we must undertake.

Despite representing over 30% of the U.S. population collectively, the representation of Black and Latinx entrepreneurs in the realm of venture-backed startups is meager. Nationally, Black entrepreneurs lead only about 1% of venture-backed startups, with Latinx founders slightly ahead at 2% (RateMyInvestor and Diversity VC report, 2019). In Arkansas, these discrepancies are even more acute, with less than 1% of venture capital funds being channeled to businesses helmed by founders of color (National Venture Capital Association, 2022). Furthermore, firms owned by women and minorities manage a paltry 1.3% of the asset management industry's $69 trillion in assets (Knight Foundation report).

Parallel to venture capital disparities, entrepreneurs of color face disproportionate challenges in accessing lending. Minority business owners tend to receive smaller loans, endure higher denial rates for credit, and pay steeper interest rates than their non-minority counterparts, even after accounting for factors like creditworthiness and business size (MBDA, 2010). These systemic issues are further amplified in states like Arkansas, with expansive rural areas and low levels of venture capital investment.

Accepting failure is not an option when it comes to supporting our entrepreneurs of color and closing the capital gap. It's not enough to merely recognize these disparities; it's crucial to actively work against them. To bridge these glaring disparities, I propose a three-fold strategic approach.

First, an emphasis must be placed on steering investments toward funds that are led by and committed to founders of color. These funds, like High Street Equity Partners, provide much-needed capital, as well as a nuanced understandings of the unique challenges and prospects that such founders encounter. Furthermore, supporting fund managers of color creates an inclusive ecosystem that reflects the diversity of our communities and ensures that investment decisions are equitable and with representation.

Second, we need to advocate for more alternative capital solutions like revenue-based financing, community public offerings, and impact investing. Impact investing, in particular, holds the potential to bridge the capital gap experienced by entrepreneurs of color by coupling financial returns with social or environmental benefits. Philanthropic organizations can play an integral role in this respect, by providing seed funding and credit enhancements.

Lastly, building partnerships among financial institutions, investors, and both corporate and entrepreneurial support organizations is crucial. Such collaborations not only lead to innovative capital solutions and accelerated growth among diverse businesses but also play a significant role in educating and upskilling the entrepreneurial talent pool. This multi-faceted approach will not only drive business success but also attract outside investments, mitigate risks, and strengthen the overall economic fabric of our communities.

Insights about what must be done to drive equality in entrepreneurship have spurred the establishment of The Multicultural Business Xcellerator (MBX), an Arkansas-based organization dedicated to fostering an inclusive innovation ecosystem that genuinely empowers entrepreneurs of color. By fostering a culture of intentionality, MBX is dedicated to catalyzing pathways for entrepreneurs of color in the innovation economy with the essential capital, education, and deal-flow opportunities that they need to succeed.

The success stories of entrepreneurs like John H. Johnson and O.W. Gurley, founding father of Tulsa's "Black Wall Street", bear testament to the immense potential that Arkansas possesses. Their entrepreneurial prowess affirms that, given the right opportunities and resources, diverse entrepreneurs from Arkansas can not only thrive but also significantly enrich our diverse communities abroad.

In the words of another great Arkansas founder, Sam Walton, "Capital isn't scarce; vision is." This quote reminds us that access to capital is essential, but we can no longer continue to limit the vision of our founders of color by perpetuating limited resources. By providing intentional inclusive capital and fostering an equitable ecosystem, we empower entrepreneurs of color to realize their vision and contribute to the prosperity of Arkansas.

In collaboration with stakeholders across Arkansas—entrepreneurs, government entities, investors, corporate organizations, and philanthropic non-profits—the MBX invites you to join us in crafting a future that epitomizes equitable prosperity, where all individuals can participate and thrive. Together, we can break down the barriers that hinder the success of entrepreneurs of color and build a vibrant, inclusive economy. By ensuring we do not fail our underserved communities, we unlock the full potential of Arkansas' economy and pave the way for a future of shared success. This is the Arkansas we envision, and this is the Arkansas we are determined to build.

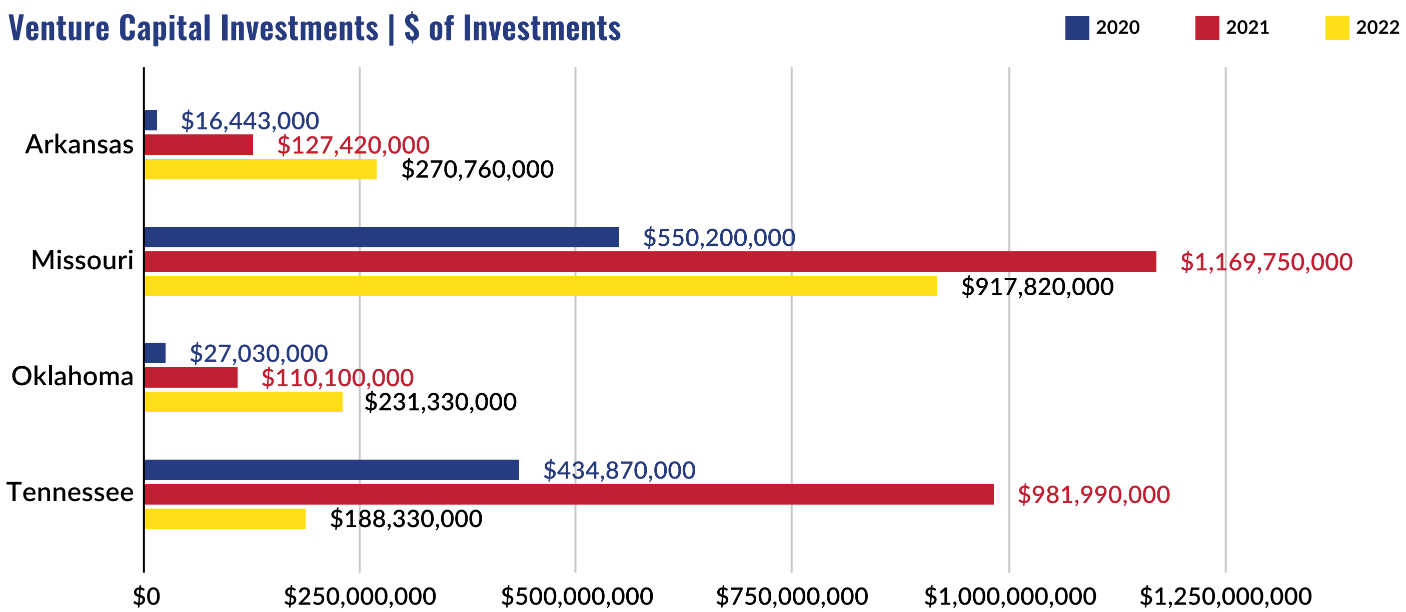
VENTURE CAPITAL INVESTMENTS BY COMPARISON GEOGRAPHIES

As stated in the introduction to this chapter, in terms of total venture capital investment, in 2022 Arkansas was 43 percent ahead of Tennessee and ahead, to a lesser extent (17 percent), of Oklahoma. In 2022, Missouri led the four-state region with $917.8 million total VC dollars invested (239 percent ahead of AR).

Venture Capital Investments | $ of Investments

State	2020	2021	2022	% of Change
Arkansas	$16,443,000	$127,420,000	$270,760,000	112.49%
Missouri	$550,200,000	$1,169,750,000	$917,820,000	-21.54%
Oklahoma	$27,030,000	$110,100,000	$231,330,000	110.11%
Tennessee	$434,870,000	$981,990,000	$188,330,000	-80.82%
Sum Total	$1,028,543,000	$2,389,260,000	$1,608,240,000	-32.69%

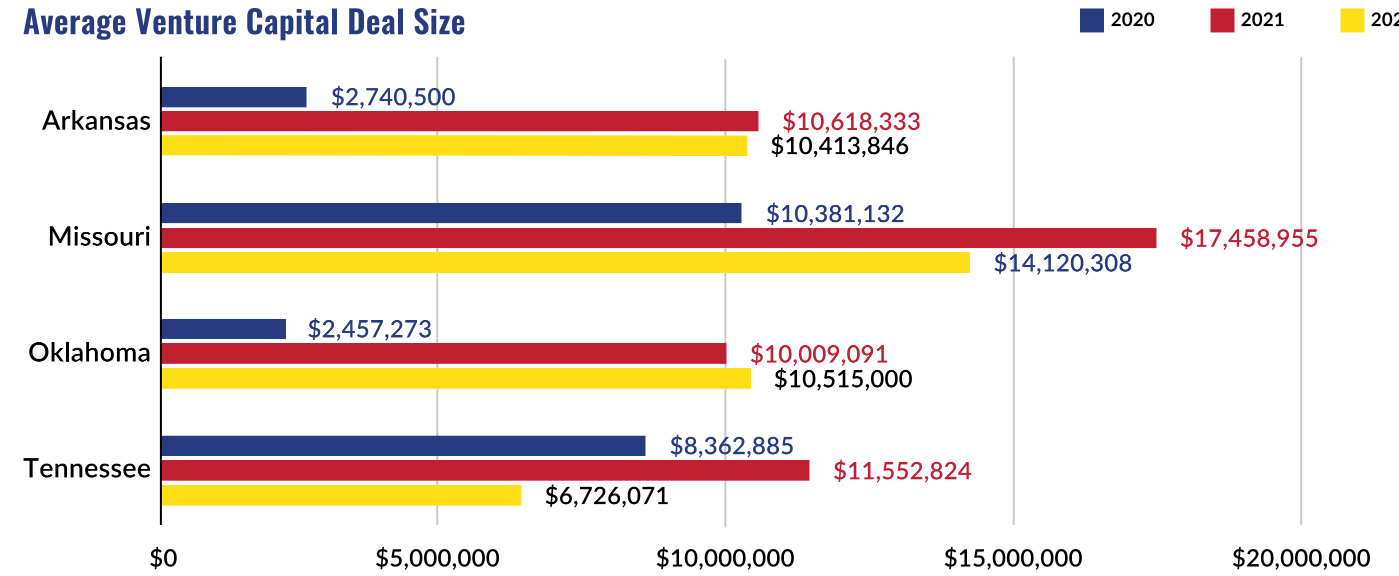
Venture Capital Investments | $ of Investments



When it came to deal size, in 2022 Arkansas remained behind Missouri, as in 2021. But Arkansas was on par with Oklahoma and moved significantly ahead of Tennessee this year–an improvement from 2021 when Arkansas was significantly behind both Tennessee and Missouri.

It is notable that in every state the majority of investment dollars was distributed among only a handful of companies. In Missouri, the top three companies made up 67.1 percent of all dollars raised. In Tennessee, the top three companies made up 61.3 percent of all dollars raised. And in Oklahoma, the number one company raised 60.9 percent of all venture capital funding in the state.

Average Venture Capital Deal Size

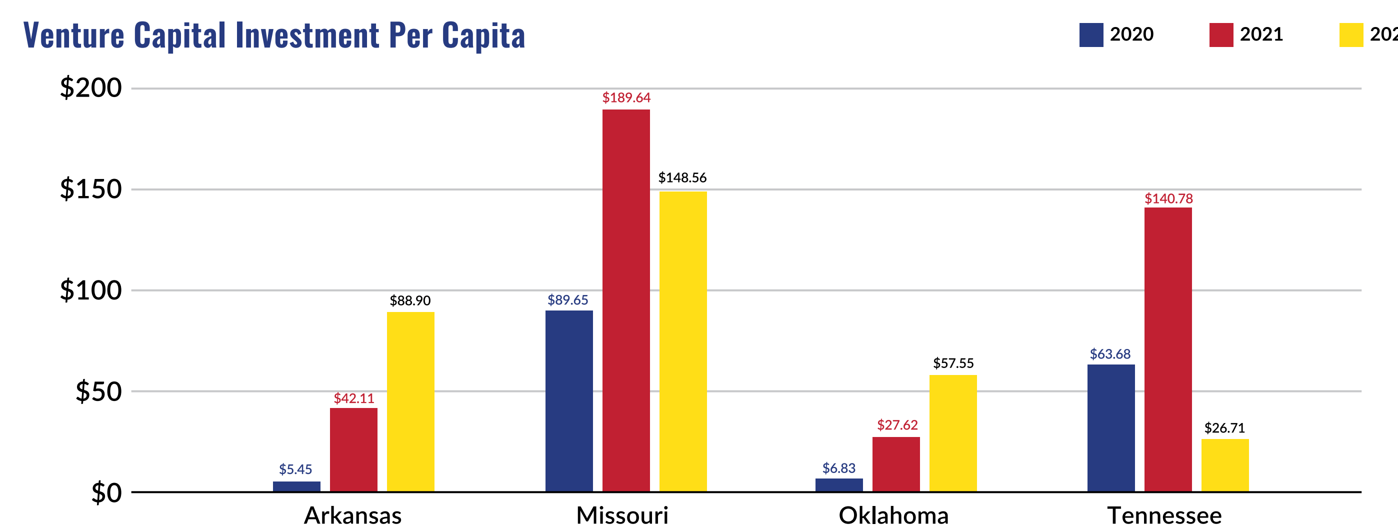


VENTURE CAPITAL INVESTMENTS PER CAPITA COMPARISONS

Per capita rates of venture capital investment in Arkansas more than doubled in 2022 (from $42.11 to $88.90 per Arkansas resident). This rise reflects the increase in the number of deals in Arkansas, as well as, to some extent, the increase in average deal size. If we look at the change in per capita investment over the past three years, the increase is remarkable: Arkansas has gone from an average of $5.45 per resident invested in 2020 to $88.90 in 2022, an increase of over 1,500 percent (the state's population has only increased by 1 percent during this time).

By comparison, Tennessee's per capita rate fell significantly this year, from $140.78 per resident to $26.71 (a decrease of 81 percent). Missouri's per capita investment also fell, by 21.6 percent. Oklahoma's increased, but not as much as that of Arkansas. Also notable is that over the past three years, Oklahoma has seen a similar per capita increase as that of Arkansas (going from $6.83 per resident to $57.55, for an increase of 1,346 percent).

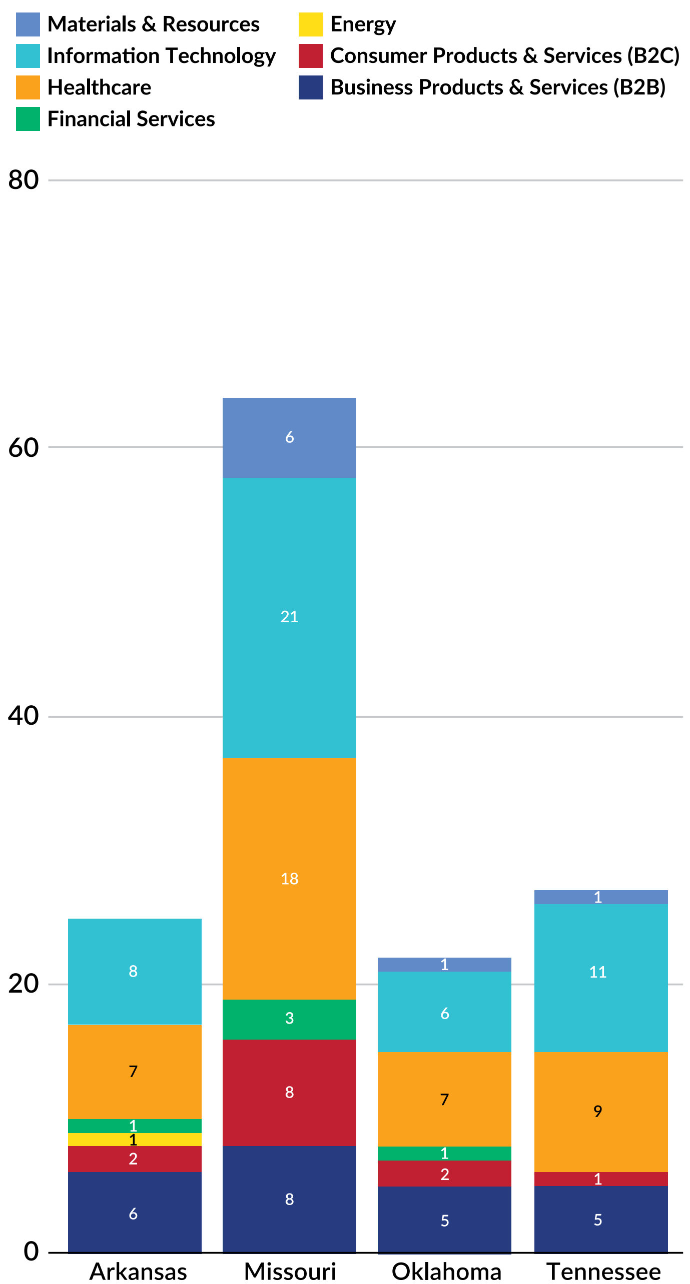
Venture Capital Investment Per Capita



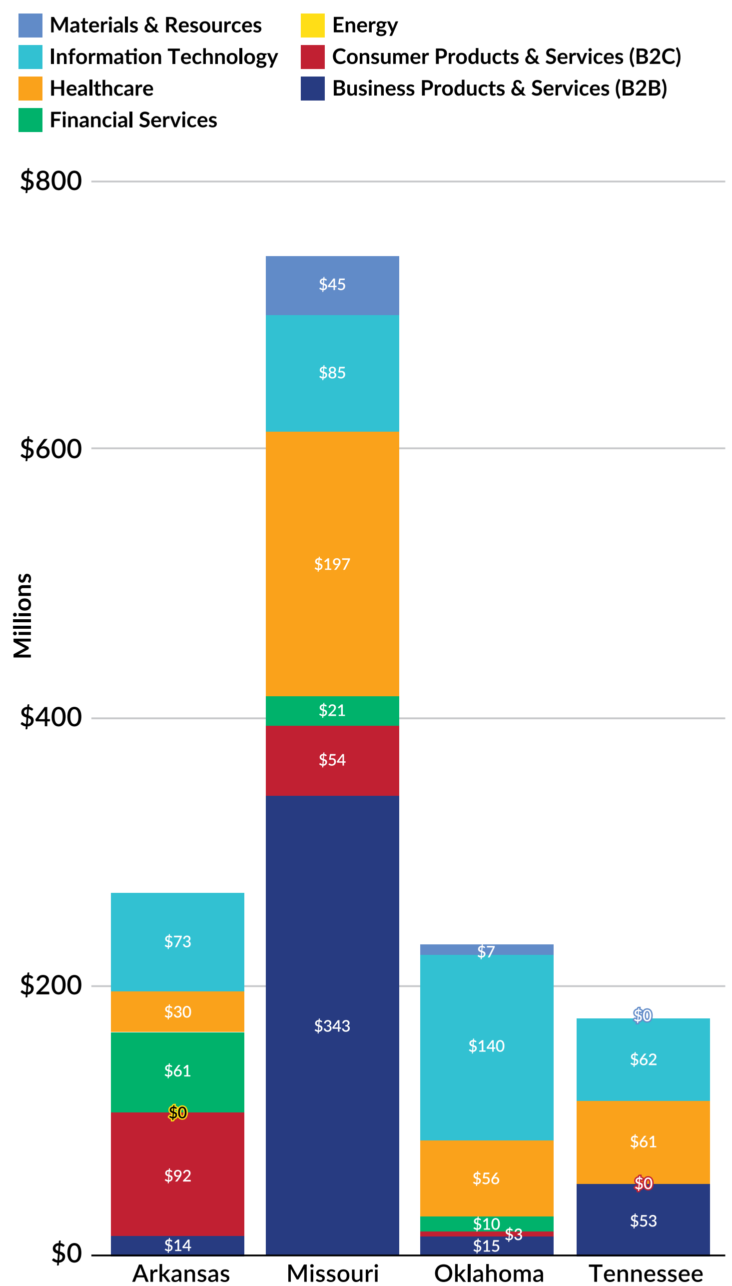
VENTURE CAPITAL INVESTMENTS COMPARISON BY INDUSTRY

As noted in the introduction to this chapter, in 2022, Arkansas' venture capital deals were significantly more diversified, by industry/sector, than in the comparison states. 28 percent of Arkansas deals were in healthcare, 32 percent were in information technology, and 24 percent were in business products and services. One notable detail is that the percentage of venture investment going to information and technology in Arkansas is significantly higher than the percentage of angel/seed investments going to the same sector.

Venture Capital Investments # by Industry and State



Venture Capital Investments $ by Industry and State



$92 million, or 34 percent, of total venture capital investment in Arkansas in 2022 went to Consumer Products and Services. Again, this percentage was driven by investments in two agricultural companies–Cooks Venture and Good Day Farm–that were discussed above (AcreTrader, which achieved the highest deal of 2022, is also agricultural-adjacent but because it is an investment platform for farmland it is classified as financial services).

PERSPECTIVE:

JARED GREER, LAPOVATIONS

Navigating the Capital Landscape in Arkansas: A Medical Device Startup Perspective

Arkansas has been instrumental to our progression at Lapovations, a medical device company developing a platform of innovative products to improve laparoscopy. Founded in Fayetteville in 2016, we have leveraged many resources and support from higher education, business incubators, entrepreneurial support organizations, and state agencies. This ecosystem of support catalyzed our growth from an idea on the back of a napkin to a company with nearly $4M in total funding to date, and our flagship product, AbGrab®, being carried by over 50 independent sales representatives across the U.S.

Organizations like the University of Arkansas Office of Entrepreneurship and Innovation, Startup Junkie, Innovate Arkansas, and the Arkansas Small Business and Technology Development Center (ASBTDC) were instrumental during our early stages, providing not just funding but also strategic advice, mentorship, and networking opportunities. HealthTech Arkansas, with its specialized focus on healthcare technology startups, has also been a valuable partner, helping us navigate the complex healthcare landscape.

Equally vital was the role of government organizations within the state – Arkansas Economic Development Commission (AEDC) and Arkansas Development Finance Authority (ADFA) provided working capital through the SBIR Matching Grant, R&D Tax Credit, Equity Investment Tax Credit, and Venture Capital Development Fund, allowing us to focus on our core mission – developing products that revolutionize laparoscopic surgery.

However, despite the robust support ecosystem, we did encounter hurdles when it came to raising capital. Our experience raising a $1M Series A highlighted a critical gap in Arkansas's capital landscape – an under-developed organized angel capital landscape. Given the size of our round, we were too small for traditional venture capital, and the absence of a well-developed organized angel network within the state made the raise much more challenging. We were able to persevere, raising an oversubscribed $1.25M round, but the vast majority was sourced from individual angels, almost all unaffiliated with an organized group.

While this approach was ultimately successful, the process of independently identifying and engaging individual angels diverted focus and energy from our core mission, a challenge many other startups may find insurmountable, highlighting the fact that the current situation is not a sustainable solution for the broader entrepreneurial community in Arkansas. A more robust and well-developed angel capital network could bridge this funding gap, saving startups valuable time and resources, and propelling more to success.

We remain optimistic. The entrepreneurial spirit is strong in Arkansas, the support infrastructure is impressive, and newly launched organized angel groups provide hope for the future. We believe that acknowledging and addressing this funding gap will only strengthen the state's startup ecosystem, paving the way for more success stories.

Our journey at Lapovations, although far from over, has been both challenging and rewarding. We have flourished thanks to the unique blend of resources and support in Arkansas and we look forward to continuing to contribute to Arkansas' growth and rise to prominence in startup culture.

Venture Capital Investments Case Study:

HIVERY

Data has a better idea

HIVERY – an AI-driven retail strategy simulation & optimization company–raised $42M in funding over 6 rounds led by Blackbird Ventures and Tiger Global Management. HIVERY is based in Sydney, Australia, with offices in Bentonville and Tokyo, Japan.

With a vision to harness the transformative potential of data and unlock new possibilities, the company was founded in 2015 by Franki Chamaki and Jason Hosking, along with Matthew Robards and Menkes van den Briel from CSIRO's Data61-Australia's world-leading national science agency.

HIVERY uses machine learning and applied mathematics methods to enable major retailers and CPG brands to understand shoppers' preferences by analyzing and discovering humanly impossible purchasing patterns and recommending the best store strategy to execute. *"By leveraging store-level data, we deeply understand each store's unique customers, needs, and preferences. Shoppers vote with their dollars daily in the store, and our technology makes this visible"*.[50] HIVERY's tagline, "Data has a better idea™," sums up the company's view that AI is the key to creatively disrupting and expanding retail landscapes.

HIVERY's cutting-edge analytics offering, HIVERY Curate, optimizes and simulates brand portfolio, assortment, and space strategies at the store level. What takes several months can now be accomplished in minutes.

The company currently serves the top 25 retail and CPG brands worldwide and is growing, covering North America, LATAM, and the UK, and operating in over 110 different categories of CPG/retail combinations resulting, on average, in 5% incremental sales growth and labor tasks reduction by 80%. In 2023, HIVERY secured its first annual license exceeding $1 million in ARR from a single CPG brand.

In 2022 and 2023, HIVERY was recognized as one of CB Insights top 100 Retail Tech companies and featured on Fast Company's list of the World's Most Innovative Companies.

The company's global team brings extensive experience from data and technology companies such as Numerator, 84.51˚, Dunnhumby, NielsenIQ, SPINS, and IRI, as well as deep industry know-how from Coca-Cola, Pepsi, Molson Coors, P&G, Kroger, and other notable companies. HIVERY employees are split between Australia, Japan, and North America and are poised to expand next year to meet customer demand.

Venture Capital Investments Case Study:

soda health

Social Determinants of Health (SDOH) have a major impact on health and well-being and the cost of healthcare in the U.S. **Soda Health**, a Bentonville-based healthcare technology company, is focused on eliminating the inequities that shape SDOH in order to create a healthier nation. In fact, the company is so focused on its mission of eliminating health inequities and creating a healthier nation that its founders worked the problem they're trying to solve into the company name.

Soda Health received a May 2022 Series A deal for $25 million. The investor syndicate for this deal included Lightspeed Venture Partners, Define Ventures, and Qiming Venture Partners USA. Soda Health's ability to attract investors is accelerating this rapidly growing NWA startup's capacity for achieving its mission on a national scale.

Soda Health's approach to growing equity in the healthcare system focuses on streamlining users' access to the supplemental benefits that they and their families need and can benefit from the most. Understanding and keeping track of supplemental health plan benefits, such as fitness, food, or over-the-counter medication benefits, is difficult. Blocked by the confusing and cumbersome processes of using these benefits, many people (especially the elderly, sick, or those struggling with the stress of living in poverty) opt not to use their supplemental benefits at all. By "personalizing the benefits" offered to healthcare plan members–especially Medicare Advantage and Medicaid members–Soda Health is working to "ensure every dollar addresses the disparities people experience across the range of social determinants of health."[51]

Soda Health's member platform provides a "simplified, frictionless member experience to easily use these vital resources for access to better health. Meanwhile, the platform also benefits the retailers who provide the benefits, a key reason why major retailers, like Albertsons, are interested. Several former Walmart executives are part of Soda Health's founding team, including CEO Robby Knight, Chief Growth Officer Daryl Risinger, and Head of Operations Jared Dauman.[52]

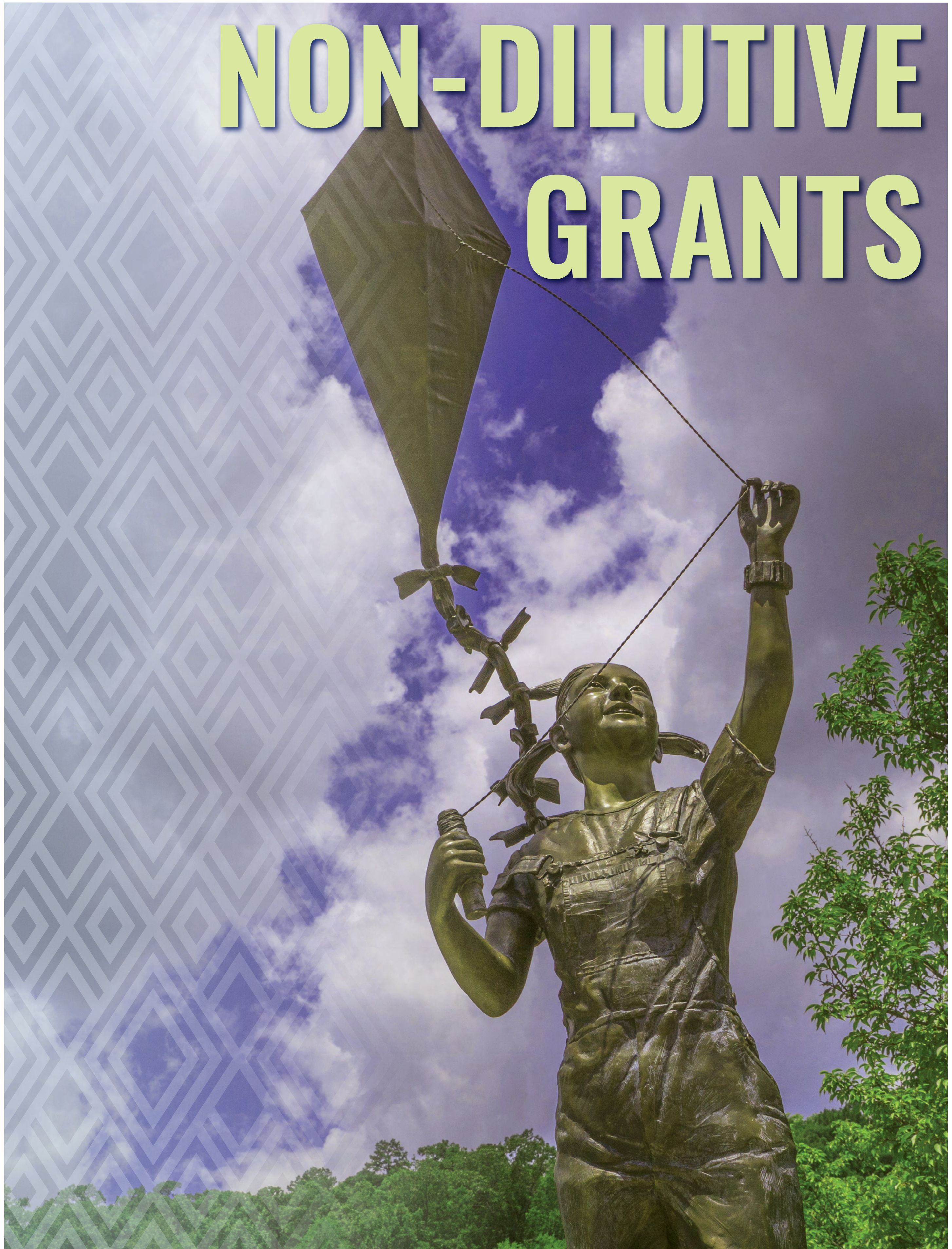
Soda Health's Co-founder & President is Daryl Risinger. A serial brand builder, Risinger has long recognized the healthcare industry as ideal for engineering disruptive strategies in the development of successful products, services, and organizations. Risinger, who has long roots in Arkansas, formerly served as the Chief Growth Officer of Health and Wellness at Walmart. His nearly 25 years of healthcare marketing expertise has included Fortune 100 and start-up organizations within the pharmaceutical, medical device, hospital, and outpatient services industries. In his own words: "My goal has always been to provide customers with indelible impressions of the brands I touched and the organizations to which I belonged. Relentless focus on customers' needs and removing friction from their journey replaces transactions with relationships".[53]

Co-Founder & CEO, Robby Knight, was a Health Leader at Walmart who, among other achievements, built the Medicare Advantage directed spend business and grew it to $2B in two years. He shared with the Capital Scan team that "Soda Health is a proud to be an Arkansas-based company. At Walmart, Daryl and I led the growth of the directed spend category and knew that it unlocked a way to provide critical resources to improve millions of people's health outcomes. We also saw that the real need was to connect people to more resources, more dollars, more services that could reduce the pernicious health inequities people like my father struggled with every day. In Arkansas, 467,550 people are facing hunger-- and of them 134,690 are children. We committed ourselves to building a company dedicated to connecting people to the resources they need, using a next-generation payments infrastructure, aligned objectives between health plans and retailers, and compassionate human engagement."

Other leaders at Soda Health include Co-Founder & Head of Operations, Jared Dauman, who was a Program Manager on Directed Spend at Walmart and was named by Forbes as one of 30 under 30 in Healthcare, and Co-Founder and Chief Technology Officer, Chris Brown, an experienced technology executive with extensive experience in both healthcare and fintech. Brown's technical accomplishments include technology stack modernization, architecting solutions to position organizations for future growth while leading teams focused on high-priority, high-impact projects. He built and led teams at Rally Health, Aurora Investment Management and Backstop Solutions Group.

Within a few months of launching in 2021, Soda Health was named to the CB Insights Digital Health 150 List of Most Innovative Digital Health Startups.[54] The company made this list for the second year in a row in 2022.[55]

NON-DILUTIVE GRANTS



INTRODUCTION

When a business owner looks at their options to fund their company's next stage or growth initiative, non-dilutive grant capital can be a very attractive option, particularly for small- to mid-sized companies that might not qualify for a traditional bank loan. It does not require the exchange of equity, like venture capital, nor repayment, like debt.

Entrepreneurs specifically looking to test and commercialize technological innovations can apply for non-dilutive grant funding for their research and development through the Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs at federal agencies. In 2022, twelve U.S. federal agencies awarded a total of $4.3 billion in highly competitive, non-dilutive grants to small businesses and entrepreneurs across the country to foster innovation and strengthen American businesses.[56] In addition to this annual funding influx from federal agencies, many states offer matching grants to companies that win federal funding for their innovation projects.[57]

The SBIR and STTR programs are structured into three phases:

- **Phase I** establishes the technical merit, feasibility, and commercial potential of an innovation. These awards are typically below $275,000 and for 12 months or less.
- **Phase II** funding is typically based on the success of Phase I outcomes and focuses on finishing the research and evelopment necessary to get an innovation ready for the market. The size of the award depends on the agency, but it is generally $750,000 to $1,100,000 over two years.
- **Phase III** funding, if available, is designed for small businesses to pursue commercialization objectives resulting from the outcomes of Phase I and Phase II activities. This funding may be structured as a non-dilutive grant or may be structured as contracts for products, processes, or services intended for use by the government. Phase III can be important for some companies and their growth, as it can be a significant source of funding without a ceiling and comes with the right to establish sole-source contracts with the United States government.

This section focuses on the SBIR and STTR funds made available through Congress for the advancement of innovation in the United States. There are a number of other smaller granting programs relevant to small businesses that we aim to collect data on in the coming years of this report.

2022 ARKANSAS SBIR AND STTR AWARDS

Arkansas companies won 19 SBIR/STTR awards in 2022 (the same number awarded in the state in 2021), worth a collective $7,599,147. Arkansas' total SBIR/STTR award amount was up in 2022 by $608,663 (8.7 percent), from $6.9 million in 2021. This increase stemmed partly from the fact that federal agencies increased budgets for awards to account for inflation. However, 2022's total SBIR/STTR funding was less than the high of >$11.3 million we saw in 2020.

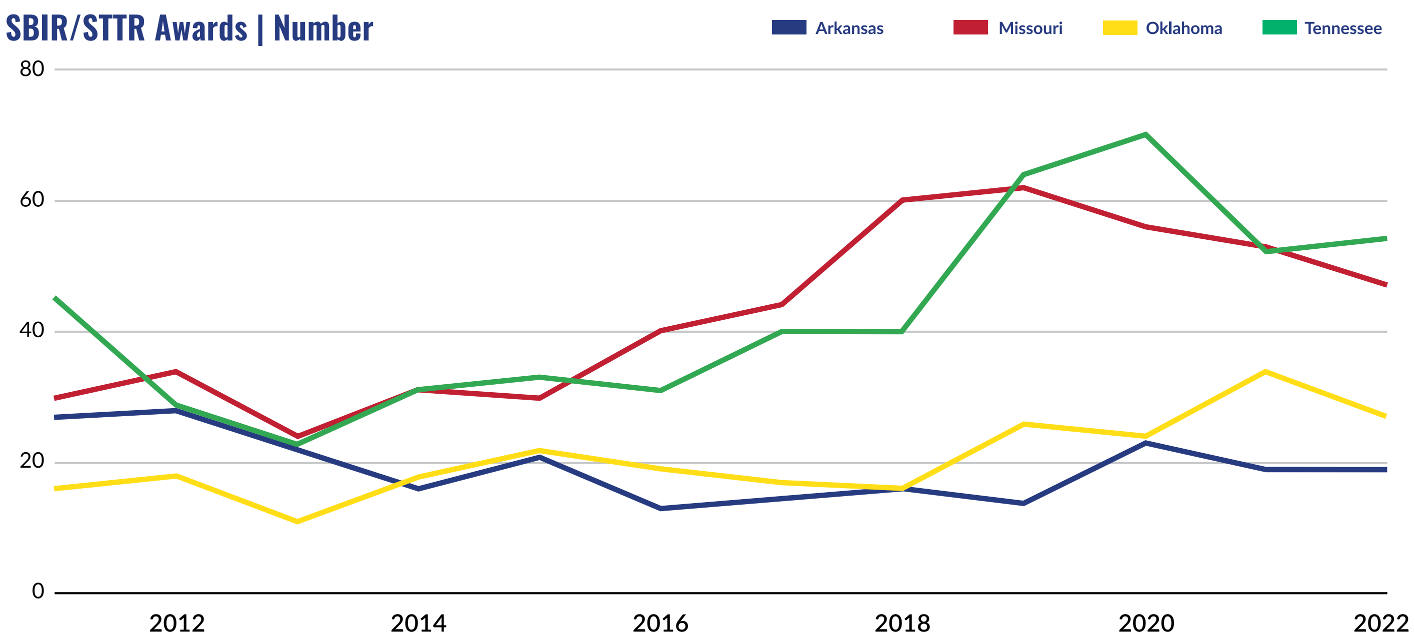
In 2022, Arkansas received exactly the same number of Phase I and Phase 2 awards as in 2021. 73.7 percent of the 2022 awards were Phase I awards, totaling 14 awards and $3,010,984 (39.6 percent of all dollars awarded). 26.3 percent of the 2022 awards were Phase II awards, totaling 5 awards and $4,588,163 (60.4 percent of all dollars awarded).

In addition to federal agency dollars, the Arkansas Economic Development Commission's Division of Science and Technology (AEDC) awarded matching funding for seven SBIR/STTR projects, including three Phase II awards and four Phase I awards, for a total of $550,000 in grants. The AEDC grants are designed to stimulate innovation in Arkansas technology businesses and grow Arkansas companies so that they can create and retain high-tech jobs.

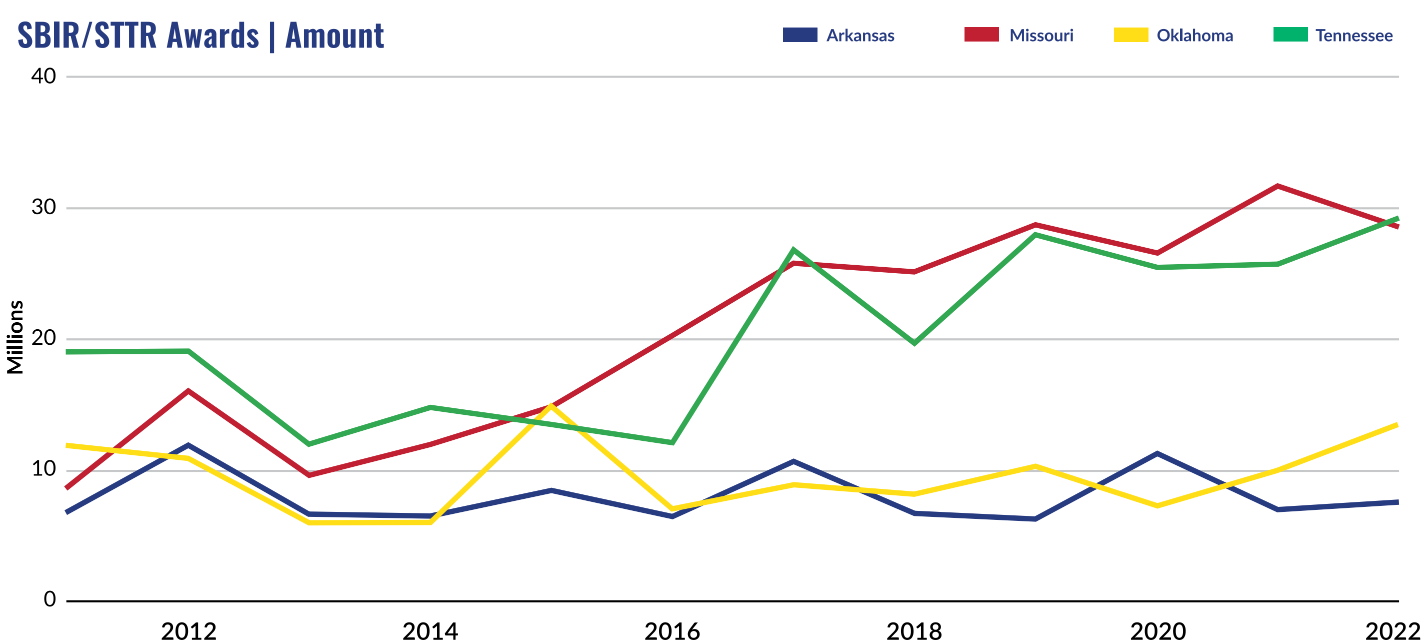
REGIONAL TRENDS

Over the last decade, we have seen the number of SBIR/STTR awards range from a low of 13 to a high of 28 in Arkansas. While in Arkansas the number of awards remained the same in 2021 and 2022, in two of the four comparison states there was a decrease in the number of awards. Missouri went from 53 to 47 SBIR/STTR awards, a decrease of 11.3 percent. Oklahoma saw a decrease of 20.6 percent in the number of awards, from 34 in 2021 to 27 in 2022. By contrast, the number of awards in Tennessee increased in 2022, from 52 to 54.

SBIR/STTR Awards | Number



SBIR/STTR Awards | Amount



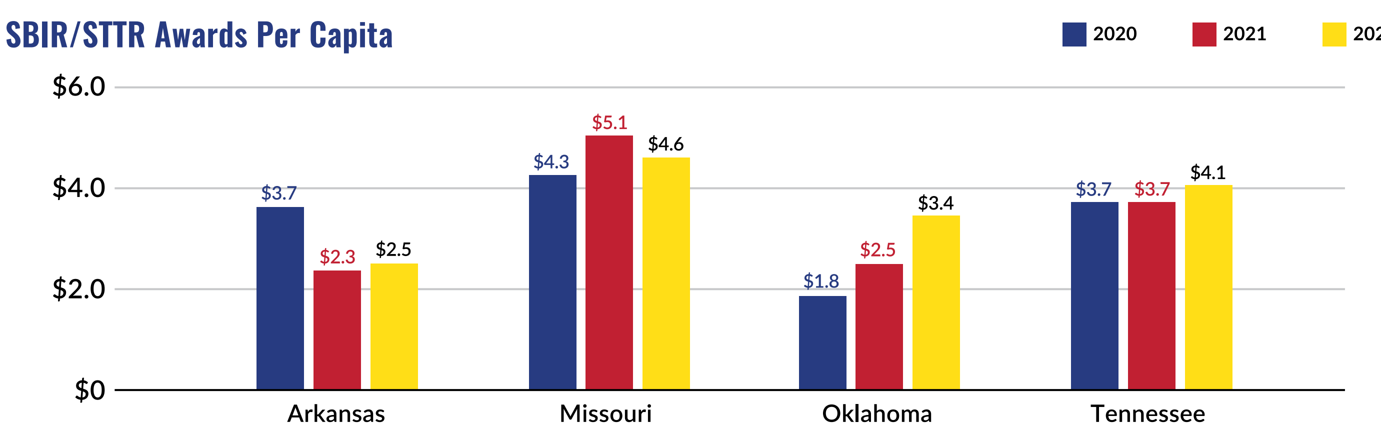
In the four-state region, aggregate award amounts only decreased in Missouri, which received $3.1 million less in funding in 2022 than in 2021 (a decrease of 9.9 percent). By contrast, even though Oklahoma received fewer awards, the state's total award amount grew in 2022 due to an increase in Phase II awards (up to 13, from 8). Oklahoma received nearly $3.5 million more in funding in 2022 than in 2021 (an increase of 34.4 percent). This was also the case in Tennessee, which also received more Phase II awards (up to 23, from 21). Like Oklahoma, in 2022, Tennessee companies received close to $3.5 million more in SBIR/STTR funding than 2021, an increase of 13.6 percent.

As this data shows, one of the best ways to increase the amount of non-dilutive grants going to Arkansas companies in future years will be for the state to focus on growing the number of successful Phase II applications. Since "size provides a benefit in advancing to Phase II,"[58] if Arkansas wants to grow its access to SBIR/STTR funding, even more than investing in accelerators and grant support programs that assist companies with Phase I applications, growing technology transfer programs that support companies in successful commercialization and hiring is key to ensuring more Arkansas companies apply for and receive Phase II SBIR/STTR funding.

SBIR/STTR AWARDS PER CAPITA

When we look at awards per capita, we get a better sense of how each state performed when removing the population disparity. 2022 saw significant regional gains in per-capita funding. Arkansas received 8 percent more in SBIR/STTR funding per capita in 2022 than in 2021. Oklahoma received 33.4 percent more, and Tennessee received 12.4 percent more. Only Missouri received less SBIR/STTR funding than in 2021, at just over 10 percent less per capita.

SBIR/STTR Awards Per Capita



2021's Capital Scan noted that the decrease in awards, award amounts, and per capita amounts in Arkansas and the majority of comparator states didn't necessarily represent a trend. This assertion was correct: taking inflation-related grant adjustments into account, 2022 did not see enormous gains in non-dilutive federal funding in Arkansas and the surrounding region, but, with the exception of Missouri, the region did see growth overall.

This growth aligns with SBIR/STTR growth nationally. In 2022, the total SBIR awards were higher than ever before.[59] Also in 2022, the federal government passed legislation to limit the number of awards any one business can win in order to reduce "SBIR mills" – companies whose growth has been entirely contingent on SBIR awards (mostly Phase 1s). This should open up more space for emerging small businesses to position themselves for SBIR/STTR grants more competitively.

SBIR/STTR AWARD COMPARISONS BY ARKANSAS REGIONS

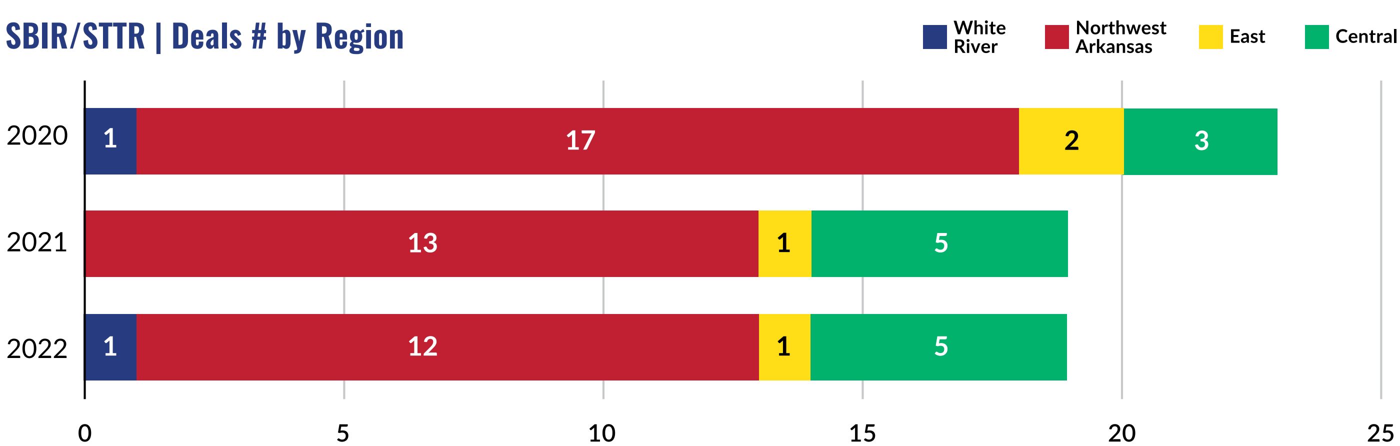
In both 2021 and 2020, Northwest Arkansas (NWA) won the majority of awards and total SBIR funding. This trend continued in 2022: companies in NWA won twelve awards (63.2 percent) for a total of $4,171,560, which was 54.8 percent of total SBIR/STTR funding in the state. However, Central Arkansas has seen the most growth in awards in recent years: the region went from three awards in 2020, to five in both 2021 and 2022, and from under $1 million in funding in 2020, to nearly $3 million in 2022 ($2,855,590). In 2022, Central Arkansas received 37.6 percent of total SBIR/STTR funding in Arkansas, up from 23.5 percent in 2021.

Companies headquartered in East Arkansas won one award, and there was, likewise, only one award in White River (near NWA).

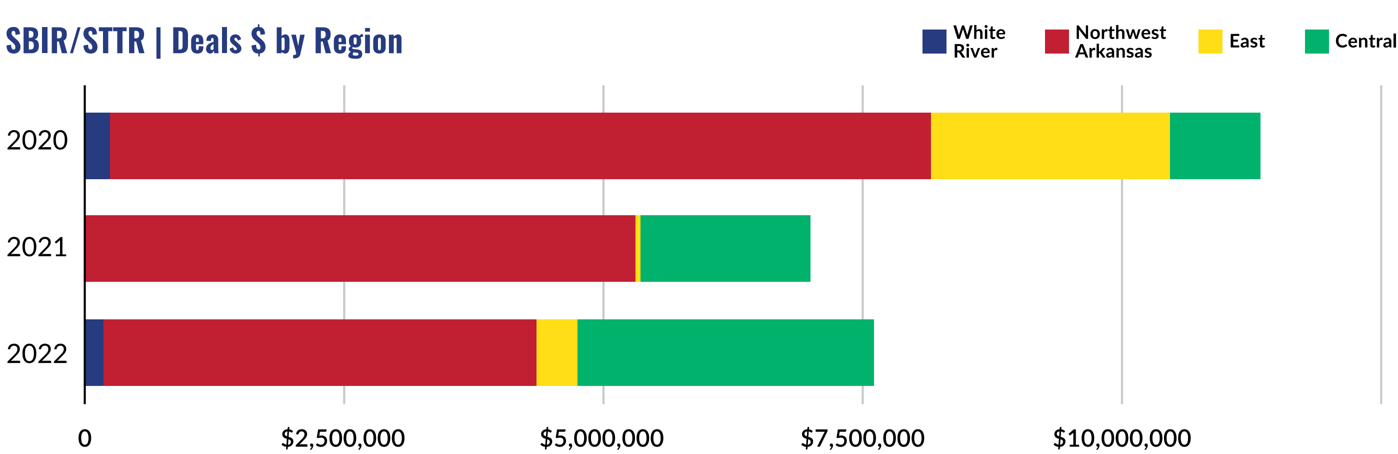
Four out of five Central Arkansas SBIR/STTR grants were awarded by the National Institutes of Health, a fact that testifies to Little Rock's recent investments and growth in health science research. Since the summer of 2022, this growth has been increasingly supported by the University of Arkansas for Medical Sciences' Bioventures program, which seeks to promote the biomedical technology industry for Arkansas and translate its research into products that benefit human health.[60]

Notably, three out of five Central Arkansas awards went to Arkana Labs (doing business as Nephropathology Associates, PLC), a laboratory focused on the area of neuromuscular disease and kidney diagnostics.

SBIR/STTR | Deals # by Region



SBIR/STTR | Deals $ by Region

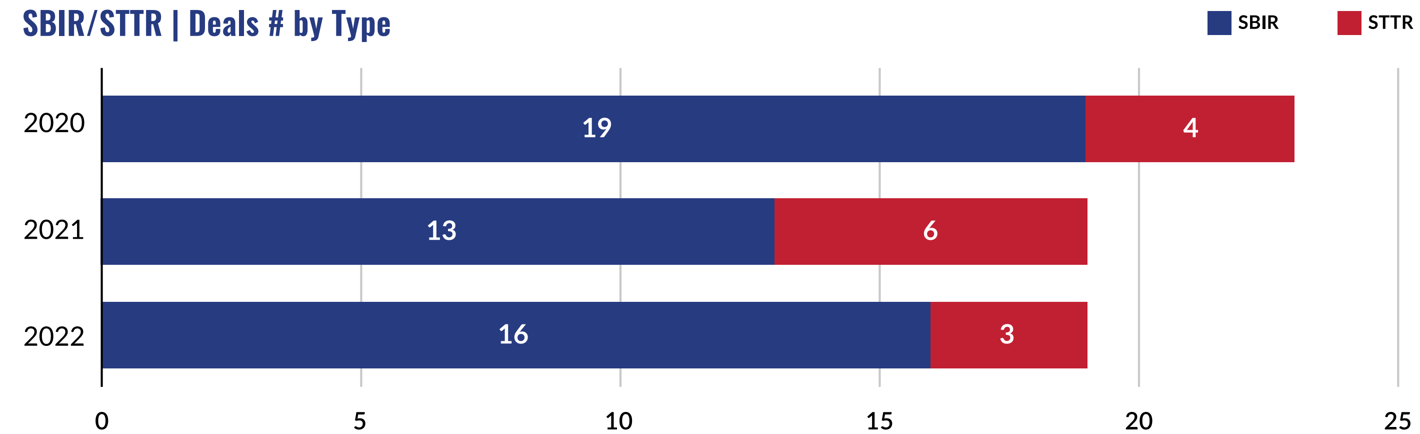


SBIR/STTR ANALYSIS BY TYPE OF AWARD

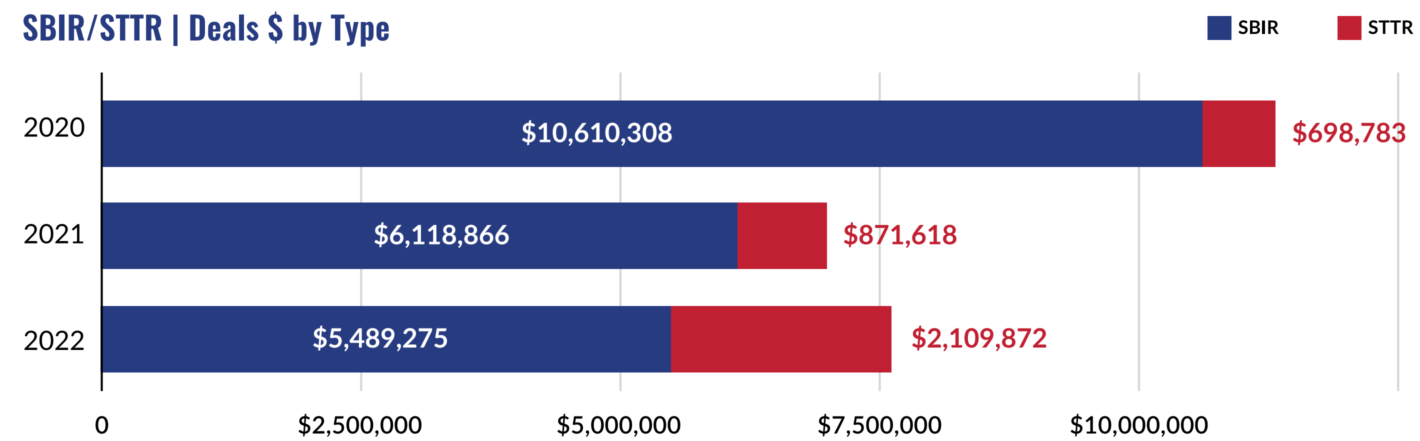
Only five out of twelve award-granting agencies award STTR awards, making SBIR awards more common than STTR awards. In 2022, there were sixteen SBIR awards in Arkansas (totaling $5,489,275 in funding) and three STTR awards (totaling $2,109,872 in funding).

There were three fewer STTR awards in Arkansas in 2022 compared to 2021 and 2020, but 2022 saw significant gains in total STTR funding: 2021 had 6 STTRs, but the total award amount was only $871,618 (58.7 percent less than 2022's $2.1 million in STTR funding). Looking back, 2020 had four STTR awards, but the total STTR award amount in the state that year was only $698,783.

SBIR/STTR | Deals # by Type



SBIR/STTR | Deals $ by Type



Arkansas' increase in STTR funding was due mainly to the fact that there were two Phase II STTR awards in the state in 2022 (compared to none in 2021 and 2020). One of these awards was a $1.1 million award from the Department of Defense (DOD) to Nanomatronix, a microelectronics and biotechnology company headquartered in Fayetteville. Nanomatronix received this Phase II investment to continue the development of their Advanced Microphysiological Brain Injury Technology (or AMBIT) Platform, which "seeks to enable researchers to model the transport of molecules across the blood-brain barrier before and after traumatic brain injury and examine the communication between different cell types."[61] PI, Angeline Rodriguez, notes that organ-on-chip technology, such as that employed by AMBIT, is "revolutionizing the study of diseases." Nanomatromix is helping ensure that the University of Arkansas and Fayetteville's research ecosystem is at the forefront of cutting-edge advances in biomedical research.

The other Phase II STTR award (also a DOD award) went to Arktonics, an engineering company focused on semiconductor and sensor development. This award was also the only SBIR/STTR award given to a women-owned firm in Arkansas in 2022 (see more details below in the section on SBIR/STTR awards to companies owned by women in the four-state region).

SBIR/STTR PHASE I VS PHASE II AWARDS

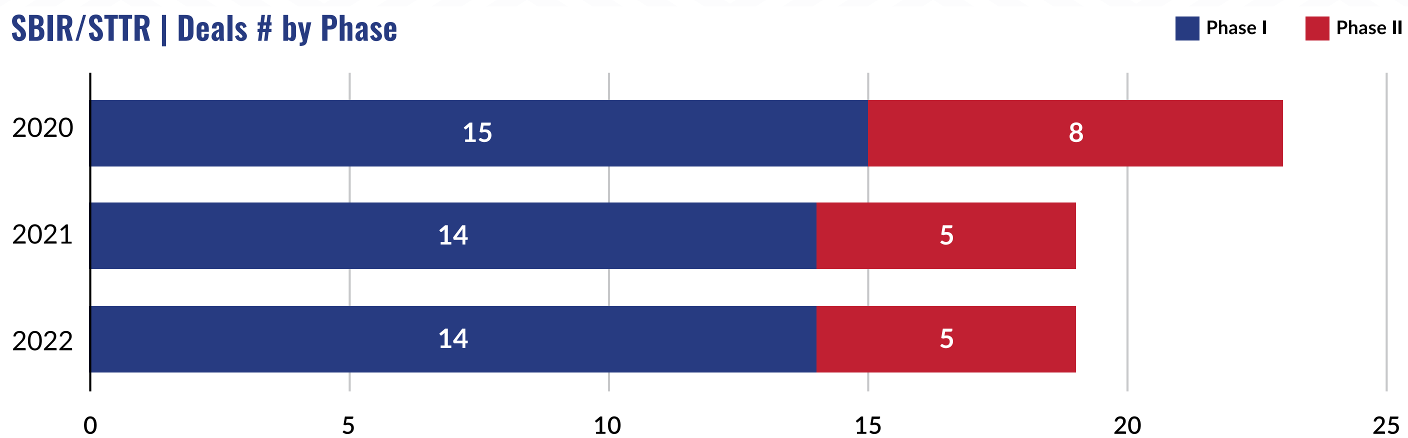
Due to the nature of the awards, there are a greater number of Phase I awards than Phase II. While Phase I awards are seed funds that give companies six to twelve months of support to establish the technical merit, feasibility, and commercial potential of an innovation, to receive Phase II funds, a company must show evidence of successful Phase I outcomes. Even more rare, Phase III funds are targeted specifically at the commercialization of successful Phase II research and help a company bring an innovation to market or attain the right to a sole-source contract with the relevant U.S. government agency.

In 2022, dollar amounts for Phase I and Phase II awards in Arkansas were almost equal due to Phase II being larger awards. This year Arkansas' Phase II awards were slightly lower than in 2021, which saw five Phase II awards totaling $4,972,403. In 2022, Arkansas' businesses also received five Phase II awards, but the total award amount was only $4,588,163.

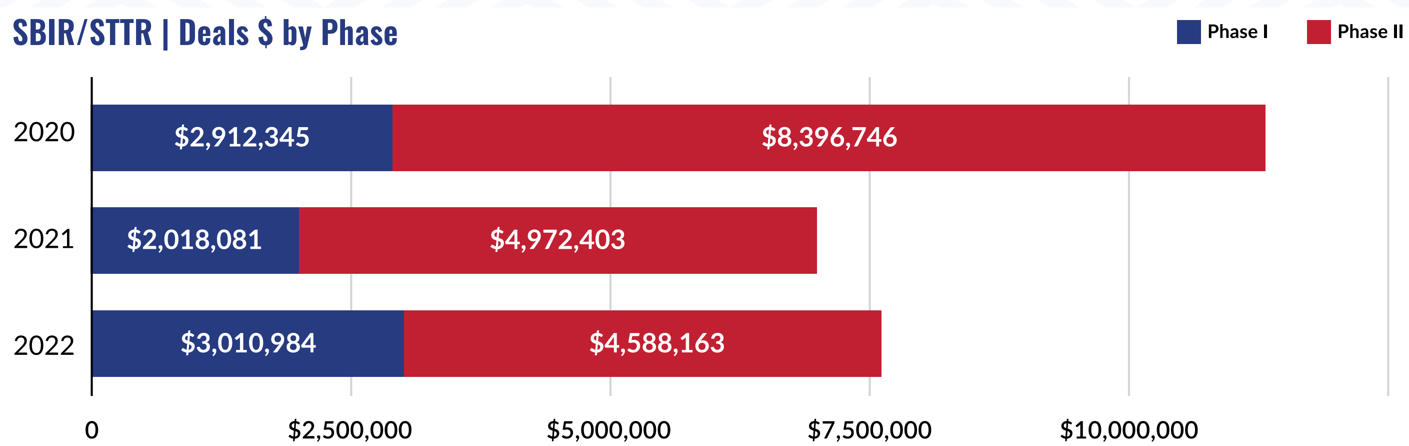
2022 was the second year of lowered Phase II funding in Arkansas. In 2021, Phase II funding was $3.42 million less than in 2020, which had 8 awards totaling $8,396,746.

As noted above, a key factor in a company's ability to win Phase II awards is size. The more that the Arkansas ecosystem is able to support the growth of companies winning Phase I awards, the greater the likelihood that more companies will be competitive for larger, Phase II awards. Phase II funding is a powerful means of support to enable the successful commercialization of scientific research that results in a growth in high-paying technology jobs.

SBIR/STTR | Deals # by Phase



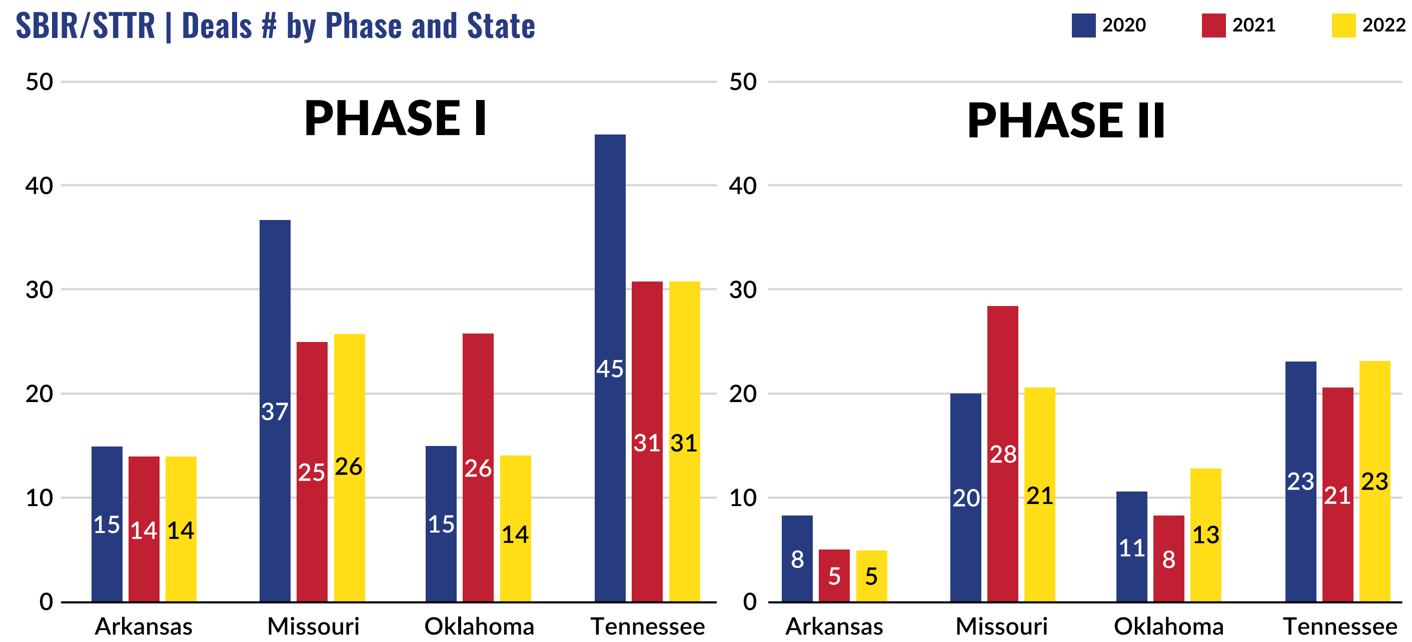
SBIR/STTR | Deals $ by Phase



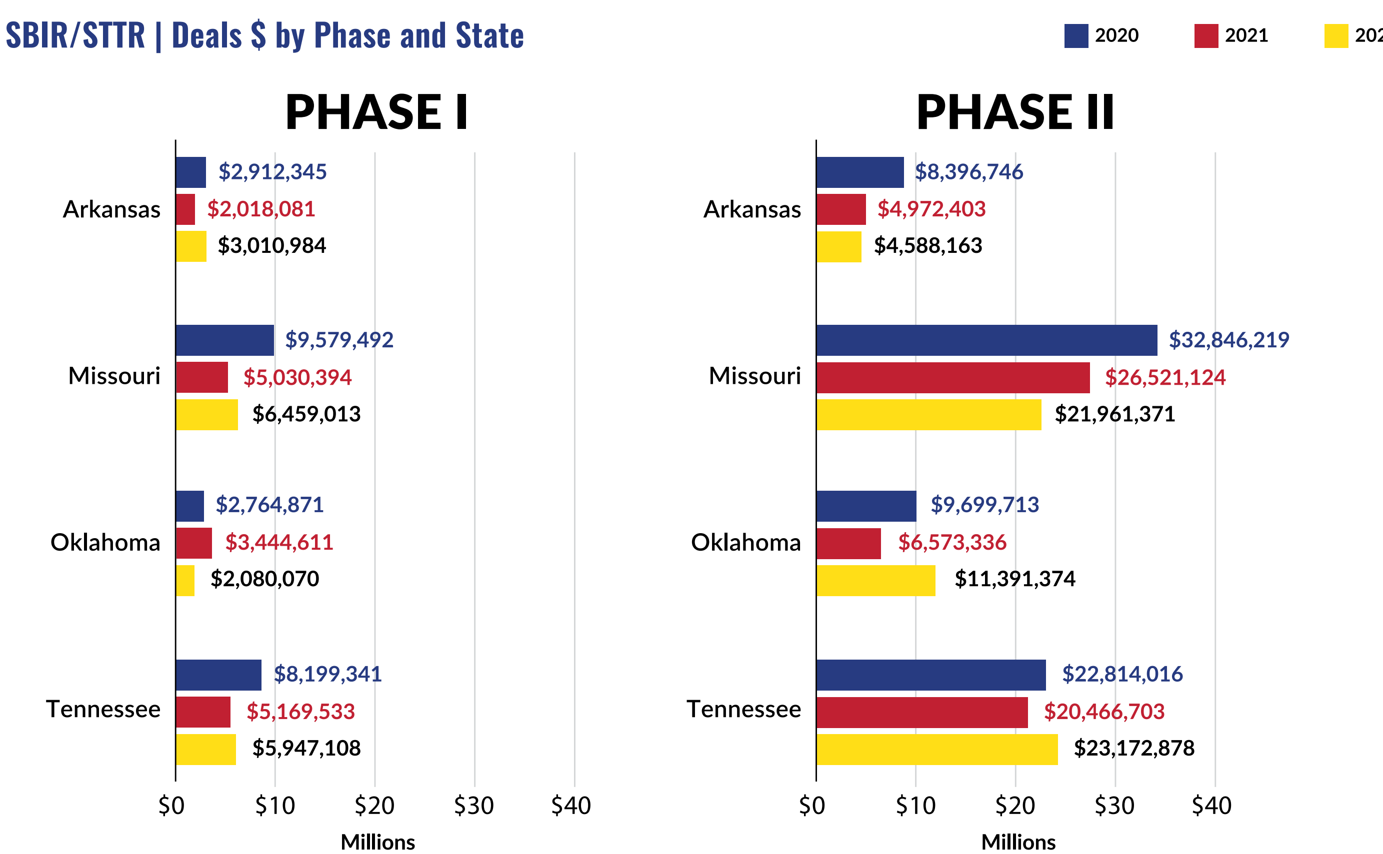
PHASE I AND PHASE II AWARD COMPARISON ACROSS 4-STATE REGION

In 2022, Phase II award totals were also significantly reduced in Missouri (from $26.5 to just under $22 million). However, Tennessee and Oklahoma both received more Phase II awards than in 2021. Oklahoma saw the largest increase: in 2022, 13 Oklahoma companies completed successful Phase I projects and went on to receive Phase II awards (up from 8 in 2021), a 34.4 percent Phase II increase.

SBIR/STTR | Deals # by Phase and State



SBIR/STTR | Deals $ by Phase and State



SBIR/STTR BY AGENCY

Nationally three agencies – the Department of Defense (DOD), the Department of Health and Human Services (NIH), and the Department of Energy (DOE) – dominated SBIR/STTR grantmaking in 2022 (as in other years), giving 90 percent of all SBIR/STTR awards.[62] However, Arkansas' 19 awards reflect a more well-rounded funding landscape. Only 68.4 percent of total SBIR/STTR funding came from the top three funding agencies.

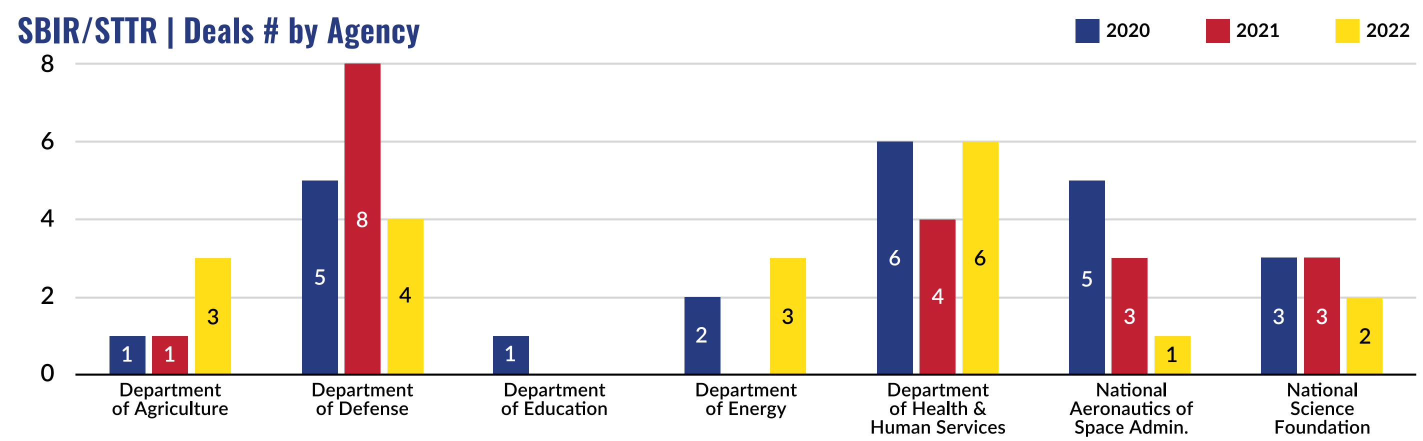
The largest percentage of Arkansas' 2022 awards came from NIH. NIH awards made up 31.6 percent of the state's total awards – a lower percentage than 2021's 36 percent, but more awards overall. In 2022, Arkansas companies received six NIH awards, up from four in 2021. Notably, Arkansas companies also received six NIH awards in 2020. In 2022, NIH's total funding of Arkansas companies was $3.25 million, or 42.8 percent of the state's total SBIR/STTR funding.

Twenty-one percent of the state's 2022 SBIR/STTR awards came from the DOD. Arkansas companies received 50 percent fewer awards than in 2021 (from eight down to four).

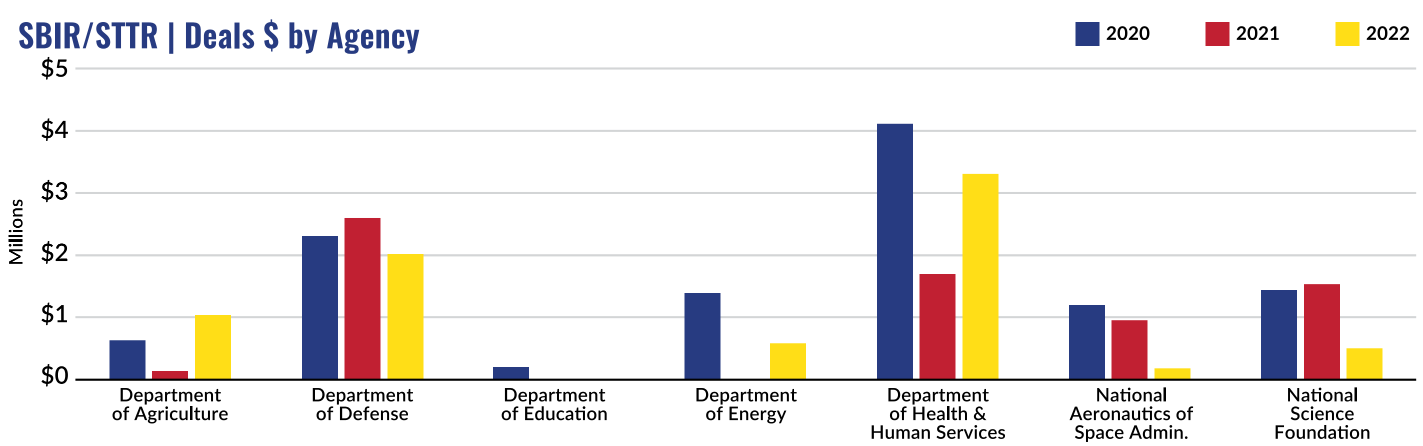
Arkansas companies received three awards (15.7 percent of the state's total awards) from the Department of Agriculture (USDA), an improvement over the state's single USDA award in both 2021 and 2020. Arkansas companies also received three awards from the DOE in 2022, up significantly from zero in 2021 and two in 2020.

By contrast, in 2022, Arkansas received one award from NASA and two from NSF: these awards were a decline from three awards from each of those agengies in 2021.

SBIR/STTR | Deals # by Agency



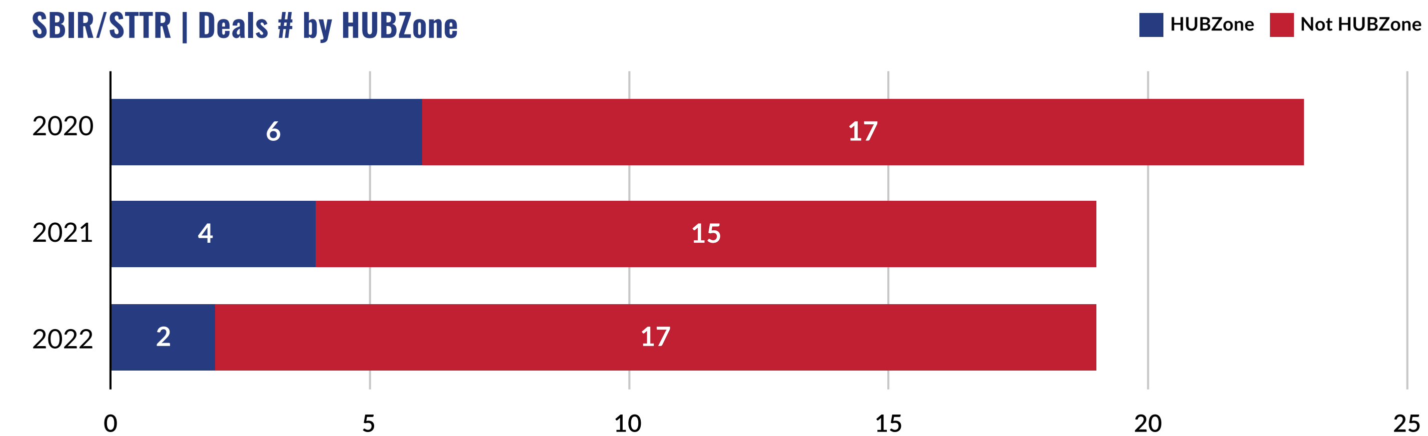
SBIR/STTR | Deals $ by Agency



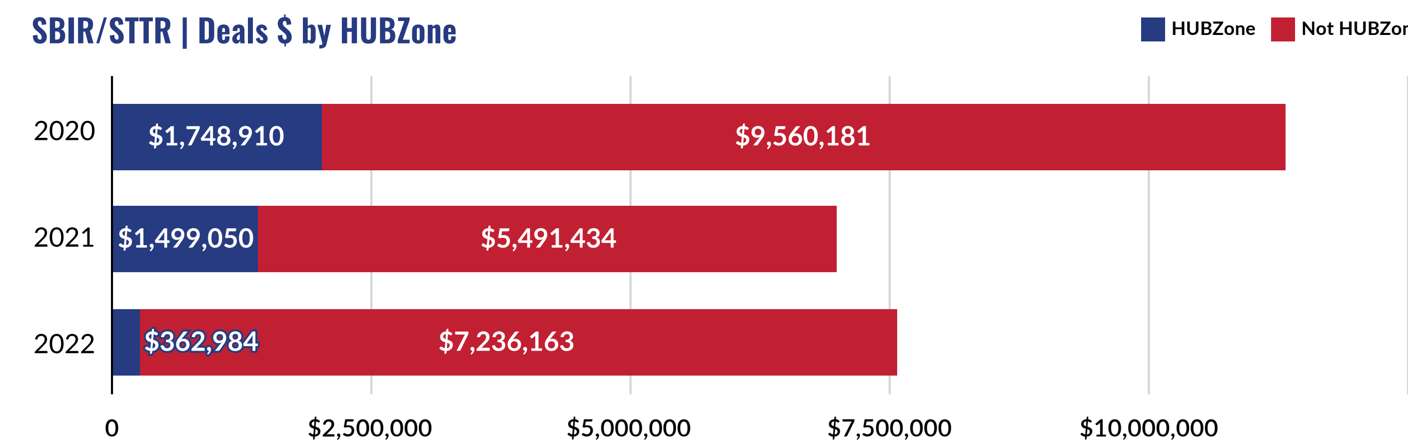
SBIR/STTR INVESTMENT IN HUBZONES

The Federal government's HUBZone program is designed to fuel small business growth in historically underutilized business zones with a goal of awarding at least three percent of federal contract dollars to HUBZone-certified companies each year. In 2022, Arkansas' non-dilutive grant funding beat that goal, with 4.8 percent of all dollars awarded ($362,984) going to businesses located in HUBZones. This percentage, however, was over $1.1 million less than the amount of SBIR/STTR funding invested in Arkansas HUBZones in 2021 (which was similar to the amount invested in 2020). In 2022, there were two fewer projects funded in Arkansas HUBZones as well, which means that Arkansas received funding for only 50 percent of the number of HUBZones projects as in 2021, which, in turn, saw 33 percent fewer funded HUBZone projects than 2020.

SBIR/STTR | Deals # by HUBZone



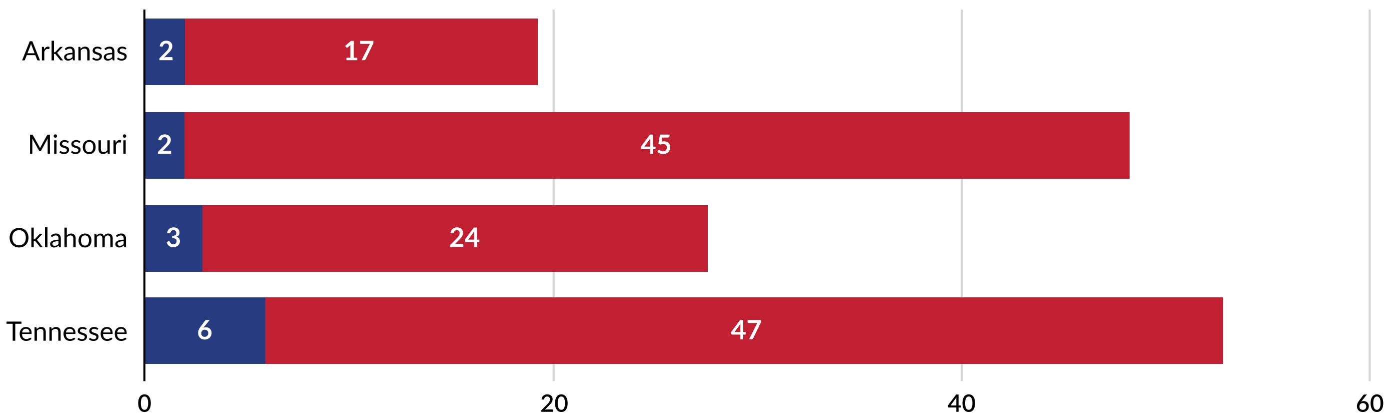
SBIR/STTR | Deals $ by HUBZone



By comparison, nationally in 2022, 9 percent of Phase I awards and 6 percent of Phase II awards went to businesses headquartered in HUBZones.[63] With 10.5 percent of Arkansas SBIR/STTR awards going to projects in HUBZones, Arkansas remains slightly ahead of the curve when compared to these national numbers.

Compared to 2021, when Arkansas' percentage of HUBZones-based SBIR/STTR projects was higher than that of all other states in the comparison region, in 2022, Arkansas' rate of HUBZone awards was only higher than that of Missouri, where 4.3 percent (two out of 47 awards) went to HUBZone-based companies. In Tennessee, 11.3 percent, six out of 53 2022 awards, went to companies located in HUBZones. Similarly, in Oklahoma three awards out of 27 (11.1 percent) went to HUBZones.

SBIR/STTR | Deals # by HUBZone and State



Arkansas' drop in the number of SBIR/STTR awards and award totals in HUBZones is especially disappointing given that in 2021 the federal government expanded the HUBZone program, allowing state governors to request Governor-Designated Covered Areas. Governor-Designated HUBZones are areas that state governors target as having potential for job creation and investment where small businesses have demonstrated interest, and/or areas for which the state has created an economic development strategy. Arkansas (like all states) now has a greater opportunity to expand HUBZones and allow more businesses to become HUBZone certified.

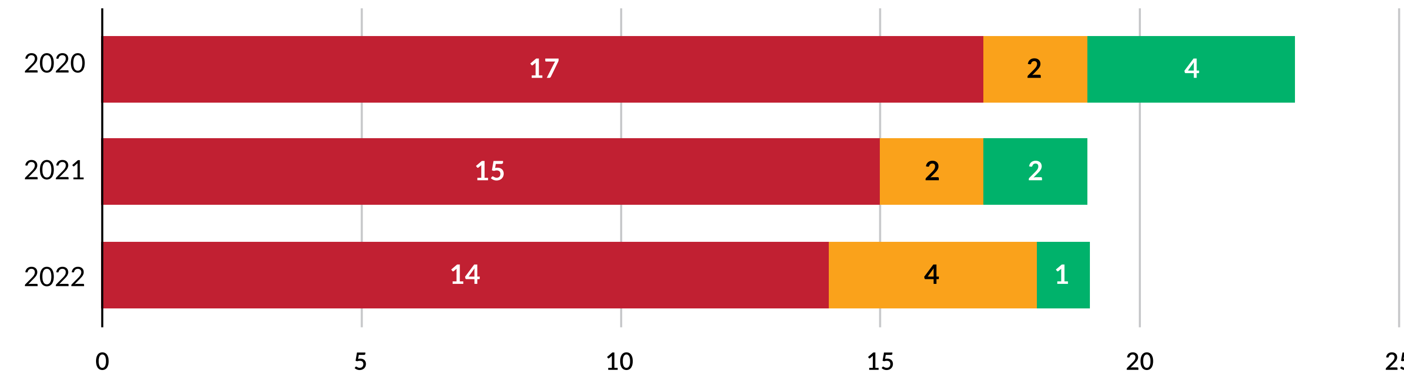
It remains to be seen whether our state will take advantage of this opportunity to drive additional funding to historically underinvested regions. In 2022, in the four-state region, awards given to companies in HUBZones were significantly smaller, on average, than companies in non-HUBZones: $292,654 compared to the four-state award average of $560,264. By investing in helping grow the number of awards to companies in HUBZones and increasing the dollar amounts awarded, particularly Phase II awards, which are tied to more job creation, Arkansas could direct funding to areas of the state that could most benefit from business development and job creation.

SBIR/STTRs BY DEMOGRAPHICS

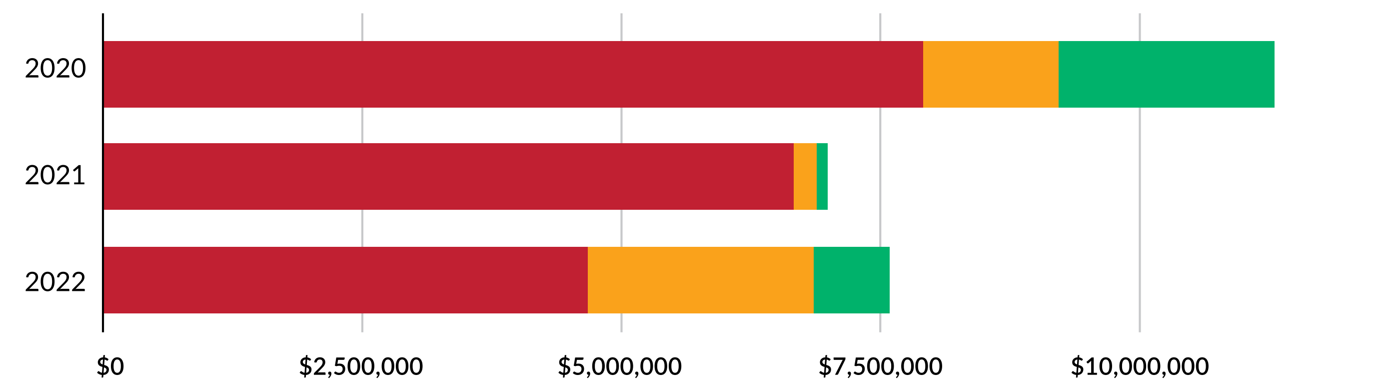
SBIR/STTR AWARDS TO WOMEN-OWNED SMALL BUSINESSES

In 2022, only one SBIR/STTR award in Arkansas was given to a women-owned small business (or WOSB, which is defined as being 51+ percent owned by one or more women and primarily managed by one or more women, self-reported). As stated above, this award was a Phase II STTR award from the DOD that went to Arktonics, an engineering company in Fayetteville pursuing semiconductor and sensor R&D projects. This isolated award to a WOSB represents 5.3 percent of all Arkansas awards in 2022 and a mere 9.9 percent of total funding dollars. By comparison, in 2021, two woman-owned companies in Arkansas received Phase I awards, making up 17.4 percent of the total awards. Since these 2021 awards were Phase I grants, they totaled only 1.4 percent of the state's SBIR/STTR funding. Since 2001, only 45 of the 567 awards (7.9 percent) to Arkansas companies have been granted to women-owned small businesses.

SBIR/STTR | Deals # by Demographic

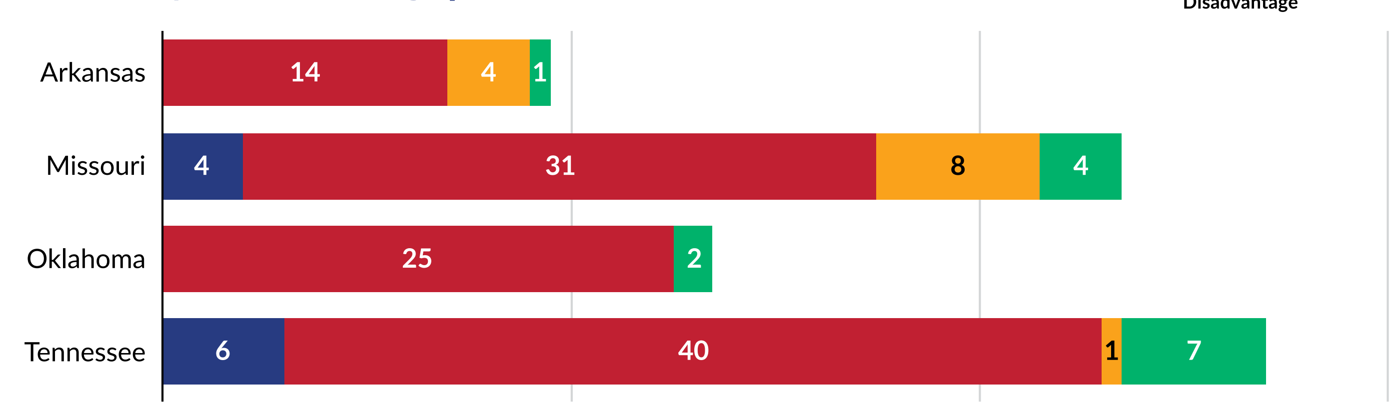


SBIR/STTR | Deals $ by Demographic



Nationally, in 2022, 12 percent of Phase I awards and 11 percent of Phase 2 awards went to WOSB.[64] Arkansas not only fell significantly behind these national rates, but our state was last for the number of awards going to WOSB among the four states in the comparison region. In third place was Oklahoma, where two out of 27 awards and just over 10 percent of total funding went to WOSB. In Tennessee, 13 out of 54 awards (24 percent) went to WOSB, six of which also qualified as socially and economically disadvantaged small businesses (SEDSB). In Tennessee, 28.4 percent of total SBIR/STTR funding went to WOSB. In Missouri, eight out of 47 total awards (17 percent) went to WOSB, four of which also qualified as SEDSB. Twelve percent of total SBIR/STTR funding in Missouri went to WOSB.

SBIR/STTR | Deals # by Demographic and State



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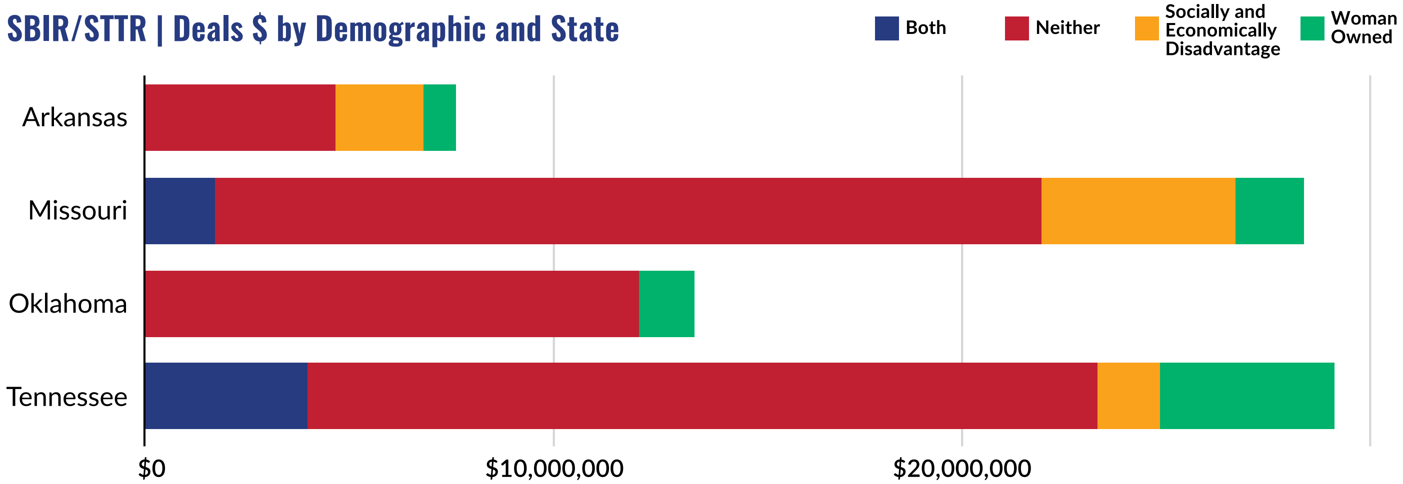


SBIR/STTR AWARDS TO SOCIALLY AND ECONOMICALLY DISADVANTAGED SMALL BUSINESSES

To qualify as socially and economically disadvantaged, a small business must be

- 51% or more owned and controlled by one or more disadvantaged persons, and
- The disadvantaged person or persons must be socially disadvantaged and economically disadvantaged.

The designation relies on self-reporting of ethnicity, including people who self-identify as or are identified by others as

- Black Americans
- Hispanic Americans
- Native Americans
- Asian Pacific Americans
- Or SubContinent Asian Americans

Individual majority owners of a business who are not identified by the above ethnicities can qualify as socially disadvantaged by proving that either their gender, education levels, rural location, or physical handicaps have had a negative impact on their entrance into the business world.

Since 2001, only 10 of the 567 awards (1.76 percent) given to Arkansas companies have gone to socially and economically disadvantaged small businesses. Viewed historically, 2022 saw a significant increase in the number of awards going to SEDSBs: four of Arkansas' SBIR/STTR awards (21 percent) went to businesses classified as socially and economically disadvantaged (SEDSB).

Arkansas' rates of SBIR/STTR awards to SEDSB beat national trends in 2022: 12 percent of Phase I awards and 9 percent of Phase 2 awards went to businesses classified as socially and economically disadvantaged. Awards to SEDSB in Arkansas in 2022 were also significantly higher in number and amount than in 2021. In 2022, awards to SEDSB in Arkansas represented 21 percent of all awards (up from 5.3 percent in 2021) and 28.7 percent of total SBIR/STTR funding (up from 1.7 percent in 2021). This impressive rise in funding to SEDSB in Arkansas in 2022 results from the fact that two out of the four awards were for Phase II projects. In 2021, no Phase II awards were given to SEDSB, and in 2020, there was only one.

Nearby, Tennessee and Missouri saw higher percentages of SBIR/STTRs but lower percentages of total funding go to SEDSBs. In Tennessee, seven of 54 awards (31.4 percent), but only 18.9 percent of total funding went to SEDSBs. In Missouri, 12 of 47 awards (25.5 percent) and 22.6 percent of total funding went to SEDSBs. In Oklahoma, no 2022 awards went to SEDSBs.

2022 also saw more SBIR/STTR awards in the four-state region be awarded to companies that identify as both women-owned and socially and economically disadvantaged: six such companies in Tennessee received SBIR/STTR awards, and four in Missouri (up from one in each state, and two in Oklahoma in 2021). In Arkansas, not one business owned by a woman of color or a low-income woman in Arkansas has ever received an SBIR or STTR award.

ASBTDC AND SVS SUPPORT FOR SMALL BUSINESSES SEEKING SBIR/STTR AWARDS

Two Arkansas-based non-profit organizations – the Arkansas Small Business and Technology Development Center and Science Venture Studio – are helping to grow SBIR/STTR awards in Arkansas by offering support to small business applicants.

The ASBTDC is part of a national network of Small Business Development Centers that have a tremendous impact across the nation. In addition to supporting clients with moving technological innovations to the marketplace, in 2022 the ASBTDC supported Arkansas businesses in attaining $102 million in capital investments. Their advocacy and programs supported 8,511 jobs and 202 new business starts.

One of ASBTDC's central goals is to achieve greater equity in the number of women-led and socially and economically disadvantaged small businesses winning SBIR/STTR awards. To increase their impact on SBIR/STTR equity in Arkansas, in 2021 the ASBTDC expanded to four new sites in partnership with institutions of higher education, including two community colleges and an HBCU. Arkansas small businesses can also now go through the ASBTDC to join the accelerator program with the regional, Four-State FAST Collaborative that helps small companies compete for National Science Foundation seed funding for innovative technologies.[65]

Supported by the Walton Family Foundation, Winrock International's Science Venture Studio partners with a wide range of technology mentors, grant writing specialists, analysts, scientific illustrators, and commercialization interns to provide in-depth strategic advice and proposal drafting support to Northwest Arkansas science- and technology-based startups. Since its founding in 2020, SVS has helped Arkansas companies raise over $4.4 million in SBIR/STTR funding. According to Executive Director Katie Thompson, in SVS's first two years, "companies that collaborated with SVS were 30 percent more likely to get funding, which is more than double the national success rate."[66]

SVS also runs EMPOWER – an annual cohort-based learning and accelerator program for women and non-binary scientific entrepreneurs. Like ASBTDC, SVS is pushing hard to grow equity in Arkansas' SBIR/STTR awards. The EMPOWER program is a way for SVS to bring together technical and business mentors, federal agency program directors, and other support systems to "rally around female and non-binary entrepreneurs so that they can be supported in accessing [federal] funding opportunities to develop their innovation and take it to market."[67]

PERSPECTIVE:

CATHERINE CORLEY, BUSINESS & INNOVATION CONSULTANT, ASBTDC

What's Tech Got To Do With It?

Arkansas is rising when it comes to development in the technology sector, with an impressive array of new technologies that are reaching the market with the power to transform lives, better society, and boost economies. The Arkansas Small Business and Technology Development Center (ASBTDC), Science Venture Studio (SVS), and Arkansas Economic Development Commission (AEDC) are three partner organizations in the entrepreneurial support ecosystem who support researchers and entrepreneurs in Arkansas.

Funding Start-Ups is Key

Eleven federal agencies provide non-dilutive seed capital, a crucial element in encouraging science and technology innovation by entrepre-neurs and small businesses in our state. ASBTDC https://asbtdc.org/ has assisted Arkansas companies in accessing over $36 million in SBIR, STTR, and other funding to support technology innovation and commercialization over the past five years.

SVS https://www.scienceventurestudio.org/ was established in 2020 as another resource provider for SBIR/STTR applicants. ASBTDC and SVS are working together to increase the number of SBIR/STTR clients that can be served, as well as expand the scope of consulting and support services to include grant writing assistance, scientific illustration, technology mentors, and commercialization experts.

New technology development can involve many years (5-10) to develop, scale and gain customer traction. So there continues to be a persistent funding gap, beyond SBIR/STTR funding. AEDC offers additional funding through the Technology Development Program (up to $100K) and Seed Capital Investment Program (up to $500K). There are other funds that can be accessed through accelerators and nonprofits, such as The Validation Fund at Winrock International.

"De-risking Tech Commercialization"

Another challenge is how to increase the chances of commercial success. Ideally, a customer is ready to buy at the end of the development phase, but this is not always the case. Here are some approaches:

Customer Discovery.

The National Science Foundation (NSF) established a national I-Corps program to train university-based faculty, graduate students and post-docs in the language of business and to teach them the techniques of Customer Discovery. Teams complete over 100 customer discovery interviews to determine whether their technology has a 'Product-Market' fit and should pursue commercialization. Arkansas ranked first among EPSCoR states in sending teams to the NSF I-Corps program. Many of those teams have gone on to apply for SBIR/STTR funding.

Accelerators and Incubators.

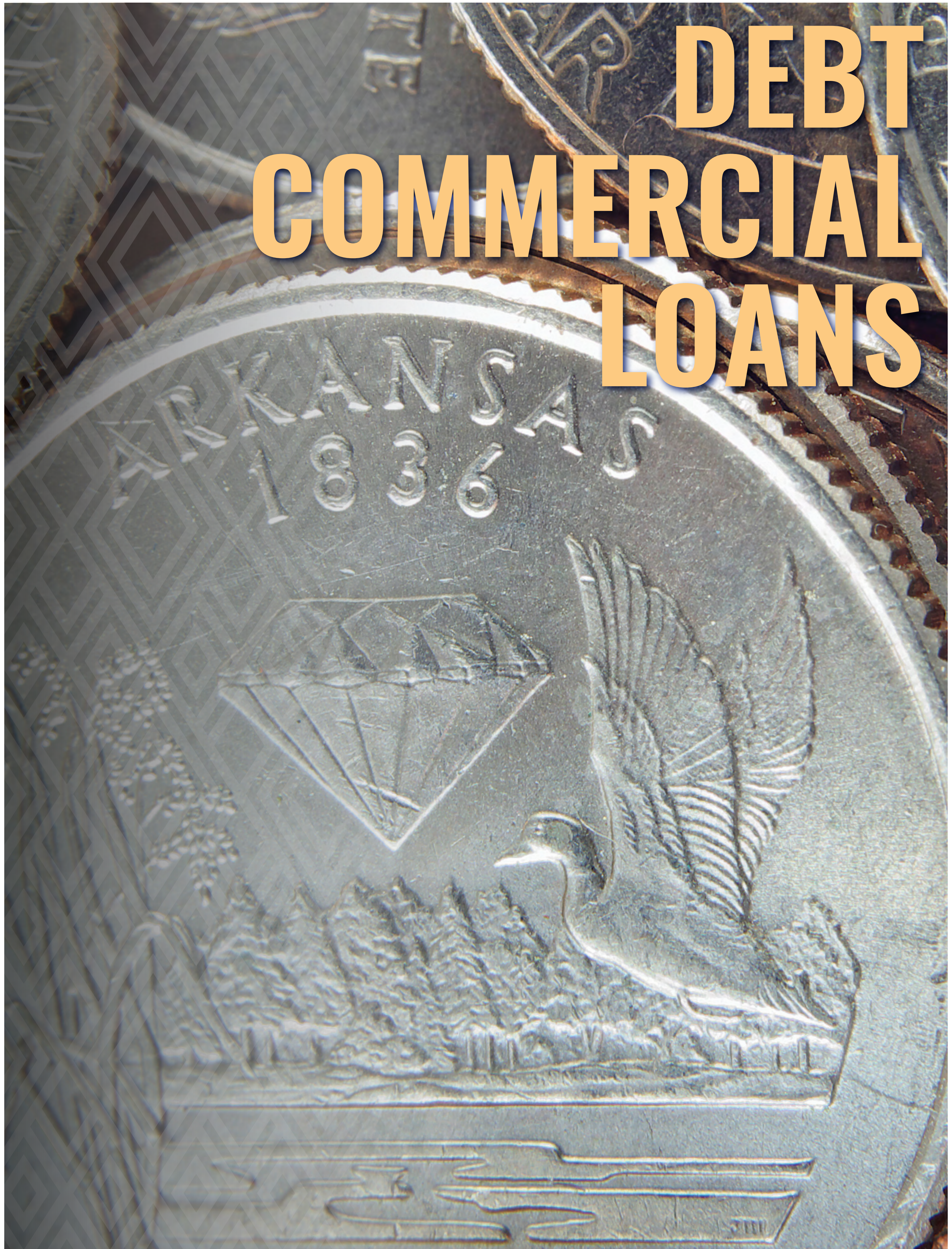
Entrepreneurs can access several accelerators and programs across the state who teach the principles of customer discovery and business model development along with pairing them with industry and technology mentors. These include the Genesis Tech Incubator, Fuel Accelerator, and HealthTech Arkansas's HeartX Accelerator and BioAR Accelerator. SVS and Startup Junkie Foundation partnered to create EMPOWER serving women and non-binary people in STEM.

Collaboration between Industry, small business, and universities.

Large companies already have access to customers and the financial means to scale new innovations. Lockheed Martin is an example of a corporation that supports SBIR companies through technology requirements, mentoring, evaluation, co-development, and insertion into larger systems. Plug and Play Tech Center in Northwest Arkansas is a platform connecting supply chain start-ups to large companies and seed funding opportunities.

Bottomline, Arkansas has a rich and growing ecosystem of resources and funding to support our state's tech innovators and economy. Contact Catherine Corley at cc112@uark.edu for assistance and connection to other resources.

DEBT COMMERCIAL LOANS



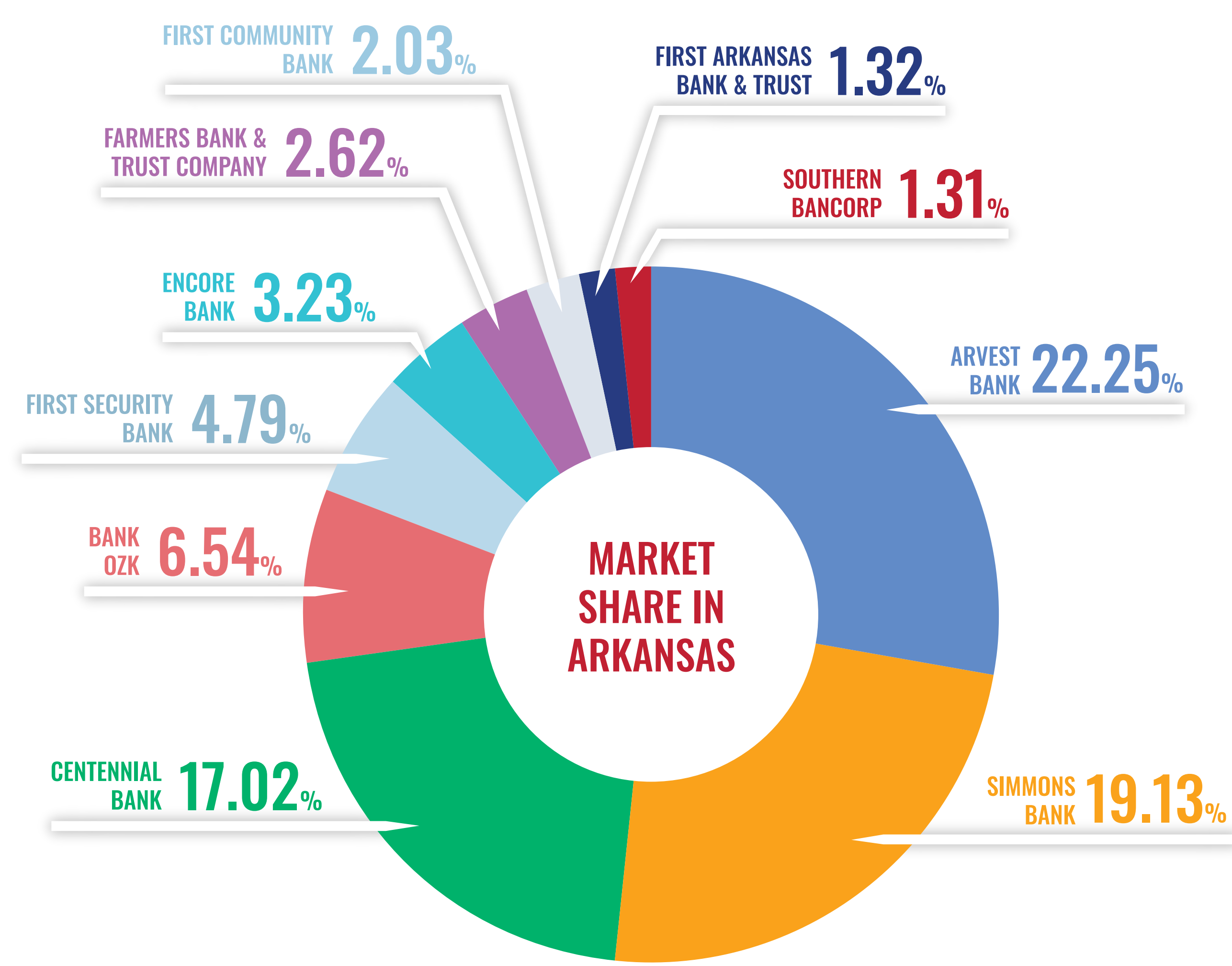
INTRODUCTION

Over the past few years, we have reported the growing venture capital investment in the state of Arkansas, while also noting some of the distributional inequalities in Venture Capital. Tech-enabled STEM-derived businesses and sectors are seen as more scalable and appropriate for the return multiples sought by venture investors. While it is difficult to argue against the economic gains delivered by the tech industry in recent years, this investment approach can leave a broad segment of Arkansas' entrepreneurial ecosystem underfunded. For those businesses with existing earnings and a consistent track record of cash inflows, or those businesses that generate fixed assets to use as collateral, bank lending can be a viable way to fund growth and operations. Other entrepreneurs may choose debt to avoid selling equity in the business, especially if they can personally guarantee or collateralize the loan. This section explores recent data on small business lending in Arkansas.

COMMERCIAL BANK LENDING IN ARKANSAS

Consolidation continues in the commercial bank lending space in Arkansas. In the 2021 Arkansas Capital Scan, we reported that the top 10 largest commercial banks by loan volume accounted for 76.4 percent of commercial bank loans by volume at the end of 2021. At December 31, 2022, those same banks accounted for 80.2 percent of commercial loans reported on the books of banks headquartered in Arkansas.

Commercial Loan Concentration as of EOY 2022



We note that these loans are not exclusively located in Arkansas – for instance, Bank OZK notably lends to numerous commercial projects out of state. Our bank data is derived from the Call Reports submitted by each bank to the Federal Financial Institutions Examinations Council (FFIEC). This reporting is extensive at the bank level, but it does not deliver precise loan-level demographic or location data, which also inhibits our ability to track debt to the level of the funded enterprises as we have done across other funding sources.

We have noted in prior Arkansas Capital Scan reports that rural and community banks contribute deeply to the economic vitality of their communities by "punching above their weight" in terms of the allocation of commercial loans in their overall loan portfolio. Sorting Arkansas commercial banks by the metropolitan statistical area (MSA) and detailing each bank's average percentage of commercial banks in the total loan portfolio, we see that the "Blank – NON-MSA" category consistently ranks highest in terms of commercial loan share in the bank's portfolio. These "Non-MSA" banks have headquarters that are not associated with any metropolitan area, and are thus rural and small community banks. We also note a strong focus on commercial lending from the banks in the MSAs of Pine Bluff, Searcy, and Russellville.

2022 - Commercial Loans % of Total Loans by MSA

	03/31	06/30	09/30	12/31	2022 Avg.
Arkadelphia AR	12.88	13.08	13.35	13.17	13.12
Batesville AR	11.38	11.59	10.64	11.39	11.25
Blytheville AR	12.71	13.47	13.46	15.58	13.80
Camden AR	11.19	10.36	9.08	8.94	9.89
El Dorado AR	8.96	8.21	7.97	8.57	8.43
Fayetteville - Springdale - Rogers AR-MO	11.58	11.50	10.74	10.67	11.12
Forrest City AR	14.38	13.21	11.12	12.64	12.84
Fort Smith AR-OK	11.72	11.78	11.98	11.44	11.73
Helena-West Helena AR	14.49	13.40	11.30	12.22	12.85
Jonesboro AR	9.63	10.14	10.67	12.56	10.75
Little Rock - N. Little Rock - Conway AR	13.71	13.91	13.75	13.77	13.78
Magnolia AR	12.28	12.98	12.38	12.62	12.56
Memphis TN-MS-AR	15.96	16.67	14.75	14.30	15.42
Paragould AR	7.88	7.74	6.81	7.41	7.46
Pine Bluff AR	16.14	15.80	15.53	16.39	15.97
Russellville AR	14.26	14.44	14.10	14.63	14.36
Searcy AR	16.14	15.72	17.98	17.60	16.86
(blank)	15.35	14.96	15.03	15.51	15.21
Grand Total	**14.06**	**13.86**	**13.62**	**13.98**	**13.88**

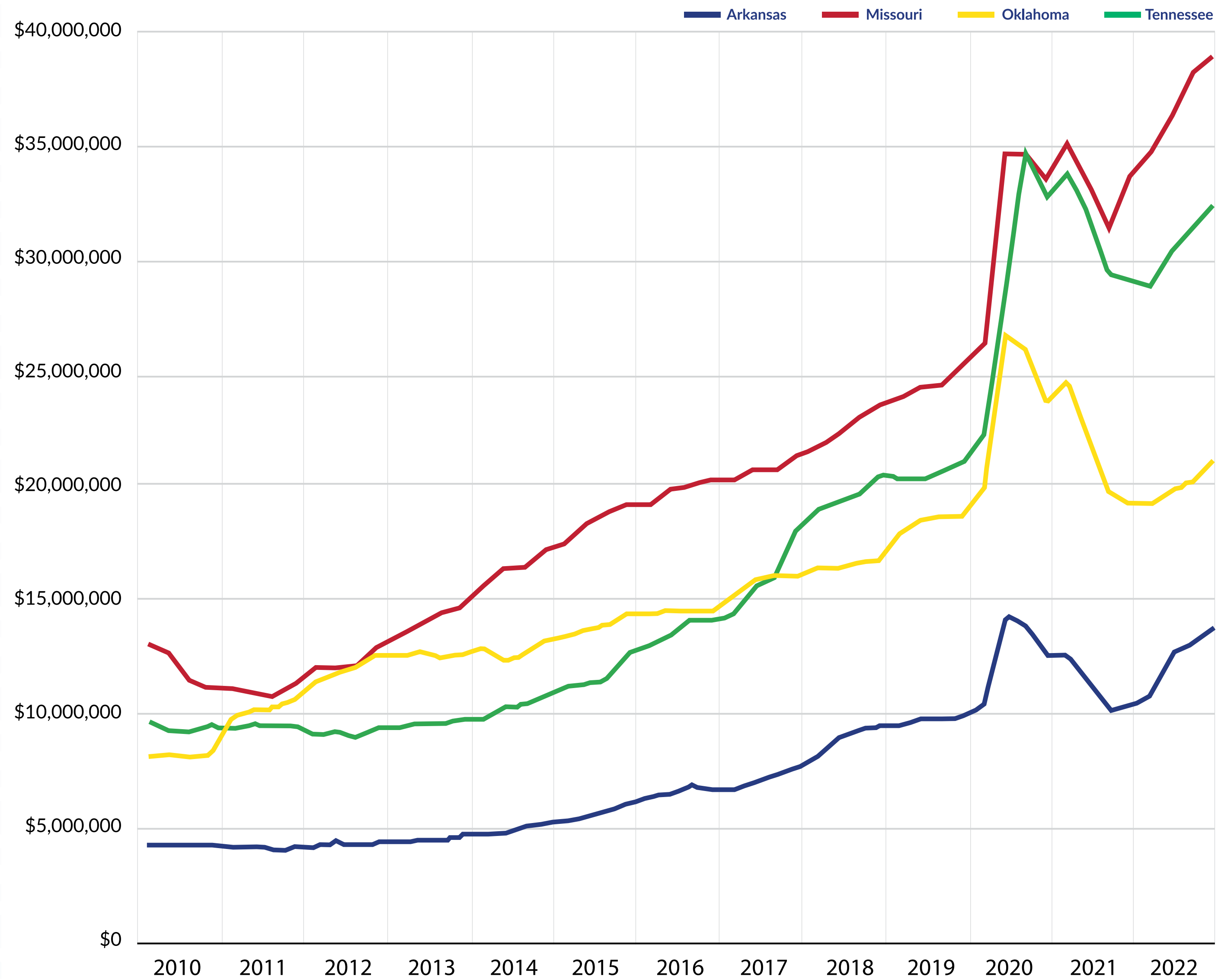
By dollar amount, as in prior years, the areas with the highest intensity of commercial bank lending in the state were the MSAs of Fayetteville-Springdale-Rogers, Little Rock-North Little Rock-Conway, and Pine Bluff. In 2022, we finally see the stabilizing of the commercial bank lending volume with no distortions from the Payroll Protection Program (PPP) which led to a spike in bank lending in 2020 and 2021, as reported in the prior versions of the Arkansas Capital Scan. We also see a steady increase in bank lending over the quarters of 2022 in almost all of the reported areas of the state.

2022 - Dollar Amounts of Commercial Loans on the Books of Arkansas Banks by MSA

	03/31	06/30	09/30	12/31	2022 Total
Arkadelphia AR	$161,609	$174,523	$184,861	$180,587	$701,580
Batesville AR	$319,730	$342,804	$340,357	$377,753	$1,380,644
Blytheville AR	$29,571	$35,089	$38,851	$42,996	$146,507
Camden AR	$6,368	$6,055	$6,320	$6,087	$24,830
El Dorado AR	$111,353	$105,634	$111,104	$127,006	$455,097
Fayetteville-Springdale-Rogers AR-MO	$2,953,940	$3,092,832	$3,222,866	$3,384,780	$12,654,418
Forrest City AR	$69,826	$74,139	$66,759	$70,449	$281,173
Fort Smith AR-OK	$184,040	$178,751	$177,812	$181,898	$722,501
Helena-West Helena AR	$41,581	$42,056	$38,427	$39,214	$161,278
Jonesboro AR	$16,413	$16,440	$16,824	$17,250	$66,927
Little Rock-North Little Rock-Conway AR	$2,565,057	$3,553,311	$3,788,173	$4,048,679	$13,955,220
Magnolia AR	$286,802	$317,880	$311,716	$331,524	$1,247,922
Memphis TN-MS-AR	$141,415	$172,444	$170,516	$190,425	$674,800
Paragould AR	$140,956	$143,997	$131,769	$142,231	$558,953
Pine Bluff AR	$2,200,483	$2,743,098	$2,697,236	$2,829,926	$10,470,743
Russellville AR	$153,905	$157,399	$156,721	$164,683	$632,708
Searcy AR	$533,182	$535,114	$657,371	$661,274	$2,386,941
(blank)	$899,561	$962,464	$994,342	$1,002,364	$3,858,731
Grand Total	**$10,815,792**	**$12,654,030**	**$13,112,025**	**$13,799,126**	**$50,380,973**

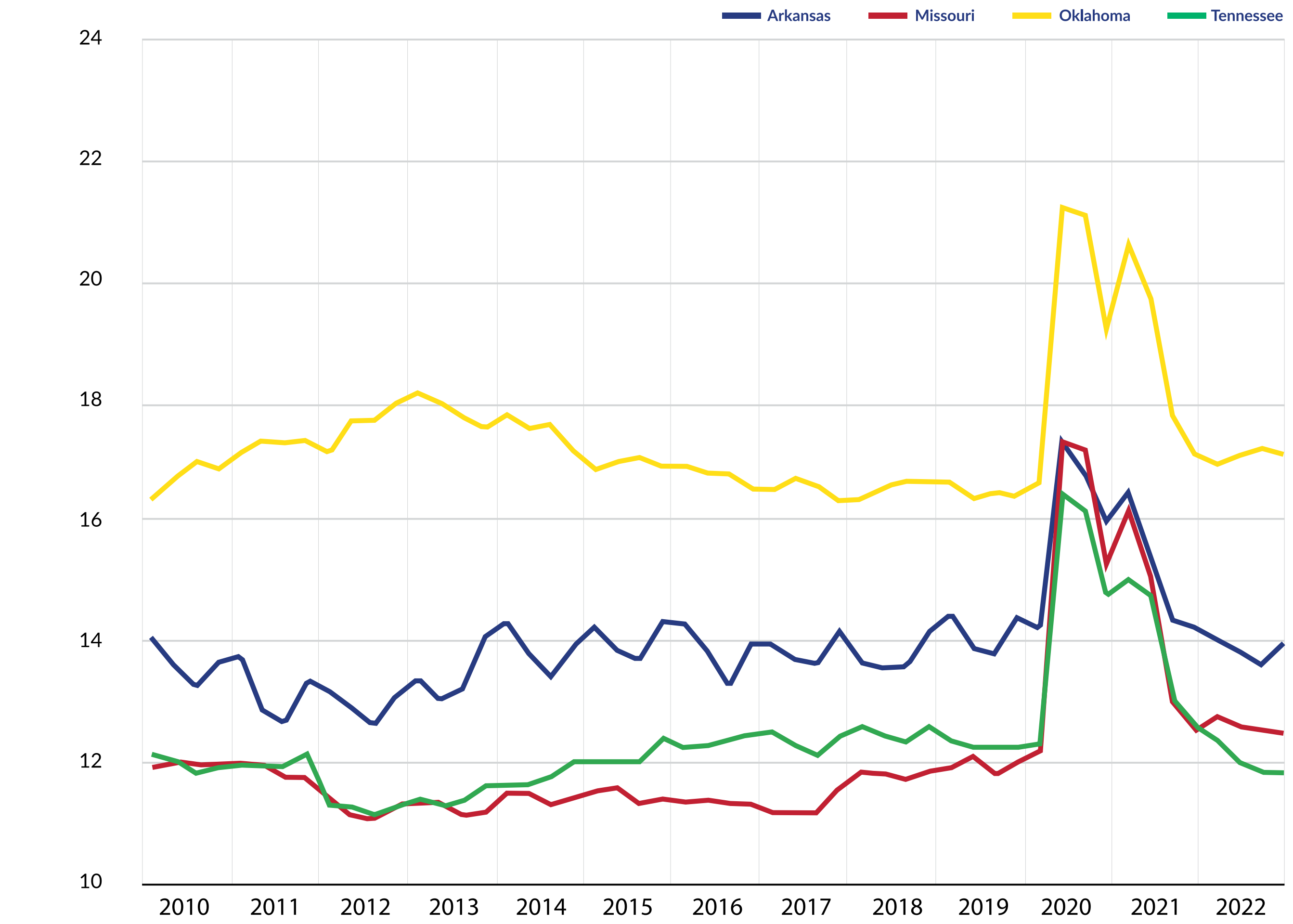
Compared to the dollar volume of our neighboring states, Arkansas still trails well behind the commercial lending activity. Graphically you can note the infusion of PPP loans in 2020 and early 2021, which tapered off in Arkansas, and our commercial bank lending has finally trended back to something approximating a historical norm with an upward trend.

Commercial Lending $ of Total Loans | Arkansas Verses Nearby States



When we view the percentage of Arkansas' banks with portfolios that are committed to commercial lending, we see that Arkansas banks contribute at the second highest rate to commercial lending relative to our comparison states, with only Oklahoma showing a higher percentage of commercial loans to total loans across their loan portfolios.

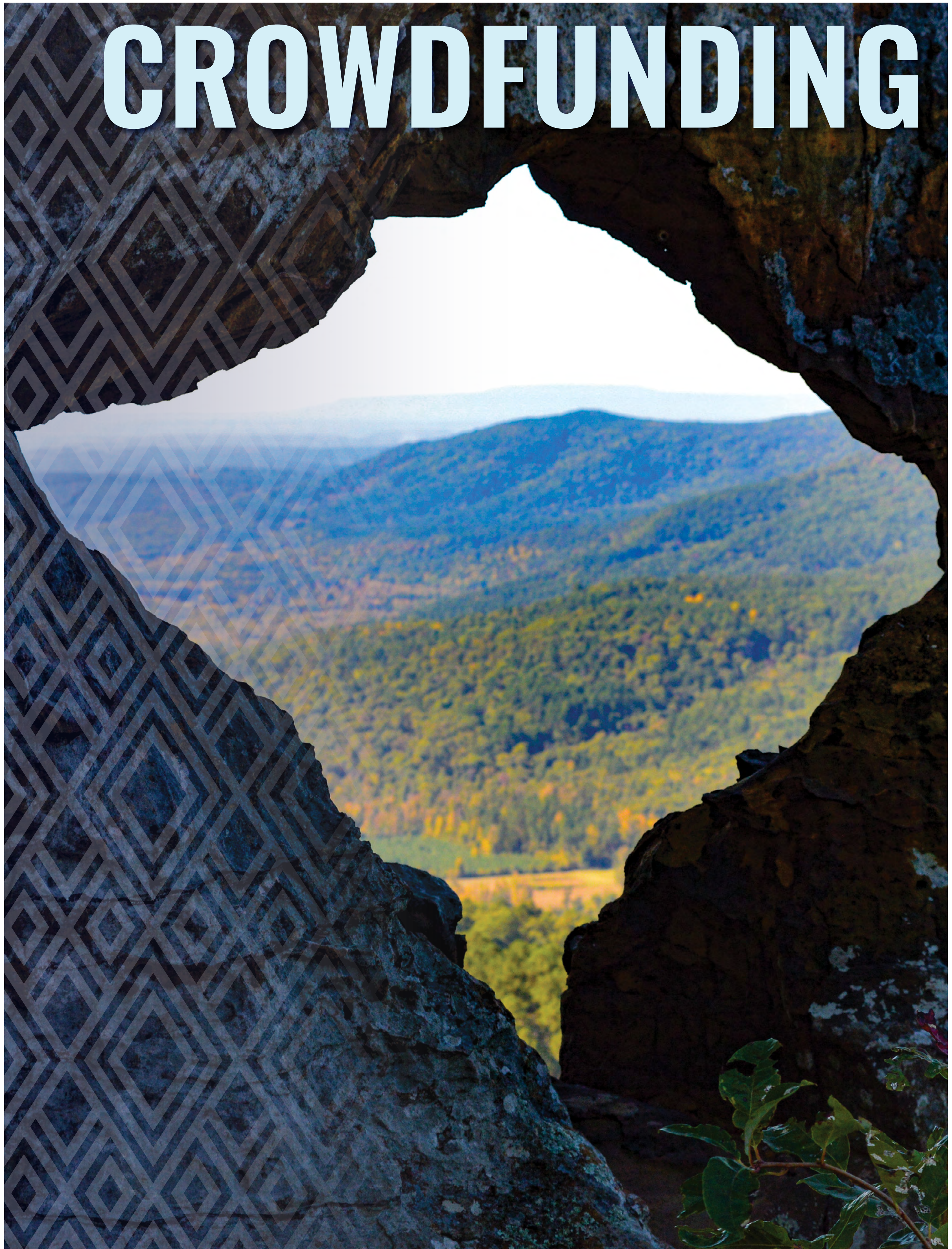
Commercial Lending % of Total Loans | Arkansas Verses Nearby States



Notably, we are able to find some Arkansas venture debt in Pitchbook, though the information often contains multiple entries for the same deal, some of the deal sizes are not disclosed, and we have little means of verifying the accuracy or completeness of the data. In 2022, we note that Pitchbook contains 38 debt entries for deals in the state of Arkansas, and when we process this data to show one record per debt transaction (even if they involve multiple types of loans in the deal, or multiple lenders that may be listed in Pitchbook separately), we find (in $millions):

Total $1,078.03 • Average $46.87 • Unique Debt Deals 28

CROWDFUNDING



INTRODUCTION

CROWDFUNDING (n.): the practice of funding a project or venture by raising money from a large number of people individually contributing a relatively small amount of money.

Crowdfunding allows entrepreneurs to raise funds from a broad pool of small backers. This diversifies the pool of available investors, as the SEC does not require crowdfunding investors to have accreditation.

Crowdfunding activity has grown rapidly in the past two years. Total crowdfunding investment in Arkansas in 2021 was 450% greater than in 2020 ($1,475,115 compared to $268,210). 2022 total were 92% greater than 2021, at $2,832,300.

Types of Crowdfunded Investments

Typically, the funds from a crowdfunding campaign come in one of three forms:

- **Product or Pre-Sales:** These are the most common campaigns on platforms like Kickstarter Indiegogo. Backers of a successful campaign often receive "awards" of products or services rather than equity or financial returns.

- **Debt:** The most well-known platform in this field is Kiva, which allows innovators and entrepreneurs to raise debt capital from a large number of small contributors. Debt crowdfunding can be a valuable resource for entrepreneurs who do not have access to other forms of capital.

- **Equity:** This is the newest type of crowdfunding available to entrepreneurs. Equity crowdfunding allows the investor to purchase securities (either equity, revenue share, convertible note, SAFE, or other). In March 2021, new U.S. investment regulations allowed startups to raise equity investment up to $5 million in a one-year period from unaccredited investors (previously, the limit was $1.07 million). Equity crowdfunding platforms include Republic and WeFunder, which opened an office in Northwest Arkansas in late 2021. Because of its newness, this year is the first time the Arkansas Capital Scan has included equity crowdfunding.

Limitations on Data

Data on these types of investments can be difficult to source, as the platforms are varied and are not required to report into a single entity, as is required for venture capital. The Arkansas Capital Scan team sourced the campaigns on the most common platforms by region and leveraged the entrepreneurial community to identify any additional campaigns conducted formally or informally within Arkansas.

Crowdfunding data also reflects some individual projects or ideas that are funded prior to company formation.

Given its limitations and complexities, the crowdfunding data here should be evaluated as generally reflective of the activity in Arkansas, but not exhaustive in nature.

CROWDFUNDING TOTALS

In 2022, at least 59 **product crowdfunding** deals occurred in Arkansas, an 18 percent rise over 2021 (in which 50 deals were identified). In aggregate, deals in 2022 raised $1,189,300.

In 2022, the average product crowdfunding deal size was $20,158. The average deal size in 2021, by comparison, was $24,392. It's important to note, however, that 2021's numbers were inflated because of the unusually large raise by NWA outdoor clothing company, LIVSN, which raised over $500K, 34.9% of all crowdfunding dollars raised across the state in 2021.

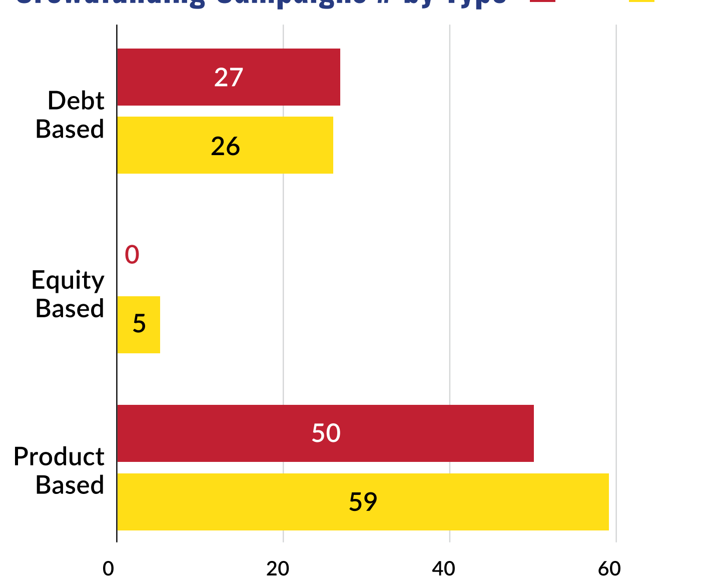
LIVSN was also one of the first companies in the region to start an equity crowdfunding campaign. LIVSN's 2022 Wefunder equity campaign raised $419,631.

Overall in 2022, there were five equity crowdfunding deals in Arkansas, with a total of $1.42 million raised (more than product and debt-based crowdfunding totals combined). Prior to the regulation changes in 2021, we had no data indicating prior successful equity crowdfunding campaigns in Arkansas. With the expansion of equity crowdfunding and the rise of new platforms to simplify the processes, campaign data has become more readily available. In the 2021 Arkansas Capital Scan, we reported no equity crowdfunding campaigns. In building the 2022 report, a new source of data identified a single crowdfunding campaign completed by an unknown company in 2021 for $55,598, with 83 individual investors. With five successful campaigns in 2022 totalling $1.42 million, equity crowdfunding appears to be increasingly accessible and attractive to entrepreneurs. The number and size of equity crowdfunding deals will establish a new baseline for analysis in future years.

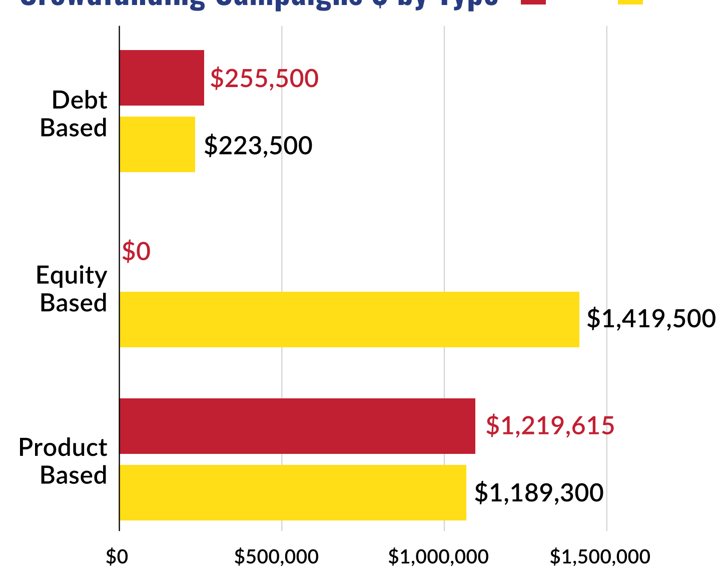
The primary dataset for this analysis comes from Pitchbook, which includes all types of exempt offers including RegD, 506c, and RegA. Some of these numbers are self-disclosed. An additional dataset provided by Crowdfund Capital Advisors includes RegCF offers filed with the SEC, representing $599,329 of the $1.42 million raised. All of those deals occurred in Northwest Arkansas.[68]

Finally, we were able to draw down details on 26 debt crowdfunding campaigns completed through Kiva, totaling $223,500. The totals in the charts in this chapter reflect the debt crowdfunding deals for which full data was available. However, we also received data on debt crowdfunding totals directly from Kiva that shows there was a total of $335,000 in debt crowdfunding deals raised in Arkansas in 2022. This larger total indicates that debt crowdfunding's impact on new businesses in the state is increasingly significant.[69] In total, crowdfunding campaigns in Arkansas in 2022 raised $2,832,300, a 92% increase over 2021.

Crowdfunding Campaigns # by Type



Crowdfunding Campaigns $ by Type



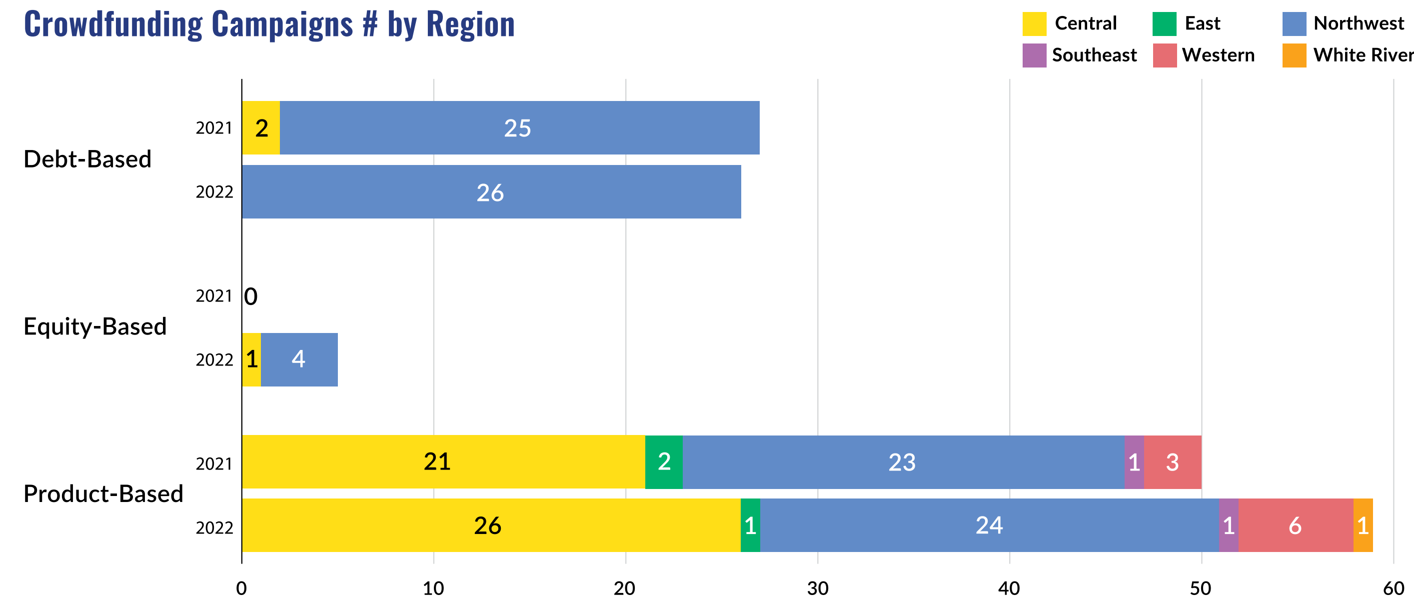
CROWDFUNDING BY ARKANSAS REGION

In 2021, NWA dominated the crowdfunding scene. In 2022, companies in Central Arkansas raised the most money for product crowdfunding deals–$952,300 total (80% of the state's total), with an average of $36,627 per deal. By contrast, there were no identified debt crowdfunding campaigns and only one equity crowdfunding campaign in Central Arkansas in 2022.

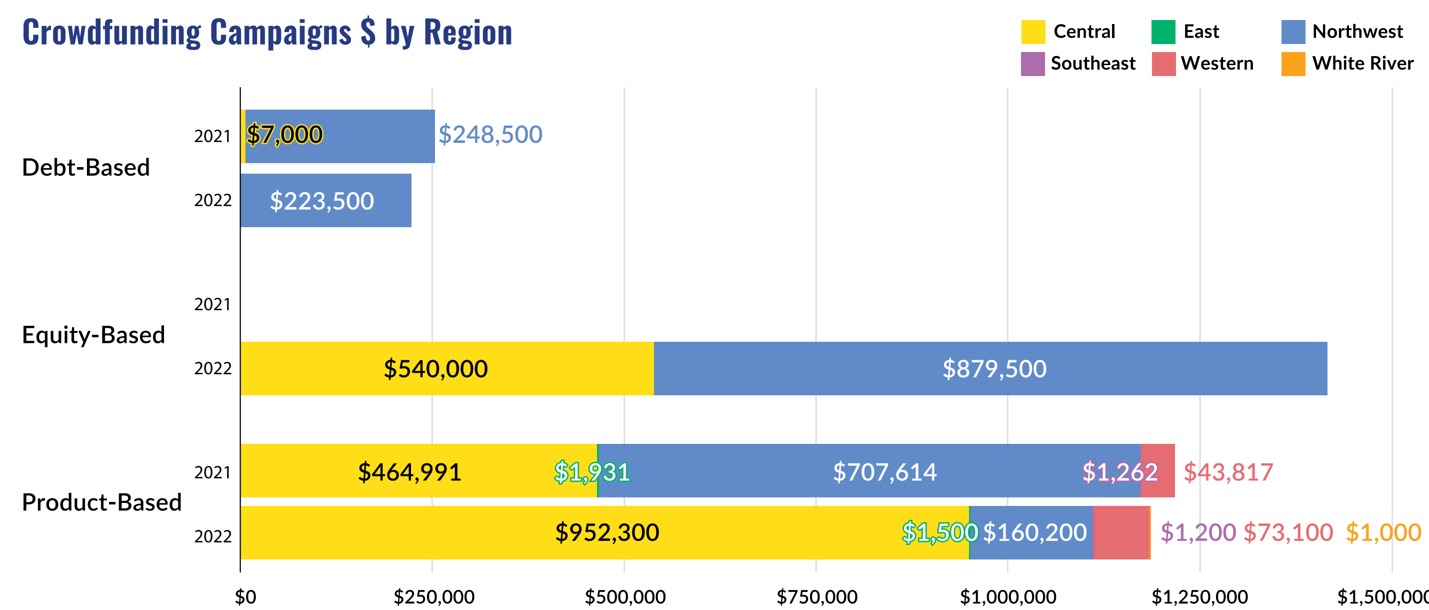
NWA crowdfunding this year was split between product, debt, and equity. In the product crowdfunding category, NWA companies raised $160,200, or 13.4% of the state's total funding, at an average of $7,674 per company. Four of the state's five equity crowdfunding deals (80%) were in NWA, representing $879,000 of the $1,419,000 raised (61.9%). NWA companies also raised 100% of the state's total debt crowdfunding dollars, for a total of $223,500.

Taken together, campaigns in Northwest Arkansas and Central Arkansas collectively raised 97.3% of Arkansas' 2022 crowdfunding dollars. Companies in Western Arkansas raised $73,100, or 2.6% of the state's total crowdfunding dollars. The campaigns in East and Southeast Arkansas and White River were all under $2,000.

Crowdfunding Campaigns # by Region



Crowdfunding Campaigns $ by Region

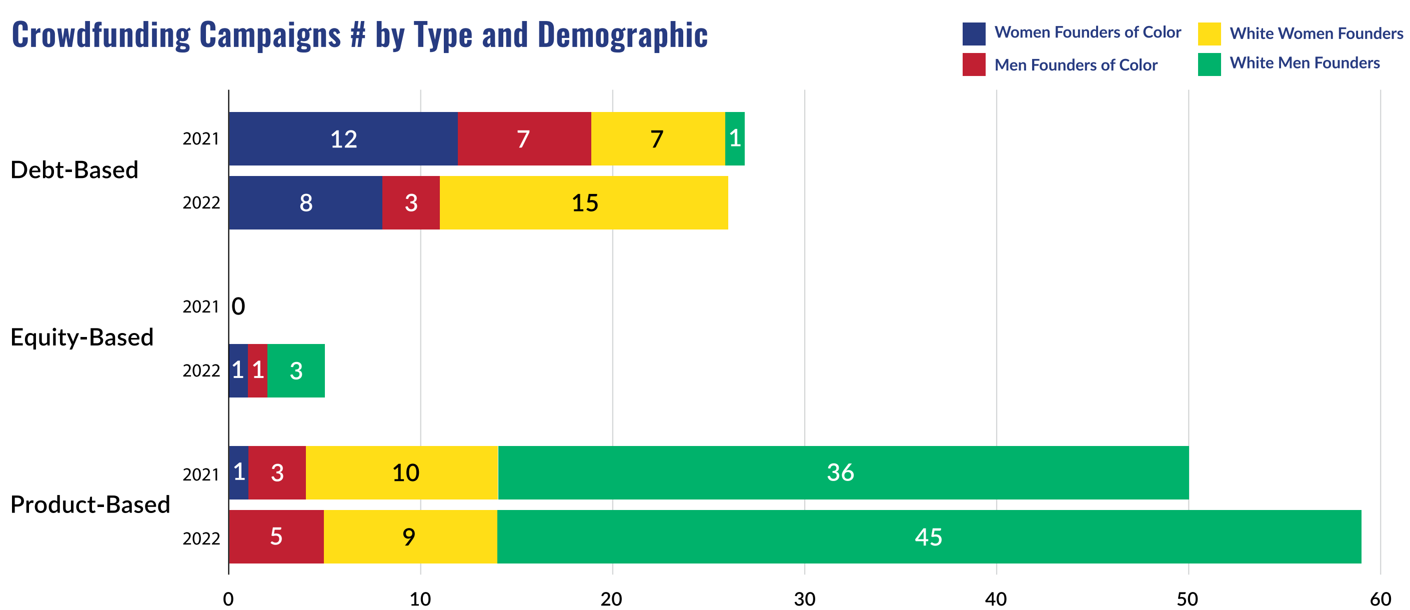


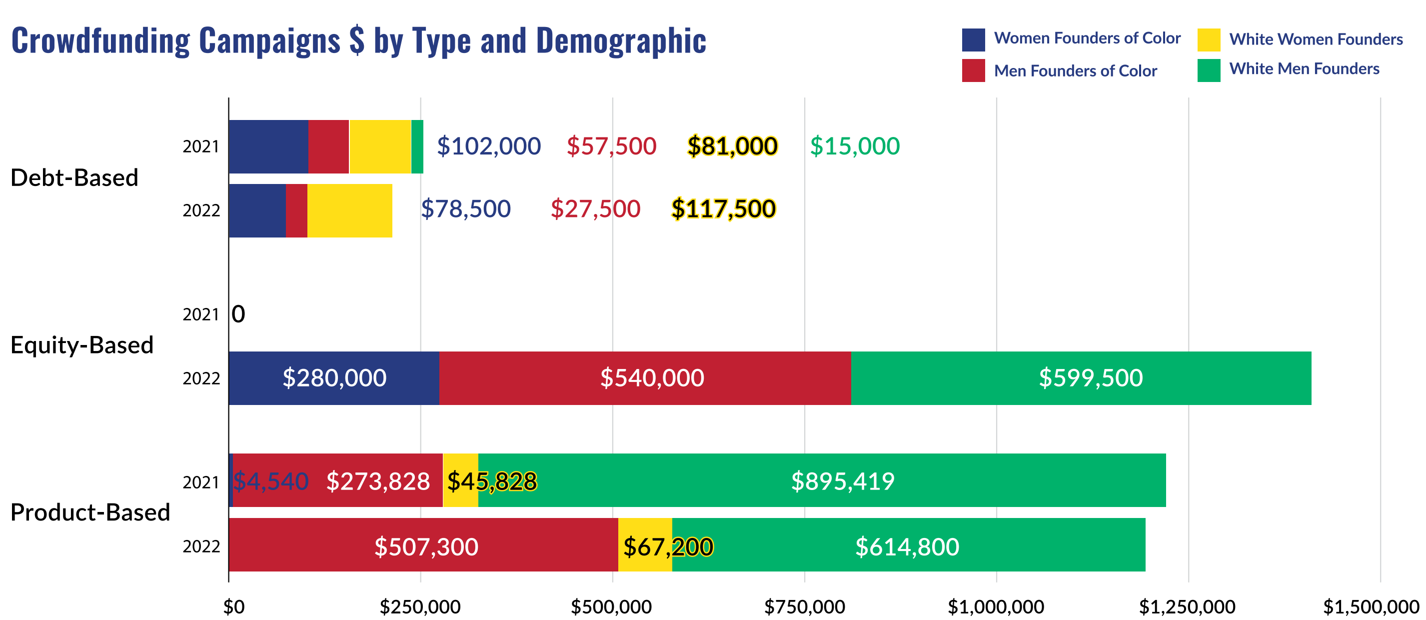
CROWDFUNDING BY CAMPAIGN TYPE AND ARKANSAS DEMOGRAPHICS

In 2022, the number of women running crowdfunding campaigns in Arkansas increased to 33 from 30 in 2021. Women of color owned 10% of the companies that received 2022 crowdfunding awards and received 12.6% of total funding. White women owned 26.7% of the companies and received 6.5% of total funding.

This year, men of color owned the same percent of companies receiving crowdfunding investments as women of color–10%–but received significantly more funding: 37.9% of the total. By comparison, in 2021 men of color owned 13% of the companies receiving crowdfunding investments and received 22.5% of total crowdfunding dollars.

In 2022, white men owned 67.4% of the companies funded by crowdfunding and received 42.9% of the funding. This is a significant drop since 2021, when white men owned 46.8% of the Arkansas companies funded by crowdfunding but received more than half of the funding–61.2%.

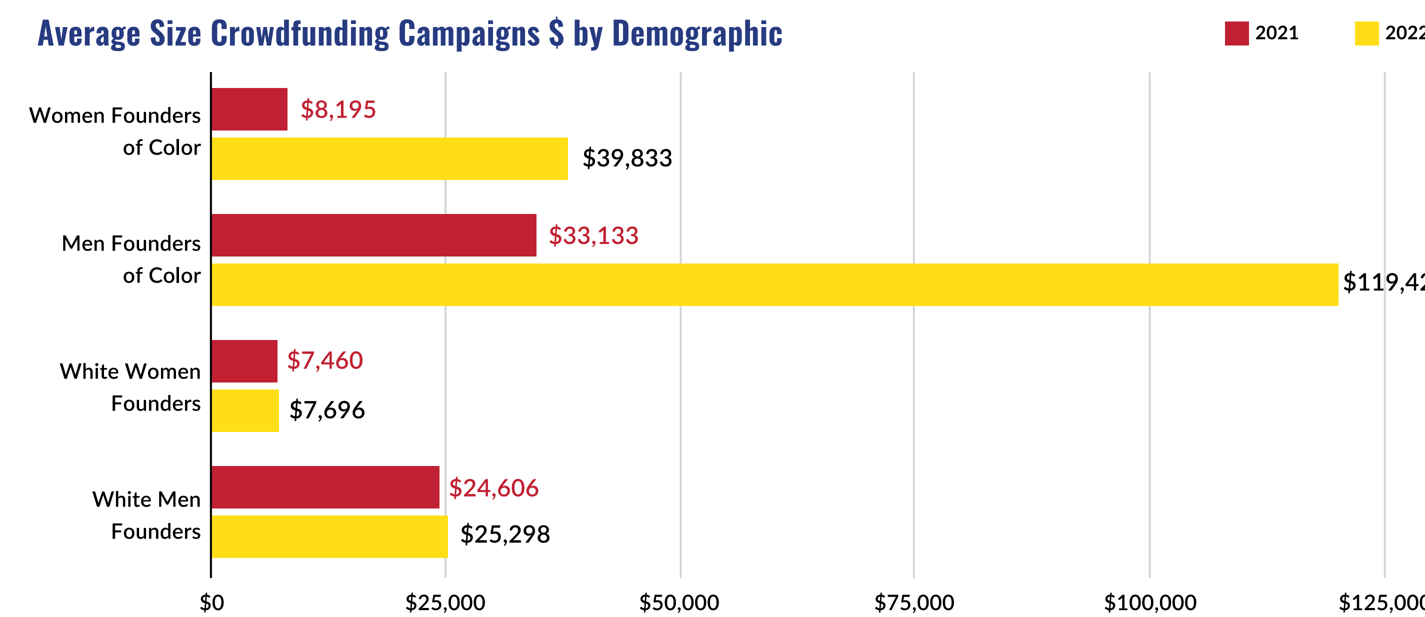




Totals aside, if we look at campaign averages, companies started by men of color raised more than any other demographic–$119,422 (compared to $39,833 for companies started by women of color, $7,696 for those started by white women, and $25,298 for those of white men). The larger context of this average is that nearly 98% ($497,000 out of $507,300) in product crowdfunding raised by founders who are men of color went to Timothy Lim for early release digital downloads of the popular Kamen America comic/graphic novel series, which he co-creates with writer Mark Pellegrini, also a top-seller on Amazon. Lim received 77% of crowdfunding going to men of color in 2021. Comic books are a booming industry on Kickstarter. Lim's publications represent some of the platform's top-funded crowdfunding campaigns nationally.

White male founders ran 79.7% (47 out of 59) of Arkansas Kickstarter campaigns (via pre-sales, as with comics and graphic novels, or awards) and received 68.5% of product crowdfunding cash.

A 2021 study on Kickstarter found that women make up a smaller share of the entrepreneurs on the platform (34.7%) and that both male and female backers of campaigns pledge predominantly to projects led by male entrepreneurs (40% of pledges from female backers and 22.6% of pledges from male backers went to female-led projects).

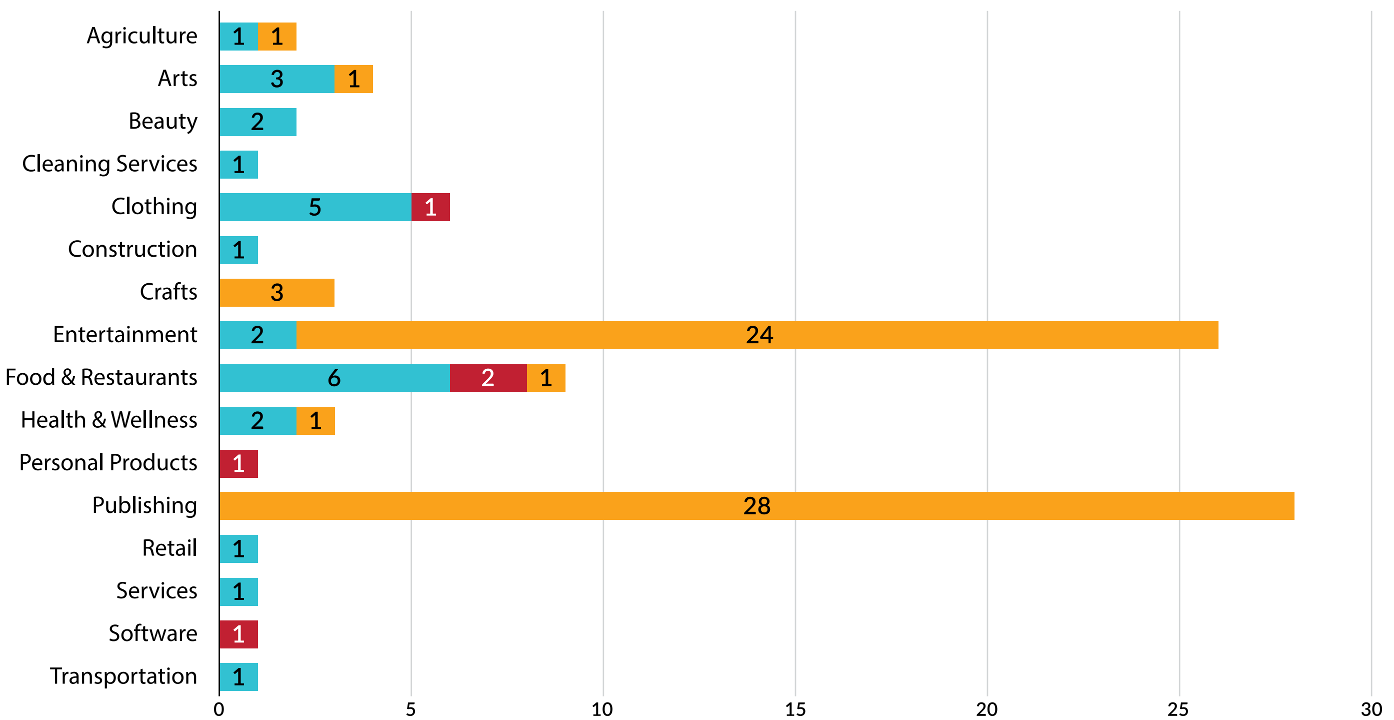


In addition to raising smaller amounts on average, women founders were more likely in 2022 (as in prior years) to run debt crowdfunding campaigns compared with other crowdfunding categories. The publicly available data (pulled in March 2023) shows that Kiva campaigns in 2022 were similar to those in 2021, when there were 27 deals totaling $255,500. Debt-based crowdfunding campaigns tend to be smaller than campaigns on other platforms: while Kiva campaigns made up 28.9% of the campaigns in Arkansas, they only accounted for 7.9% of the funds raised. The average campaign on Kiva was $8,596.

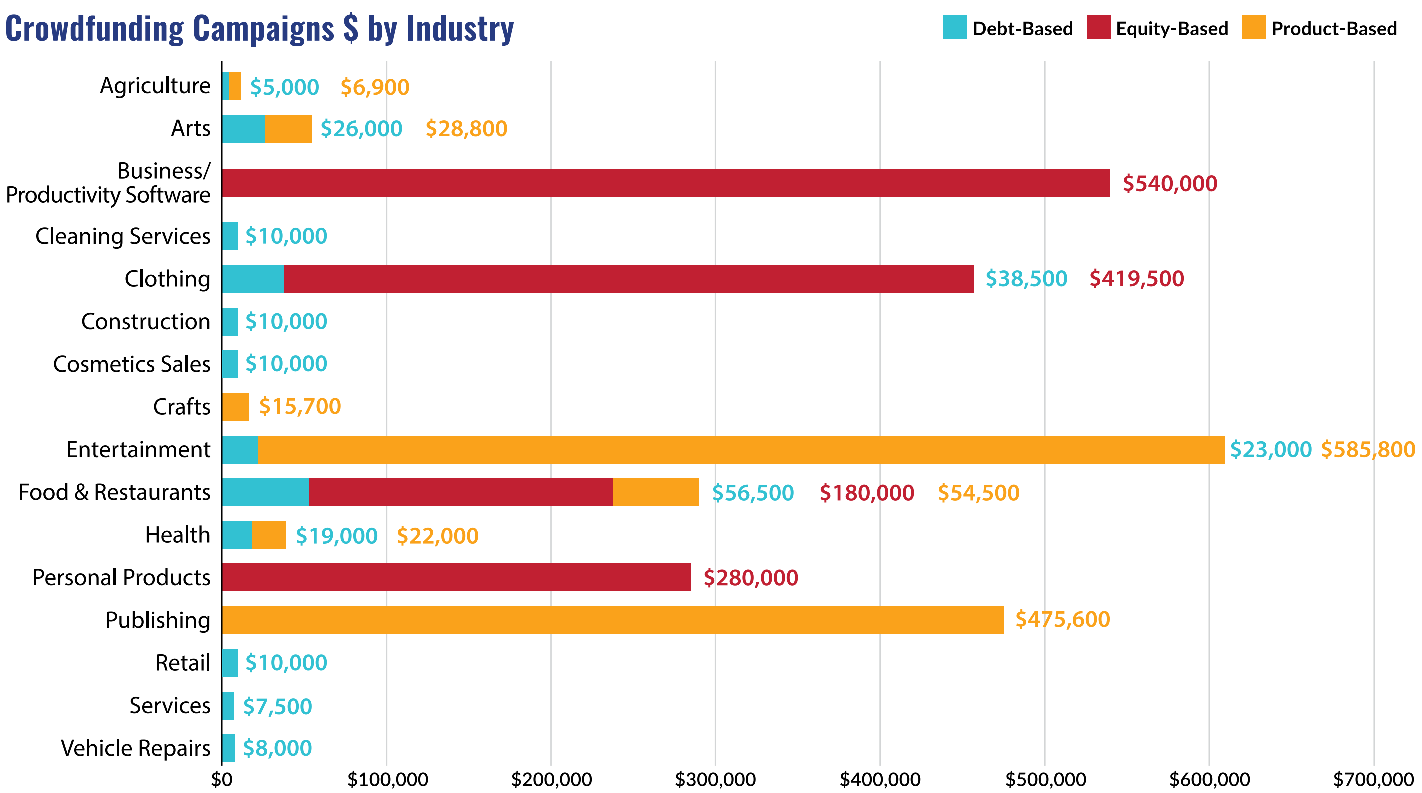
A single equity crowdfunding campaign–by Trace Femcare, a "farm-to-body" hemp-based feminine products company co-founded by Claire Crunk, Meg Galaske, and Olaf Isele–raised $280,000 in 2022. This raise significantly increased the 2022 crowdfunding totals for women of color. Due to the impact of Trace's large raise on total award amounts, in 2022 only 21.9% of the crowdfunding dollars that women of color founders raised was debt-based. By contrast, 63.6% of the crowdfunding amount raised by white women was debt-based.

CROWDFUNDING BY INDUSTRY

Crowdfunding Campaigns # by Industry



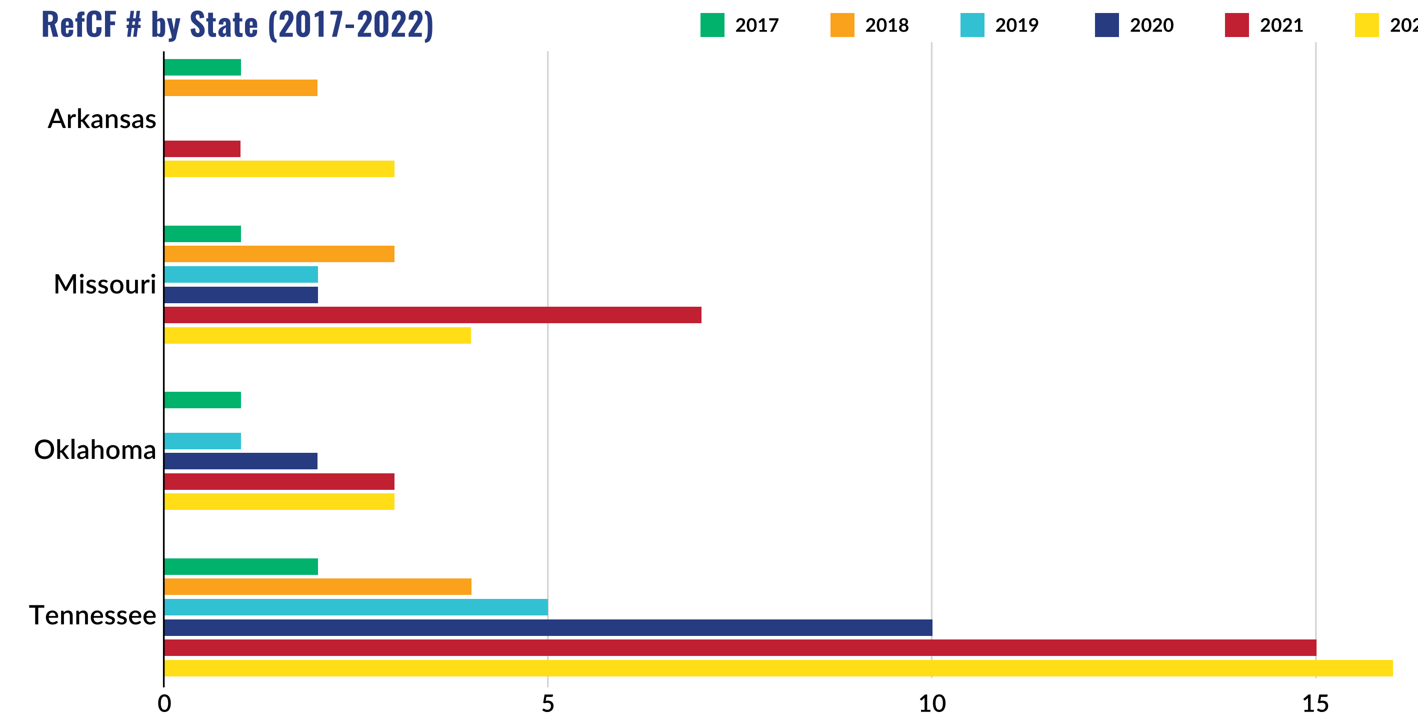
Crowdfunding Campaigns $ by Industry



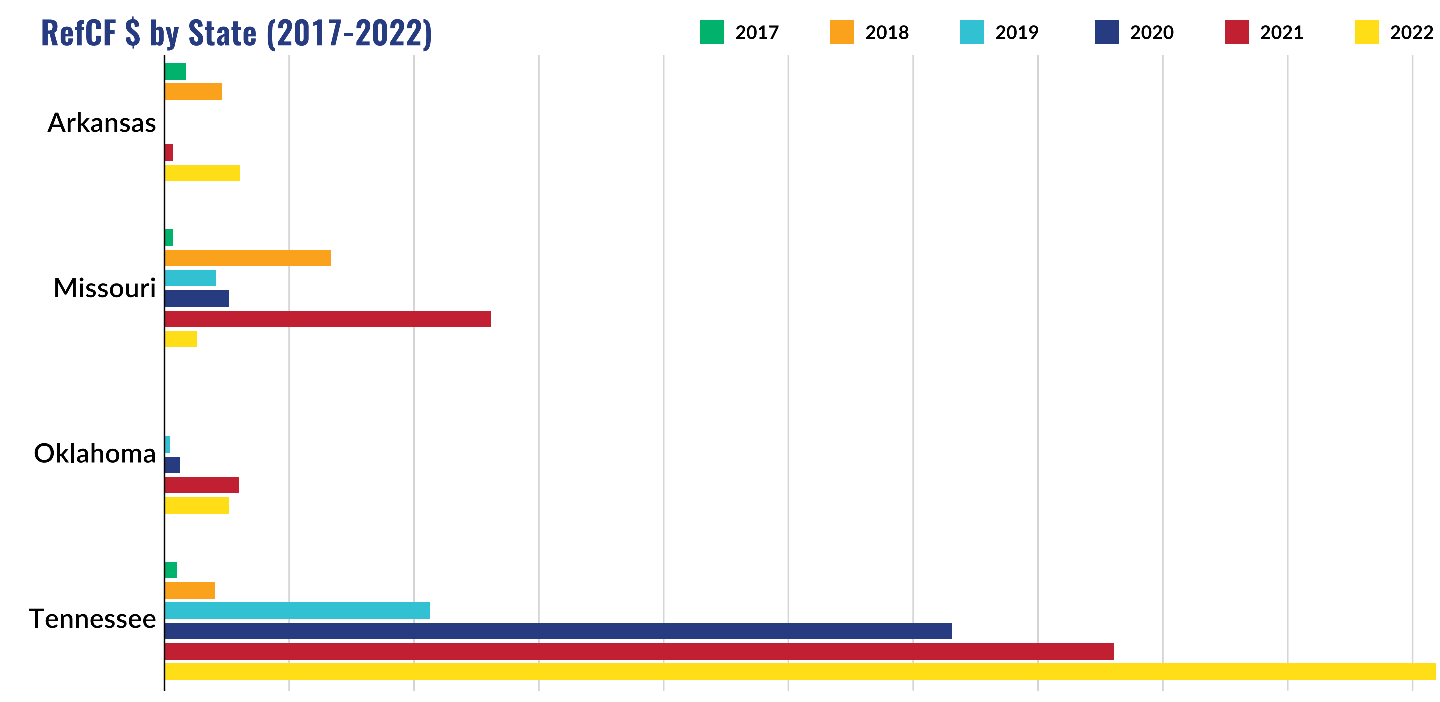
REGULATION EQUITY CROWDFUNDING BY COMPARATOR STATES & MSAs

As previously mentioned, the availability of equity crowdfunding data prior to 2022 is limited. For this report, we were able to leverage the Crowdfund Capital Advisors (CCA) dataset on regulation crowdfunding filed with the SEC to view comparisons between states over the last six years.[70] It is important to note that this is not inclusive of all equity crowdfunding, only those filed as a RegCF. RegCF equity offerings arise from a registration exemption for internet offerings of equity securities in Title III of the JOBS Act. Companies are now permitted to raise up to $5M in equity in these "community rounds" from a larger population of smaller investors, many of whom were previously excluded from non-public equity investment.

RefCF # by State (2017-2022)



RefCF $ by State (2017-2022)



Over the last six years, Arkansas, Missouri, and Oklahoma companies have had an inconsistent engagement with equity crowdfunding. In 2017, Arkansas had a single funded equity crowdfunding campaign ($164,440 raised) followed by two in 2018 ($453,843 raised) and no campaigns in 2019 or 2020. Tennessee saw a growing increase in regulation equity crowdfunding, increasing from 2 funded campaigns ($78,657 raised) in 2017 to 16 in 2022 ($10.2 million raised). Missouri had a high of 7 funded campaigns in 2021 ($2.6 million raised).

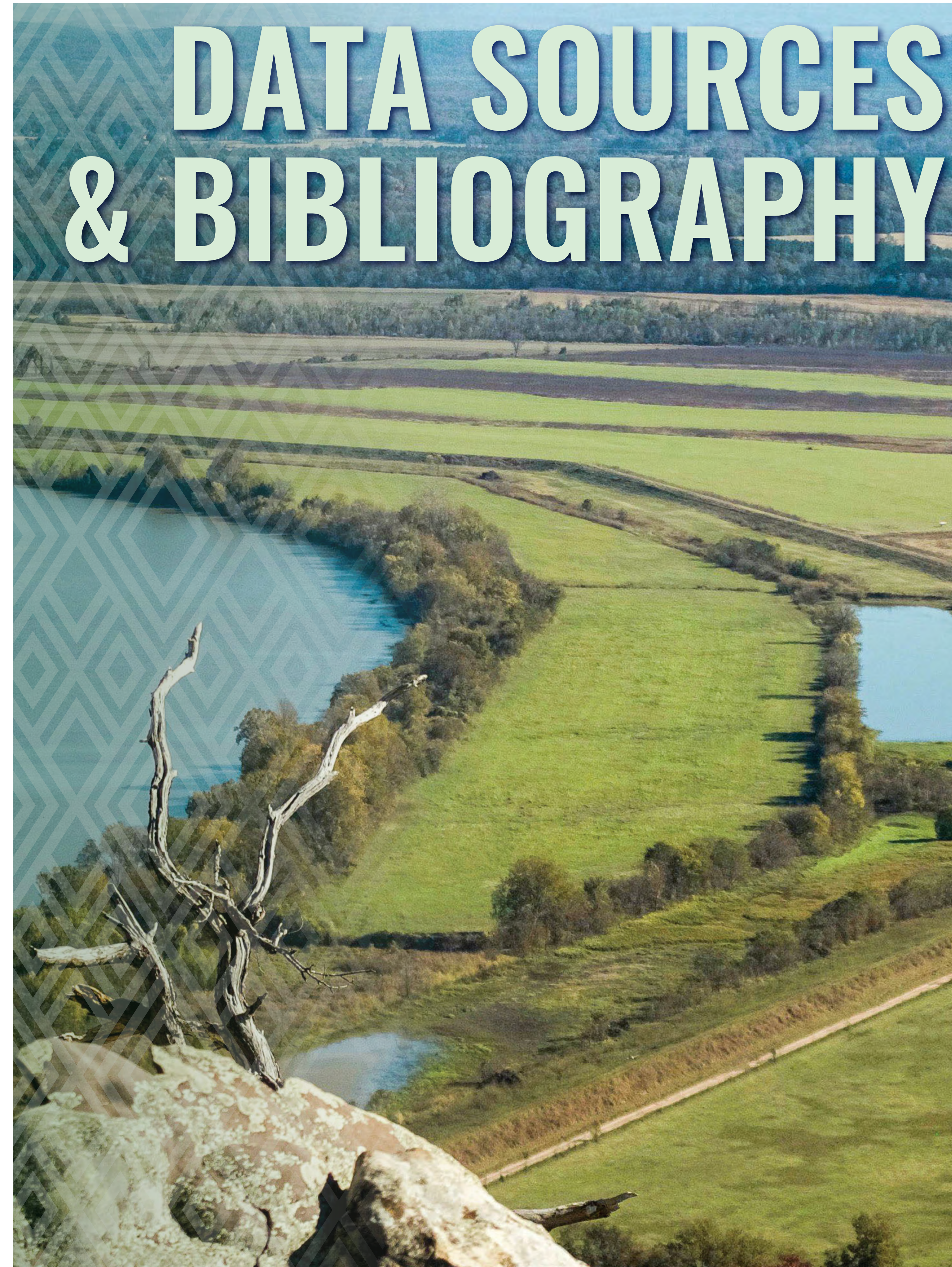
CCA's RegCF data also provides comparisons between entrepreneurship in cities and regions across the nation. The charts below compare regulation equity crowdfunding in NWA with that in other metropolitan regions known for their expanding entrepreneurial ecosystems. These comparisons show how crowdfunding is increasingly contributing to growing entrepreneurship across the U.S., especially since the regulation changes that opened up equity crowdfunding to be accessible to more entrepreneurs in 2021.

Please note that the data below has not been adjusted for per capita population. Additionally, since this data only includes regulation crowdfunding, it does not provide a full comparison of crowdfunding raises between the regions.

Northwest Arkansas MSA Comparison (2016-2022)

2016 2017 2018 2019 2020 2021 2022

Location	Year	Number of Issuers	Investments $	Quantity of Investors
Austin-Round Rock, TX	2016	9	$3,234,792	3,134
	2017	9	$3,248,210	4,015
	2018	14	$3,531,578	5,582
	2019	22	$3,261,122	10,822
	2020	26	$22,934,150	17,807
	2021	42	$36,314,301	23,754
	2022	33	$5,426,896	4,346
Provo-Orem, UT	2016	1	$500,000	943
	2017	1	$353,250	456
	2018	6	$134,581	290
	2019	4	$2,383,779	2,441
	2020	6	$2,455,031	6,379
	2021	7	$9,240,235	12,844
	2022	5	$1,073,298	1,229
Durham-Chapel Hill, NC	2016			
	2017	3	$142,952	225
	2018	3	$27,121	10
	2019	1	$122,161	103
	2020	2	$220,751	87
	2021	6	$1,472,012	681
	2022	9	$2,300,069	2,054
Raleigh, NC	2016			
	2017			
	2018	1	$10,500	19
	2019			
	2020	1	$174,837	523
	2021	4	$175,725	83
	2022	10	$3,731,787	911
Des Moines-West Des Moines, IA	2016			
	2017			
	2018			
	2019	1	$369,700	0
	2020			
	2021	1	$369,278	312
	2022	3	$2,132,543	692
Madison, WI	2016			
	2017			
	2018			
	2019	3	$560,595	505
	2020	2	$33,319	0
	2021	2	$172,201	247
	2022	2	$129,870	104
Fayetteville-Springdale-Rogers, AR-MO	2016			
	2017			
	2018			
	2019			
	2020			
	2021			
	2022	3	$599,329	525
		0 5 10 15 20 25 30 35 40 45	0M 5M 10M 15M 20M 25M 30M 35M 40M	0K 5K 10K 15K 20K 25K



DATA SOURCES

1 Gelfer, James. 2022. "PitchBook Report Methodologies." Pitchbook.com. PitchBook. February 10, 2022. https://pitchbook.com/news/articles/pitchbook-report-methodologies.

2 Arend, Mark. "Diversity of Economy: Economic Diversity Drives Success: Arkansas Offers a Potent Mixture of Talent and Resources." Site Selection. 2022. https://siteselection.com/cc/arkansas/2022/economic-diversity-drives-success.cfm.

3 Sparkman, Worth. "New Report Outlines NWA's Roadmap to Mobile Leadership." Axios. Axios NW Arkansas. December 12, 2022. https://www.axios.com/local/nw-arkansas/2022/12/12/report-roadmap-arkansas-mobility-leaders.

4 Ibid.

5 Della Rosa, Jeff. "Census Bureau: Arkansas Population Grows by 0.6% in 2022 - Talk Business & Politics." Talk Business & Politics. December 22, 2022. https://talkbusiness.net/2022/12/census-bureau-arkansas-population-grows-by-0-6-in-2022/#:~:text=Arkansas%20is%20the%2017th%20fastest,from%203.02%20million%20in%202021.

6 "Arkansas - Industry Market Research, Reports, and Statistics." IBISWorld. 2013. https://www.ibisworld.com/united-states/economic-profiles/arkansas/.

7 "Arkansas' Hispanic Population Shows Steady Growth, Census Finds, as Families Put down Roots." Arkansas Online. Arkansas Democrat-Gazette. January 9, 2022. https://www.arkansasonline.com/news/2022/jan/09/arkansas-hispanic-population-shows-steady-growth/.

8 Wright, Alison."Arkansas Population by Race & Ethnicity 1980-2020 | Arkansas State Data Center." Youraedi.com. May 27, 2022. https://arstatedatacenter.youraedi.com/arkansas-population-by-race-ethnicity-1980-2020/?utm_source=rss&utm_medium=rss&utm_campaign=arkansas-population-by-race-ethnicity-1980-2020#:~:text=By%202010%2C%20the%20total%20population,central%20part%20of%20the%20state.

9 "Gross Domestic Product: All Industry Total in Arkansas." Stlouisfed.org. 2023. https://fred.stlouisfed.org/series/ARNQGSP.

10 "Arkansas - Industry Market Research, Reports, and Statistics." IBISWorld.

11 Ibid.

12 Arkansas Economic Development Guide. Arkansas Economic Development Commission. 2023. Default. 2023. https://www.arkansasedc.com/.

13 Arkansas Economic Development Guide. Arkansas Economic Development Commission.

14 "U.S. Bureau of Labor Statistics, Unemployment Rate [UNRATE]", retrieved from FRED. Federal Reserve Bank of St. Louis. September 6, 2023. https://fred.stlouisfed.org/series/UNRATE.

15 Hankin, Aaron. "The Downside of Low Unemployment." 2023. Investopedia. 2023. https://www.investopedia.com/insights/downside-low-unemployment/#:~:text=The%20level%20at%20which%20unemployment,-to%20or%20at%20full%20capacity.

16 "How the Gig Economy Supports Entrepreneurial Activity." NBER. 2021. https://www.nber.org/be-20211/how-gig-economy-supports-entrepreneurial-activity.

17 Ibid.

18 Kessler, Sarah. "The Unequal Geography of the Gig Economy." The Atlantic. theatlantic. June 5, 2018. https://www.theatlantic.com/business/archive/2018/06/gig-economy-inequality/560942/.

19 Aleksandric, Milica. 2023. "20+ Gig Economy Statistics for 2023: The State of Gig Work." FinMasters. April 12, 2023. https://finmasters.com/gig-economy-statistics/#gref.

20- "Cost of Living Comparison Index." Arkansas Economic Development Guide. Arkansas EDC. 2023. https://www.arkansasedc.com/docs/default-source/default-document-library/cost-of-living-index-annual-average-2021.pdf?sfvrsn=-480cac38_8

21 Ferguson, Stephanie. 2023. "Interactive Map: New Business Applications across the Country." U.S. Chamber of Commerce. February 14, 2023. https://www.uschamber.com/small-business/new-business-applications-a-state-by-state-view?state=ar.

22 Ibid.23-Cited in University of Central Arkansas. Women of Color Business Owners and Entrepreneurs in Arkansas. 2021 report. EPub. Pg. 6. http://www.arkansasedc.com/docs/default-source/women-and-minority/women-of-color-business-owners-report.pdf?sfvrsn=1acda252_2. The report references the following study: Hwang, V., Desai, S., & Baird, R. (2019). Access to Capital for Entrepreneurs: Removing Barriers. Ewing Marion Kauffman Foundation. Available at SSRN 3389924.

24 Engage the Future: A Look at the Growing Diversity in Northwest Arkansas. Engage NWA. 2022. https://engagenwa.org/northwest-arkansas-diversity-report/.

25 "Home | BlackOwnedNWA." BlackOwnedNWA. 2015. https://www.blackownednwa.org/.

26 Sparkman, Worth. "Friends Bolster Black Business Owners on Instagram." Axios. Axios NW Arkansas. February 11, 2022. https://www.axios.com/local/nw-arkansas/2022/02/11/nwa-black-business-owners-instagram.

27 Ibid.

28 Ibid.

29 "Listings." Diversity NWA. https://diversitynwa.com/listings/.

30 Ibid.

31 Takahashi, Dean. 2023. "U.S. VC Investments and Exits Plummeted in 2022 | NVCA." VentureBeat. VentureBeat. January 6, 2023. https://venturebeat.com/games/vc-investments-and-exits-plummeted-in-2022-nvca/.

32 Rumage, Jeff. "VC Funding Dropped in 2022 but Eclipsed Pre-2021 Totals." Built In. 2022. https://builtin.com/investments-exits/tech-funding-2022-pitchbook-report.

33 Ibid.

34 van Romburgh, Marlize. "What's Happening with Seed and Series a Funding, in 4 Charts." Crunchbase News. Crunchbase News. May 13, 2023. https://news.crunchbase.com/venture/seed-series-a-funding-charts-2023.

35 Note: In previous Arkansas Capital Scans, we categorized agriculture companies separately but in this year's scan we decided to use Pitchbook's standard categories in order to keep data consistent across states. Most agricultural companies fall into the consumer products and services sector.

36 Note: When comparing to 2021, it's important to note that there was one company in 2021 whose demographic information we were unable to access.

37 "King Biscuit Blues Festival - Helena, Arkansas." King Biscuit Blues Festival. 2021. https://kingbiscuitfestival.com/history/.

38 Butler, Caitlin. "Henry Awards Recognize Arkansas Tourism Professionals, Creative Ideas." Arkansas Online. Northwest Arkansas Democrat-Gazette. March 2, 2023. https://www.nwaonline.com/news/2023/mar/02/henry-awards-recognize-arkansas-tourism-professionals-creative-ideas/#:~:text=The%20Tourism%20Attraction%20of%20the,the%20announcement%20of%20their%20win.

39 Ibid.

40 Wilmoth, Daniel. "Small Business Facts: Small Business Job Creation." Small Business Administration. 2022. https://advocacy.sba.gov/wp-content/uploads/2022/04/Small-Business-Job-Creation-Fact-Sheet-Apr2022.pdf.

41 Gabbert, J., Tarhuni, N., Cox, D. Stanford K. Navas M. and Harrison V. "Q4 2022 Pitchbook-NVCA Venture Monitor First Look." Pitchbook.com. PitchBook. December 31, 2022. Spreadsheet. https://my.pitchbook.com/gs/reports.

42 This report follows Pitchbook's methodology for classifying deals in angel, seed, or venture stage, except where that classification differs from a founder's self-reported classification. https://pitchbook.com/news/articles/pitchbook-report-methodologies.

43 "State of Venture 2022 Report." CB Insights Research. CB Insights. January 11, 2023. https://www.cbinsights.com/research/report/venture-trends-2022/.

44 Ibid.

45 Grabow, Jeffrey."2022 Recap: Second Highest Year for vc Investment, but Winter Is Here." EY. January 30, 2023. https://www.ey.com/en_us/growth/venture-capital/q4-2022-venture-capital-investment-trends#:~:text=Venture%20capital%20(VC)%20investment,year%20ever%20for%20VC%20investment.

46 Robbins, Jacob. "The State of VC in 6 Charts." Pitchbook.com. PitchBook. January 24, 2023. https://pitchbook.com/news/articles/vc-trends-charts-2022.

47 Teare, Gené. "Global Funding Slide in 2022 Sets Stage for Another Tough Year." Crunchbase News. Crunchbase News. Jan. 5, 2023. https://news.crunchbase.com/venture/global-vc-funding-slide-q4-2022/.

48 Ibid.

49 As noted in the Angel/seed section, in previous Arkansas Capital Scans, agriculture companies were categorized separately, but this year's report follows Pitchbook's standard categories in order to keep data consistent across states. Most agricultural companies fall into the consumer products and services sector.

50 "HIVERY Named to the 2023 CB Insights' Retail Tech 100 List in the World." Newswire. March 21, 2023. https://www.newswire.com/news/hivery-named-to-the-2023-cb-insights-retail-tech-100-list-in-the-world-21985549.

51 “To Level Health Inequalities, Soda Health Raises $25M to Unlock Billions in Medicare Benefits.” Soda Health. 2022. https://sodahealth.com/press/to-level-health-inequalities-soda-health-raises-25m-to-unlock-billions-in-medicare-benefits/.

52 Ibid.

53 Rissinger, Daryl. Profile. LinkedIn. 2023. https://www.linkedin.com/in/daryl-risinger-5066034/.

54 “Soda Health Named to the 2021CB Insights Digital Health 150-List of Most Innovative Digital Health Startups.” Soda Health. 2021. https://sodahealth.com/press/soda-health-named-to-the-2021cb-insights-digital-health-150-list-of-most-innovative-digital-health-startups/.

55 Soda Health Named to the 2022 CB Insights Digital Health 150-List of Most Innovative Digital Health Startups.” Soda Health. 2022. https://sodahealth.com/press/soda-health-named-to-the-2022-cb-insights-digital-health-150-list-of-most-innovative-digital-health-startups/.

56 Siken, Justin. “2022 SBIR Awards Reach Record High.” HigherGov. March 23, 2023. https://www.highergov.com/news/sbir-awards-reach-record-high-2023/.

57 “Small Business Administration. State Funds for SBIR Companies.” August 2021. ePub. https://www.sbir.gov/sites/default/files/2021_State-Funds-for-SBIR-companies_0826.pdf.

58 Ibid.

59 Ibid.

60 Robinson, David. “BioVentures Team Aims to ‘Change Culture,’ Help Researchers Advance Discoveries.” UAMS News. Sept. 8, 2022. https://news.uams.edu/2022/09/08/bioventures-team-aims-to-change-culture-help-researchers-advance-discoveries/?utm_campaign=research_news&utm_medium=post&utm_source=facebook&utm_term=article_bioventures-team_change-culture-help-researchers-adv-discoveries_news.

61 Young, Hardin. “Local Startup Nanomatronix Receives $1.1 Million Small Business Award.” University of Arkansas News. December 16, 2022. https://news.uark.edu/articles/62968/local-startup-nanomatronix-receives-1-1-million-small-business-award.

62 HigherGov. “SBIR Benefits Go Beyond the Award.” 23 March 2023. https://www.highergov.com/news/sbir-awards-reach-record-high-2023/.

63 Ibid.

64 Ibid.

65 See https://asbtdc.org/4-states-collaborate-on-sbir-sttr-proposal-lab-nsf-accelerator-spots-available-for-arkansas-companies/ for more information on how to participate in the FAST Collaborative.

66 “Winrock International - Science Venture Studio Wins Expansion Funding and Finds New Home at Winrock International.” Winrock. rg. 2020. https://winrock.org/science-venture-studio-wins-expansion-funding-and-finds-new-home-at-winrock-international/.

67-“Empower.” Science Venture Studio. 2013. https://www.scienceventurestudio.org/empower.

68 Crowdfund Capital Advisors provided the RegCF data that we used in this analysis. See https://crowdfundcapitaladvisors.com/discover-data/.

69 In fact, Arkansas companies raised more on Kiva than in all three comparator states–160% more than Missouri’s total of $129,000, 123% more than Oklahoma’s total of $150,000, and 75% more than Tennessee’s total of $191,500.

70 For information on how to access this data see https://crowdfundcapitaladvisors.com/discover-data/.

BIBLIOGRAPHY

The conclusions that this study presents are based on a broad cross-section of primary and secondary data from government offices and surveys from entrepreneurs. The goal for this study was to capture as much of the deal flow in Arkansas as we could within the constraints of the available data. Specific data limitations are discussed within the relevant sections of this report to contextualize the analysis, and the full list of data sources has been included below.

Arkansas Economy Section

Arkansas Demographics

- 2022 Quickfacts - U.S. Census Bureau
  https://www.census.gov/quickfacts/AR

- Arkansas Economic Regions - Association of Arkansas Development Organizations
  https://arkansaseconomicregions.org/

Arkansas Unemployment

- Unemployment Rates - St. Louis Federal Reserve (FRED)
  https://fred.stlouisfed.org/series/ARUR/?utm_source=fred-glance-widget&utm_medium=widget&utm_campaign=fred-glance-widget

Business Applications

- Business Applications for Arkansas (Not Seasonally Adjusted) - St. Louis Federal Reserve (FRED)
  https://fred.stlouisfed.org/graph/?g=16nnP

Angel and Seed Fund Section

Angel and Seed Investment Deals for 2022 - PitchBook

- Includes information on types of deals, date, industry, headquarters location, and main investors. Data for accelerator/incubator deals was also included in angel/seed deal totals. The data for this report was pulled on March 5, 2023.
  https://pitchbook.com/

Self-reported Angel and Seed Investment Deals (Survey)

- Start-Up Business Survey - the 2022 Arkansas Capital Scan team collected data in early 2023 from entrepreneurs on their 2022 deals, needs, and challenges. This data was categorized into angel/seed or venture capital and reported on in aggregate. Where there was disagreement between deals reported by PitchBook and by entrepreneurs, we prioritized the primary data self-reported by entrepreneurs.

The following data was collected:

- Company Name
- Year Founded
- City and Zip code of Headquarters
- Primary Industry
- Company Stage
- Number of Founders
- Founder’s gender
- Founder’s race and ethnicity
- Founder’s age
- Founder’s education level
- Founder’s veteran status

- Whether or not the company was actively seeking funding in 2022
- What types of funding the company received in 2022
- Attitudes towards access to capital in 2022
- What resources in Arkansas were most useful in seeking capital
- Gaps in accessing capital

Entrepreneur Demographics

As demographic characteristics of companies are not collected and reported in a consistent manner, we collected this data from a variety of sources with the following prioritization:

1. Self-reported founder demographics, either through survey responses or listed on their company's website or in press releases.
2. Reported demographics from secondary sources, including PitchBook, government databases (for example, Women-Owned Small Business designations), and associations.
3. Assessment of majority demographics of self-reported founders.

Comparator State Populations

- 2022 Quickfacts - U.S. Census Bureau
  https://www.census.gov/quickfacts/

Venture Capital Section

Venture Capital Investment Deals for 2022 - PitchBook

- Includes information on types of deals, date, industry, headquarters location, and main investors.The data for this report was pulled on March 5, 2023.
  https://pitchbook.com/

Self-reported Venture Capital Investment Deals (Survey)

- Start-Up Business Survey - the 2022 Arkansas Capital Scan team collected data in early 2023 from entrepreneurs on their 2022 deals, needs, and challenges. This data was categorized into angel/seed or venture capital and reported on in aggregate. Where there was disagreement between deals reported by PitchBook and by entrepreneurs, we prioritized the primary data self-reported by entrepreneurs.

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Comparator State Populations

- 2022 Quickfacts - U.S. Census Bureau
  https://www.census.gov/quickfacts/

Non-Dilutive Grants Section

SBIR and STTR awards

All SBIR and STTR award information was gathered from the SBIR website (https://www.sbir.gov/sbirsearch/award/all). All awards between 2001 and 2022 were pulled from this database for Arkansas, Missouri, Oklahoma, and Tennessee. This date range was selected in order to provide consistent comparison across all four states because the earliest listed awards in the database for Arkansas start in 2001. This data set included:

- Company name
- Company headquarters
- Agency and Branch of award
- Phase of award
- Type of award (SBIR or STTR)
- Award dates
- Award amount
- HubZONE designation (self-reported by company)
- Woman-Owned Business designation (self-reported by company)
- Socially or Economically Disadvantaged Business designation (self-reported by company)
- Number of employees

Debt Section

We gathered data from Pitchbook and quarterly FFIEC Reports of Condition and Income (Call Reports) from the Federal Financial Institutions Examination Council.

Commercial bank consolidation and access to funding

- Bank's Arkansas market share - FDIC
  https://www7.fdic.gov/sod/sodMarketBank.asp

Credit Union Small Business Lending in Arkansas

- Credit unions doubling their small business lending between 2008-2016 - SBA
  https://advocacy.sba.gov/2018/01/01/how-did-bank-lending-to-small-business-in-the-united-states-fare-after-the-financial-crisis/

Data request for credit union financial performance

- National Credit Union Administration
  https://fpr.ncua.gov/FPRRequestSet.aspx

Comparator State Populations

- 2022 Quickfacts - U.S. Census Bureau
  https://www.census.gov/quickfacts/

Small Business Administration Loans

- Loan-level data provided by the Arkansas Office of the Small Business Administration

Crowdfunding Section

Product and Debt Crowdfunding

- Kiva
  - Startup Junkie oversees the Kiva initiative for Northwest Arkansas: https://www.startupjunkie.org/news/kivalaunch
  - Startup Junkie provided data on the crowdfunding campaigns completed under their platform, including company headquarters, total campaign, and number of participants in the campaign.

- Kickstarter
  - Data on fully funded Kickstarter campaigns in 2022 in Arkansas were retrieved from the Kickstarter website.
    https://www.kickstarter.com/

Equity Crowdfunding

- Pitchbook
  - Includes information on types of deals, date, industry, headquarters location, and main investors.
    https://pitchbook.com/

Regulation Crowdfunding: NWA, State, and MSA Comparisons

- Crowdfund Capital Advisors
  https://crowdfundcapitaladvisors.com/discover-data/

Thank you for reading the 2022 Arkansas Capital Scan.

This marked the third year of the Arkansas Capital Scan. Since this project began, we have endeavored to develop a landscape scan of the capital resources available to businesses in Arkansas in an effort to understand deal flow and identify gaps and opportunities for new programs and policies to attract investment to Arkansas businesses.

This report was only possible thanks to the advice and inputs of entrepreneurs, investors, and stakeholders like you. As we plan for the 2023 Arkansas Capital Scan, we welcome any questions, comments, or feedback on our findings for 2022. If you are an entrepreneur and interested in reporting capital raised, we invite you to email us to receive notification of the release of the 2023 survey.

EMAIL: oei@uark.edu
WEBSITE: https://entrepreneurship.uark.edu/capital-scan.php

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