



ASSET MANAGEMENT | WHITE PAPER

Conning Maintains Stable Outlook

Key Findings

- » Conning maintains a stable outlook on state credit quality as the economic recovery continued in 2021.
- » States further reopened their economies and benefitted from strong tax collections combined with unprecedented federal stimulus.
- » Population patterns that emerged during the pandemic continued with people moving out of city centers, often into rural and suburban areas.
- » Migration from Northeast and Midwest to the West and South is leading to strong housing markets in the destination regions.
- » While Western and Mountain states have increasingly led recent overall rankings, Florida, New Hampshire and Texas earned top-five spots this year.

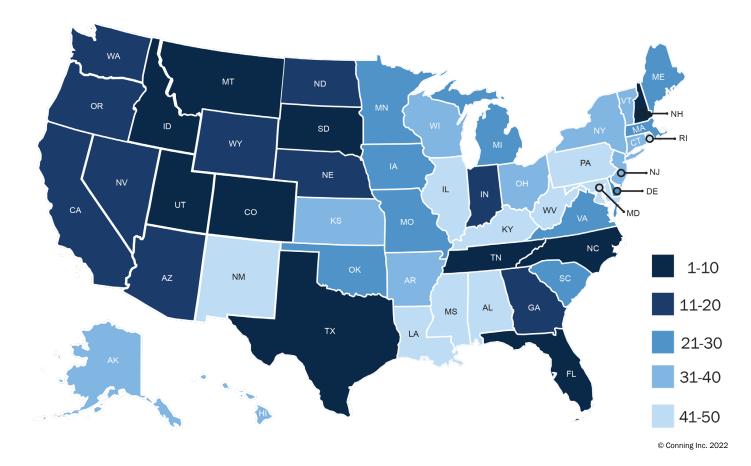


Exhibit 1: State of the States Rank May 2022



Contents

Executive Summary 2
2022 Findings 3
Economic Activity

Socioeconomic Activity 6	
Financial Metrics10	
Appendices 15	

Executive Summary: Conning Maintains Stable Outlook

Since the depths of the pandemic, state credit quality recovered quickly, driven by the economic rebound and unprecedented federal stimulus.

The economic recovery in 2021 drove strong tax revenue collections, which increased 22% from 2020. **Alaska** was the best-performing state in this category, in part because of the recovery in oil prices. Across all states, we saw the positive impact of unprecedented fiscal stimulus and witnessed economies normalizing with consumer spending focused on services. States that rely on leisure, travel and energy for tax revenues as well as employment did especially well. For example, **Nevada** and **California** improved the most when it came to employment growth while **Texas** came in fifth.

Notwithstanding their dominant position and intrinsic credit strength, states faced daunting challenges in 2020 as the COVID-19 pandemic wreaked havoc on the U.S. economy. The nation's unemployment rate jumped from a historic low of 3.5% in February 2020 to a post-war record high of 14.7% in April 2020, eclipsing the 10% rate reached in October 2009 during the Great Recession.¹ From April 2021 to March 2022, **Nebraska** had the lowest 12-month average unemployment rate, but **Indiana** had the greatest positive change in rank, rising 19 spots in the metric year over year. States with no personal income tax, such as **Florida**, **Texas**, and **Washington**, are seeing increases in their labor force and employment numbers. However, **California**, which has one of the highest personal income tax rates, also did well when it came to employment growth during the period, most likely because of the state's strong economic recovery.

Tennessee and **New Hampshire** posted the strongest growth percentage in GDP year over year while **Massachusetts** and **New York** maintained their top positions in terms of GDP per capita. **Idaho** ranked first in both population growth and personal income, with **South Dakota** and **Florida** rounding out the top three for personal income growth.

Population growth patterns that emerged during the COVID-19 pandemic continued for a second year with people moving out of city centers, often into rural and suburban areas.² **Connecticut** and **Vermont** moved up the most in terms of population growth compared to the prior year.

There was concern that high-tax and often-blue states would see outmigration as a result of 2017's Tax Cut and Jobs Act and the cap on state and local tax (SALT) deductions. **Illinois** has experienced outmigration since; however, it had also experienced outflows in years prior. As we have detailed in prior reports, there is little data to suggest that tax-law changes cause this pattern; a more likely driver of population change is job opportunities and, more recently, cost and quality of living. In a post-pandemic world, with the ability to work remotely, the cost of living (and consequently, state taxes) became an increasingly important factor in decisions to relocate. In terms of tax climate, **New York** and **New Jersey** rank as the lowest two states.

Housing markets were especially strong in **Arizona** and **Utah**. The outmigration from the Northeast and Midwest into the West and South is leading to strong housing markets in those destination regions.

¹ Bureau of Labor Statistics, U.S. Department of Labor (2022), "Civilian Unemployment Rate, seasonally adjusted," <u>https://www.bls.gov/charts/employment-situation/civilian-unemployment-rate.htm</u> ² Census Bureau, U.S. Department of Commerce (2022), "Over Two-Thirds of the Nation's Counties Had Natural Decrease in 2021," March 24, 2022 press release, <u>www.census.gov/newsroom/pressreleases/2022/population-estimates-counties-decrease.html</u>



The combination of unprecedented fiscal and monetary support allowed financial markets to recover quickly in 2020 and expand in 2021, allowing **New Jersey** to reduce its net pension liabilities. However, the state remains one of our lower-ranked states when it comes to economic debt, although it can offset that with a high personal income per capita ratio.

Reserves allow states to withstand periodic deficits without endangering their financial health; however, running longer periods of imbalances can create an unsustainable fiscal situation, pushing off to future taxpayers some past costs for government operations and services. States like **Illinois**, **New Jersey** and **Rhode Island** have very thin reserves compared to their budget, while resource-rich states tend to acquire large surpluses in boom years that can help cushion shortfalls when revenues decline. As such, we see **Wyoming**, **North Dakota**, **New Mexico** and **West Virginia** at the top of our reserves ranking.

2022 State Overall Rank

The strong recovery from the pandemic underscored performance in 2021. Three states outperformed, with **Florida**, **New Hampshire** and **Texas** moving up 18, 17 and 21 spots, respectively, into first overall, third and fifth. **Utah** dropped a spot to second overall with **Montana** moving up one spot to fourth.

Other states that moved up in rank include **Michigan** (+18), **Nevada** (+15) and **Oklahoma** (+14) and **Massachusetts**, **Alaska** and **Hawaii** all moving up 11 spots. **Michigan** improved significantly in several different metrics including tax revenue growth, GDP growth, and employment growth, as it benefitted from the recovery of its leisure & hospitality sector; its durable goods manufacturing sector accounted for most of its year-over-year real GDP growth.

As **Hawaii** improved 11 spots to move out of its 2021 State of the States last-place ranking, **Louisiana** moved down one into the bottom spot. **Maryland** dropped 15 places into 49 as its economy and housing market lagged relative to the other 49 states. **West Virginia** stayed 48 overall with **Mississippi** dropping eight spots to 47, **Kentucky** declined four spots to 46 and **Rhode Island**, which has been trending downward for several years, fell two spots to 45. (Exhibit 2 includes summaries of the top- and bottom-five ranked states.)

Let us examine the 13 factors that feed Conning's State of the States assessment.

Top Five States	Comment	Bottom Five States	Comment
1. Florida	Strong personal income, housing price and employment growth, coupled with a favorable tax climate.	46. Kentucky	High economic debt and low personal income and GDP per capita contributed to the state's low rank.
2. Utah	Second in housing-price and population growth as well as unemployment rate. Tax revenue growth and personal income change ranked high as well.	47. Mississippi	Lowest-ranked GDP per capita and personal income per capita. Weak reserves.
3. New Hampshire	GDP growth and personal income change helped support a strong overall rank.	48. West Virginia	Second-lowest personal income per capita. Weak GDP per capita and employment growth outweigh healthy reserves.
4. Montana	Top-five ranked in debt per capita, population growth, unemployment rate average, and tax climate.	49. Maryland	Low housing-price change and reserves coupled with high economic debt and debt per capita.
5. Texas	Employment growth, population growth, reserves, and debt per capita all ranked within the top 10.	50. Louisiana	Lowest-ranked housing price change. Bottom-five ranked in GDP growth, population growth, and reserves.

Exhibit 2: Top Five and Bottom Five States with Commentary

Prepared by Conning, Inc. Source: ©2022 Conning Inc.



Economic Activity

We start off by discussing economic conditions states experienced after the first year of the pandemic. Our metrics include GDP growth, GDP per capita, employment growth and the state's unemployment rate.

GDP Growth by State

GDP is the most comprehensive measure of a state's economic health. It encapsulates the underlying economic activity in each state by measuring the goods and services produced and assigning a market value to those products. GDP is reported both annually and quarterly to provide a continuous assessment of a state's economic standing.

In years past we used nominal GDP to calculate the growth of a state's economy. For our 2022 State of the States report, we shifted to real GDP to remove the effect of inflation and solely focus on the output of a state's economy.

Conning uses the GDP growth metric to identify trends in state economies. A subdivision of the growth rate—the individual sectors that contribute to a state's GDP growth, defined by the North American Industry Classification System (NAICS)—allows us to pinpoint sectors, such as oil and gas.

In our 2021 report, we observed how our lowest-ranked states (Alaska, Oklahoma, West Virginia and Wyoming) all leaned heavily on the mining, quarrying, and oil and gas extraction (oil) industry. In the previous 12 months they would have likely outperformed in terms of nominal GDP as a result of the runup in energy prices. However, when looking at real GDP changes, Alaska, Wyoming, North Dakota and Oklahoma—states that rely on the oil industry—were the four worst-performing states. The oil industry accounted for 22% of North Dakota's GDP, 20% of Alaska and Wyoming's and 17% of Oklahoma's.

There was more nuance among the top-performing states in terms of real GDP growth. Generally speaking, finance and other business services contributed the most to overall real GDP, but **Tennessee**, **New Hampshire**, **California**, **Nevada** and **Indiana** all have very different economies. Indiana leans heavily on durable goods manufacturing while the information sector drove **California**'s real GDP up the most, and the remaining three states tend to have well-diversified economies. "In a post-pandemic world, with the ability to work remotely, the cost of living (and consequently, state taxes) became an increasingly important factor in decisions to relocate."

When looking at regions, the Far West performed the best with 7.3% GDP growth year over year, despite **Alaska** coming in last with just 0.3% annual growth. **California** and **Nevada** propelled the Far West with 7.8% and 7.1% growth, respectively. The Mideast came in last with just 4.6% growth; while finance and insurance did well in that region, growth among other sectors was lackluster.

GDP per Capita

Measuring GDP on a per capita basis allows us to measure a state's efficient use of its population. Highly populated states that do not produce as much relative to their population stand out as having unused potential output. It is also a good proxy for prosperity, which in the end is an indicator of future credit quality as it signals high economic activity, which drives tax collections and possible population growth.

Similar to our GDP growth metric, we shifted to real GDP from nominal GDP for this year's report to remove the effect of inflation and solely focus on the output of a state's economy.

In our top-ranked states for the category we see strength in the East and West Coasts, which has been the case for many years as this metric is fairly sticky and requires a large change in population or economic activity to move the needle. These states all have healthy economies, which attract new residents who, in turn, contribute to GDP growth. Not surprisingly, the states with the largest metropolitan areas, like **New York**, **California**, **Illinois**, **Texas** and **Washington**, score well in this category.



Despite GDP and population growth rates diverging in 2021, there was relative stability among our top-ranked states in terms of GDP per capita. While **Massachusetts** and **New York** changed spots at the top, **Washington** and **California** stayed numbers 3 and 4, respectively. **North Dakota** moved up two spots to settle in at number 5.

Texas and Oklahoma moved up 12 and 10 spots, respectively. Oklahoma is still ranked relatively low at 34, while Texas got close to the top 10, settling in at 11. Another major mover was Wyoming, moving up nine spots.

There was very little change in the bottom 10 states other than **Maine** moving down a spot to 41 from 40 replacing **Oklahoma**, which improved from 44 to 34. Though **Oklahoma** was one of the worst-performing states in terms of GDP growth in FY21, a small change in GDP per capita among the mid-ranked states could cause a significant relative improvement, given the tight distribution among those states, as was the case with Oklahoma.

Some states in this category stand out when compared to their GDP rankings. **Florida** has both a large population and a large GDP but is in the bottom third of our GDP per capita ranking. For a population that is the third-largest in the country it is not nearly as efficient as states like **California** and **New York** at producing an equivalent amount of goods and services, although that could be due to its large retiree population. Other states with a relatively high number of residents aged 65+, like **Maine**, **West Virginia** and **Vermont**,³ are also in the bottom 13 states in terms of GDP per capita, indicating senior residents contribute less to GDP and potentially drive less economic activity and revenue generation.

Employment Growth

Employment growth shows that a state's underlying economy can support further population growth with new jobs and industries. Last year's employment picture was heavily influenced by the pandemic: on average, states saw employment levels drop by almost six percentage points between February 2020 and February 2021. There were certainly outliers, with **Idaho** and **Utah** being the only two states adding jobs during that period. The latter half of 2021 and early 2022 was a very different story with every state posting employment growth.

For our 2022 report, the top four states in terms of employment growth were among the laggards last year. **New Mexico** went from 46 to 4, **Hawaii** went from 50 to 3, **California** from 47 to 2 and **Nevada** from 48 to 1. This indicates that states that were hardest hit during the first year of the pandemic recovered strongly last year.

The picture was less clear among the bottom-ranking states. **Kansas, Alaska, West Virginia, Alabama** and **Delaware** rounded out the bottom five, but in the year prior ranged from 7 to 37. Among the top five states from our 2021 report, **South Dakota** dropped from 4 to 45 and the remaining four states dropped to the middle ranks.

States that saw their populations grow the most over the past 10 years, like **Nevada** (3) and **Texas** (4), did especially well, coming in 1 and 5 in terms of employment growth, respectively. However, in terms of the unemployment rate, they were 38 and 47, respectively, a sign of how they were not necessarily able to keep up with the influx of new residents.

"We would expect workers returning to the office to spur economic activity in the larger metropolitan cities that suffered the most during the pandemic, causing a potential outsized improvement for some states."

This year's data is skewed in part due to the drastic losses in employment experienced in 2020 and early 2021. As previously mentioned, states listed in our 2021 report with some of the worst employment declines saw outsized growth this year (March 2021 to March 2022). A strong driver of employment growth this year was the leisure & hospitality sector, which was negatively affected during the lockdowns. Ten states had more than 50% of their non-farm employment growth come from this sector, with **Vermont** (24) and **Hawaii** (3) gaining 67% and 70% of their raw employment growth from the sector, respectively.

³ Christine L. Himes, "Elderly Americans," Population Bulletin 56, no. 4 (Washington, DC: Population Reference Bureau, December 2001). For permission to reproduce portions from the Population Bulletin, write to PRB, Attn: Permissions.



In previous reports, we discussed that we believe people will move to where the jobs are and it is important for those states to continue providing jobs for the the influx of residents. **Florida** performed well with a 10-year population growth rate that is fifth among all states, an employment growth that ranks sixth, and an unemployment rate that was 20th as of March 2022.

Another topic we have touched on in previous editions of the State of the States is the relationship between personal income taxes and a state's employment situation. States like **Florida** and **Texas** have no personal income tax and did well last year. However, states with some of the higher personal income taxes, like **California**, **New Jersey** and **New York**, also came in among the topperforming states. This underscores the point we have made in the past that a personal income tax is not necessarily a detriment to a state's employment picture.

Unemployment Rate

The U.S. unemployment rate declined to 3.6% in March 2022, getting the unemployment rate back on par with the pre-pandemic level of February 2020.⁴ A total of 27 states recorded a lower unemployment rate in March 2022 as compared to the pre-pandemic February 2020 level.

Arizona posted the largest overall drop, declining from 5% to 3.3%, but six other states (**Wyoming**, **Mississippi**, **Montana**, **Minnesota**, **West Virginia** and **Indiana**) posted drops of more than one percentage point. **Nebraska** and **Utah** had the lowest overall unemployment rates as of March 2022 at 2.0%.

For the State of the States ranking we take the average of 12 months (April 2021 – March 2022). The top three states (**Nebraska**, **Utah** and **South Dakota**) were the same but with Utah and South Dakota swapping spots. **Kansas** and **Indiana** moved up from 10 and 24 overall in 2021 to 4 and 5, respectively, in 2022.

Several states experienced significantly weaker unemployment rates during the pandemic, both when compared to the nation and themselves. For example, **Hawaii**, **Massachusetts** and **Connecticut** have unemployment rates a full percentage point above pre-pandemic levels. Despite this recent weakening, none of these states are among the bottom-five ranked states. **California**, **New York** and **Nevada** also have unemployment rates higher than in the pre-pandemic period, and even though **New Mexico** and **Alaska**'s rates improved slightly they did maintain their ranks among the bottom five, indicating how much ground these two states have to make up.

We would expect workers returning to the office to spur economic activity in the larger metropolitan cities that suffered the most during the pandemic, causing a potential outsized improvement for some states. We also expect those states that rely on leisure and travel to recover in 2022.

Socioeconomic Activity

Socioeconomic factors, which include population changes, income and the tax code, affect a state's overall condition. We have previously highlighted the importance of population changes, as we believe it is a good predictor of a state's future fiscal condition given that a state's financial resources typically grow with its tax base.

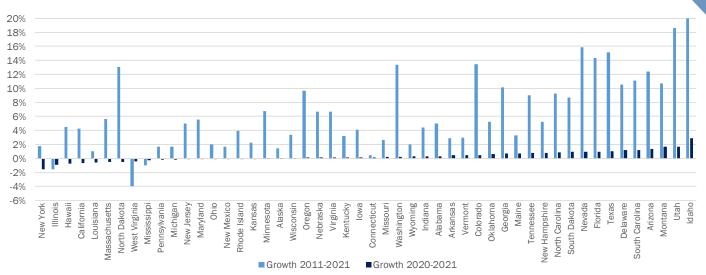
Population Change

Population change will be volatile for years to come as new work-from-home conditions will potentially reshape long-standing population trends. The 2021 U.S. Census data showed a continuation of trends: states out West (+0.05% population gain) and down South (0.65%) picked up the most people, sometimes at the expense of states in the Northeastern (-0.64%) and Midwestern (-0.14%) states.

Exhibit 3 highlights the changes in both the 10 years between 2011 and 2020 as well as from 2020 to 2021, highlighting how the trend continued in 2021 and was irrespective of the pandemic. Perhaps the move out of the Northeast and Midwest was exacerbated by the pandemic and next year's data may shine more light on that.

⁴ Bureau of Labor Statistics, U.S. Department of Labor (2022), "Civilian Unemployment Rate, seasonally adjusted," https://www.bls.gov/charts/employment-situation/civilian-unemployment-rate.htm

Exhibit 3: Population Growth 2011-2021 and 2020-2021



Prepared by Conning, Inc. Sources: Census Bureau, U.S. Department of Commerce (2022), "Annual Estimates of the Resident Population for the United States, Regions, States, District of Columbia, and Puerto Rico: April 1, 2020 to July 1, 2021" https://data.census.gov/cedsci/table?hidePreview=true&tid=PEPOP2021.NST_EST2021_POP and Census Bureau, U.S. Department of Commerce (2022), "Annual Estimates of the Resident Population for the United States, Regions, States, the District of Columbia, and Puerto Rico: April 1, 2010 to July 1, 2019; April 1, 2020; and July 1, 2020" https://www.census.gov/programs-surveys/popest/technical-documentation/research/evaluation-estimates/2020-evaluation-estimates/2010-state-total.html

One trend arising from the pandemic was the desire for people to seek less populated areas for living. As work-from-home dynamics allowed many to work and live where they chose, a number escaped larger metro areas for more rural ones. Except for **South Carolina**, the top five states in terms of population growth are those with lower population densities.

In our 2021 State of the States report, we looked at the United Van Lines survey that analyzed data from March to October of 2020 and noted that the leading motivations behind moving included changes to employment status or the ability to work remotely. For this year's report, United Van Lines reported that fewer people moved because of a job compared to previous years, but more people moved to be closer to family and to improve their cost of living.⁵ Family-related moves are difficult to capture, but we can look at housing prices via the housing price index (HPI) to help identify cost-of-living choices.

As we will show next in our analysis of home price data, the states with the most population growth during the last decade have become increasingly more expensive, which could drive people away again. **California** and **Hawaii** are examples: their populations declined by 0.7% in 2021, only eclipsed by **Illinois** and **New York** in terms of year-over-year population decline. Both **California** and **Hawaii** had strong growth between 2010 and 2020 and posted above-average HPI growth, only to see population declines in 2021.

As we have previously noted, a declining population may dent state tax revenue barring an increase in tax rates, and maintaining revenues are critical for states with a relatively high percentage of fixed costs. Furthermore, as states with positive longer-term population changes can keep taxes low, and the cost of living has become an important reason behind people moving (up from 3% in 2020 to 6.7% in 2021), population changes really matter for a state's future success.

Housing Price Index

The Federal Housing Finance Agency's Housing Price Index (HPI), which measures the sale prices of homes in each state, provides an analog to the overall economic health of a state. If the underlying economy is healthy and residents feel their jobs are stable, home purchase prices should reflect this confidence in a generally rising trend. The pandemic produced another driver of price increases in the form of the work-from-home environment. Our 2022 report notes that this trend continued for Conning's 2022 report with three of the top five states from 2021 (**Idaho**, **Arizona** and **Utah**) all staying in the top five.

Florida and **Tennessee** both moved into the top five, jumping 18 and 14 spots, respectively. **Florida** has long been a popular destination for retirees given its climate (both weather and tax) and may also now be a haven for those who can work from anywhere. Meanwhile, **Tennessee** is a popular destination for people looking to move to be closer to family and/or a job.⁶

⁵ ©2021 United Van Lines, "Annual 2021 United Van Lines National Movers Study," January 3, 2022
⁶ Ibid





Housing prices rose in all 50 states, underscoring the strength of the economy and housing market in 2021. The last decade following the end of the Great Recession saw positive house price appreciation every year, but the last two years have been especially robust.

Two states that did particularly poorly last year in the 2021 HPI ranking, **Hawaii** (49) and **South Dakota** (45), had much better growth this year, improving their ranks by 37 and 31 spots, respectively. As with **South Dakota**, improvements made by other big movers, like **South Carolina**, **Nevada**, **Texas** and **Florida**, could be attributed to population changes. **Hawaii**'s case stands out because it posted a population decline; this could be a case of people buying second homes, seeking domestic travel options over foreign travel in light of the pandemic, or purchasing an investment property to rent out to travelers with supply generally being limited.

Personal Income Growth and Personal Income Per Capita

Personal income improved again in 2021, increasing 7.4% year over year after growing 6.6% in 2020. Personal income per capita also improved 5.9% overall during the same period. Some of these gains can be attributed to federal aid and are therefore expected to come down over the next few years.

Personal income grew in all states year over year in 2021, but long-term growth has been uneven since the Great Recession.

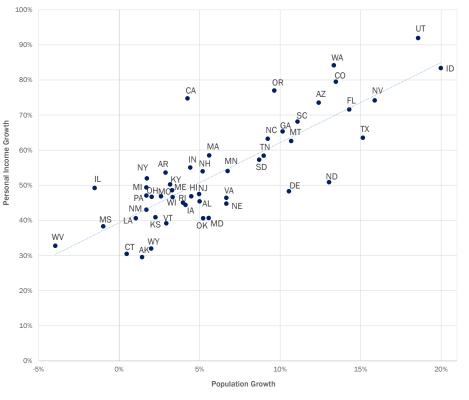
Some states were impacted by the pandemic more than others. For example, high per capita personal income states like **New York** and **Connecticut** benefitted less from the pandemic aid percentagewise compared to lower personal income states like **Mississippi** and **West Virginia**. Similarly, states that took a larger economic hit due to the pandemic benefitted more from the unemployment aid.

In 2021, **Idaho** recorded the highest personal income growth percentage at 9.6% with **Vermont** coming in last at 4.5%. **Idaho** had also scored well in 2020 (4) but **Vermont** dropped substantially from 29.

We focus on personal income growth because it correlates with population changes, which we deem a useful predictor of future credit quality given that a state's financial resources typically grow with its tax base. (Exhibit 4 highlights the 10-year relationship between personal income growth and population growth.)

We track personal income per capita for similar reasons because, in theory, a

Exhibit 4: Population Growth vs. Personal Income Growth 2011-2021



Prepared by Conning, Inc. Sources: Census Bureau, U.S. Department of Commerce (2022), "Annual Estimates of the Resident Population for the United States, Regions, States, District of Columbia, and Puerto Rico: April 1, 2020 to July 1, 2021" https://data.census.gov/ cedsci/table?hidePreview=true&did=PEPPP022021.NST EST2021_POP and Census Bureau, U.S. Department of Commerce (2022), "Annual Estimates of the Resident Population for the United States, Regions, States, the District of Columbia, and Puerto Rico: April 1, 2010 to July 1, 2019; April 1, 2020; and July 1, 2020" https://www.census.gov/programs-surveys/popest/technical-documentation/ research/evaluation-estimates/2020-evaluation-estimates/2010s-state-total.html

wealthier population can incur a higher tax burden needed to support higher debt levels.

Perhaps due to disruptions surrounding the pandemic, 2021 was somewhat of an anomaly: half the top 10 states for personal income growth fell outside the top 10 states for population growth, in part because changes among the top 10 states for personal income growth are quite small, ranging from 9.6% to 8.9%.



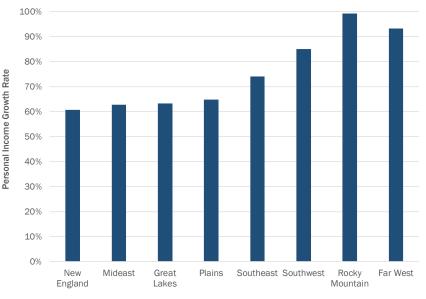
States like **Nebraska** and **Indiana** stand out with relatively no population growth in 2021 but very healthy personal income growth statistics. The 2021 job market was a factor with inflation putting pressure on wages and impacting certain parts of the economy more than others. For example, **Indiana** has a lot of durable goods manufacturing contributing to GDP.⁷ **Nebraska** is an oil-producing state with also a fair amount of agriculture, another part of the economy that did well during the pandemic.

Vermont and **Wyoming**, on the other end of the spectrum, did reasonably well in 2021, coming in 18 and 22, respectively, in terms of population growth, but scoring among the bottom five states in terms of personal income growth. This suggests these states attracted fewer people of working age compared to other states. The need for new workers has been an ongoing struggle for **Vermont** with its aging population and it has implemented several relocation grants to attract new residents. The most recent offer includes up to \$7,500 in reimbursements for eligible expenses.⁸ There is also a New Remote Worker Grant available to Vermont residents working for out-of-state employers.

As noted in the United Van Lines' Movers Study, career change is still one of the primary reasons people move. But as the working population has benefitted from the pandemic's likely permanent effect on workplace flexibility, we could see a change in the correlation between state economic factors. Added flexibility should benefit states like **Idaho** and **Utah** and could cement their overall ranks, as personal income growth should translate to more economic activity, a strong housing market, and a growing labor market.

We see major differences across the regions in personal income growth, especially when looking back at the end of the Great Recession in 2009 when personal income started to rise. For example, the Western and Rocky Mountain states recorded personal income growth rates of 93.2% and 99.1%, respectively, followed by the Southwest at 84.9%. On the other end of the spectrum, New England, the Great Lakes, Plains and Mideast all had growth rates just above 60%. The Southeast region grew by 74%. (The regional performances are highlighted in Exhibit 5.)

Exhibit 5: Regional Personal Income Growth 2009-2011



Prepared by Conning, Inc. Source: Bureau of Economic Analysis, U.S. Department of Commerce (2021), "SAINC1 Personal Income Summary: Personal Income, Population, Per Capita Personal Income,"_ https://apps.bea.gov/iTable/iTable.cfm?regid=70&step=1&isuri=1&acrdn=4#regid=70&step=1&isuri=1&acrdn=4

State Tax Climate

The Tax Foundation's State Business Tax Climate report analyzes a state's tax climate, specifically as it pertains to business friendliness. The State Business Tax Climate Index data complements our financial, economic, and socio-economic metrics to create a whole picture of state strength. States that can attract new businesses inherently have more employment opportunities for their residents, which should boost economic activity and make those states more attractive to residents from underperforming states.

Additionally, the importance of a state's taxing regime is emphasized by its potential impact on retirement decisions, which impacts population movements, as well as its ability to grow revenues, provide services to residents and satisfy debt service and pension obligations.

As in our 2021 State of the States report, in this year's report there were no changes among the top-five ranked states in this category. Among the top-10 ranked states, only **Tennessee** is a newcomer, moving up 10 spots to 8 as a result of eliminating a tax on interest and dividends.

Among the lower-ranked states, there were some minor changes with states swapping positions. Outside of **Tennessee**'s large change in rank, **Kansas** was able to move up significantly after it reformed its sales and corporate income tax.

⁷ Source: U.S. Bureau of Economic Analysis, U.S. Department of Commerce, "Regional Data", 2022, <u>https://apps.bea.gov/iTable/iTable.cfm?reqid=70&step=1&isuri=1&acrdn=4#reqid=70&step=1&isuri=1&acrdn=4</u>

⁸ Source: State of Vermont, Worker Relocation Grant Program FAQ, last accessed May 1, 2022, https://thinkvermont.com/wp-content/uploads/2021/10/Worker-Relocation-Grant-Program-FAQs.pdf



The Tax Foundation's higher-ranked states are similar in that they do not levy certain taxes, such as a corporate income tax, individual income tax or sales tax.⁹ The top-two ranked states in this category, **Wyoming** and **South Dakota**, do not have a corporate or income tax. However, the fact that a state levies all major taxes is not in itself a reason to score poorly; **Indiana** and **Utah** levy all major taxes and still scored well.

Financial Metrics

Economic activity affects states' financial health. As such these indicators are intertwined in the following section, which focuses on state-specific financial metrics Conning uses as indicators for our State of the States rankings like reserves, debt per capita, economic debt and tax revenue growth.

Reserves

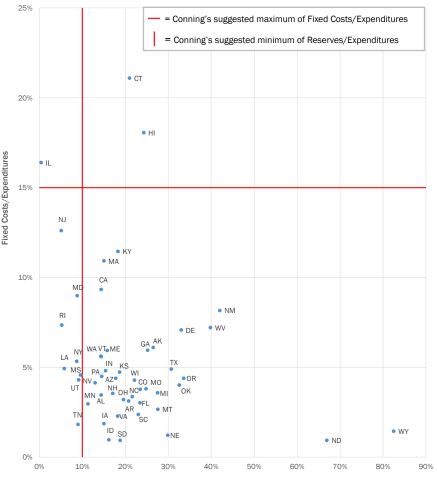
Reserves trended up in FY21 with the median total balances as a percent of General Fund expenditures growing to 23.3% from 12.7% the year prior, and almost double the 12.3% budgeted median-reserve level.¹⁰ This positive development was due to higher-than-expected revenue collections as the country recovered economically from the pandemic faster than expected, and even more noteworthy as the median spending growth rate for FY21 was 2%. The increased revenues boosted balance sheets as states had produced balanced budgets at the start of the year. States also benefitted from the one-time disbursement of federal relief funds.

Reserves have made an impressive rebound following the Great Recession when most reserves were close to being depleted. Except for FY20, when reserves ame down as some states tapped into rainy-day funds to balance budgets, growth has been steady and widespread. For example, in FY21 all but four states (Louisiana, Michigan, New Mexico and Wyoming) reported increases in reserve balances compared to FY20.

When looking at FY22 it is clear that some states are using some of the surpluses to manage budgets and as such we are seeing some states drawing down reserves. **Illinois**, for example, is projected to use up most of its FY21 reserves in FY22 to balance its budget. There are 36 other states that are budgeting for smaller reserves, but only nine would fall below the 10% level Conning sees as a good reserve level; this is markedly better than four years ago when that number stood at 20.

Exhibit 6 charts state reserves versus state fixed costs, both as a percentage of General Fund expenditures. The red cross represents the levels that Conning considers adequate for each metric (10% or more Reserves/ Expenditures; 15% or less Fixed Costs/ Expenditures). In a "regular" recession, states in the bottom right quadrant would be better prepared for an economic slowdown because they have relatively higher reserve balances and lower fixed costs.

Exhibit 6: Fixed Costs and Reserves vs. Expenditures



Prepared by Conning, Inc. Source: ©2022 The National Association of State Budget Officers (NASBO), https://www.nasbo.org/reportsdata/fiscal-survey-of-states, Fixed Costs/Expenditures: Made from data available from Investortools. Exhibit 6 charts state reserves versus state fixed costs, both as a percentage of General Fund expenditures. The red cross represents the levels that Conning considers adequate for each metric (10% or more Reserves/Expenditures; 15% or less Fixed Costs/Expenditures).

Reserves/Expenditures

States are using some of the extra money in

⁹ Source: © Tax Foundation, "2022 State Business Tax Climate Index," <u>https://taxfoundation.org/2022-state-business-tax-climate-index/</u> ¹⁰©2021 The National Association of State Budget Officers, "The Fiscal Survey of States (Fall 2021)," <u>https://www.nasbo.org/reports-data/fiscal-survey-of-states</u>



their coffers to increase spending. For FY22, spending across the board was expected to be up 9.3%. At Conning we will pay extra close attention to this trend as revenues were expected to be down in FY22 as the extraordinary windfalls of FY21 are not expected to last and these structural imbalances will likely lead to lower reserves and less recession preparedness.

Although during the pandemic states were able to borrow quickly and cheaply in the capital markets or draw on the federal government for aid, one cannot expect those conditions to exist as they did during the height of the pandemic.

Debt per Capita

Conning further analyzes a state's burden by measuring its total debt per capita. These rankings — both for the top-five and bottom-five positions — were mostly unchanged year over year, as has been the case for several years now. This is because debt-per-capita levels vary significantly from state to state, and therefore minor changes in both population and debt levels could have an outsized effect on debt-per-capita levels but not impact the states' relative positions.

This measure is important when considering population change, as the debt burden in states that experienced negative population growth in 2021 will fall on fewer residents. This could force states to increase taxes to support the debt burden or make expenditure cuts; either way, these states would become less desirable to live in absent any other changes. In the short term, states can issue more debt if raising taxes or cutting expenditures are not options, but that would further increase their debt burden.

Furthermore, the states that were able to reduce their debt-per-capita levels, like **Montana**, **Alabama**, **Colorado**, **Utah**, **Michigan** and **Oklahoma**, had debt-per-capita levels below the median in the most recent data. This makes sense given small changes in population and/or debt levels have a relatively outsized impact on debt-per-capita ratios. This also underscores how states that were in a better position coming into the pandemic performed better in this category.

As Exhibit 7 shows, states with some of the highest debt-per-capita ranks, like **Connecticut**, **Massachusetts**, **New York**, **New Jersey** and **California**, also boast some of the higher personal-income-per-capita ratios. As noted previously, a wealthier population may be able to support a higher tax burden, but the math comes undone when wealthier residents move out of a state and leave behind a debt burden for a smaller and potentially less affluent population base.

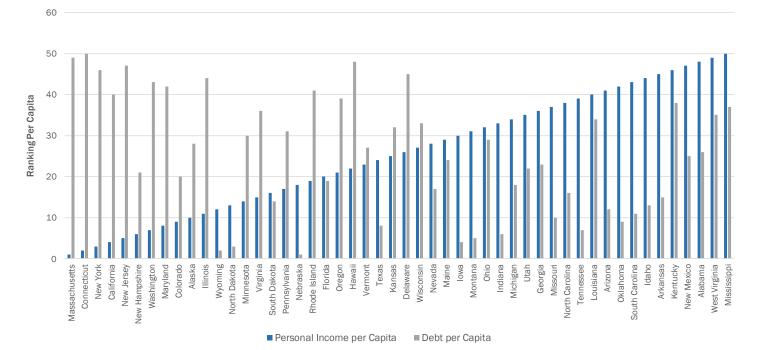


Exhibit 7: Personal Income/Capita Rank vs. Debt/Capita Rank

Prepared by Conning, Inc. Sources: Bureau of Economic Analysis, U.S. Department of Commerce (2021), "State Annual Personal Income, 2021 (Preliminary) and State Quarterly Personal Income, 4th Quarter 2021," (March 23, 2022), https://www.bea.gov/news/2022/personal-income-state-2021-preliminary-and-4th-quarter-2021 and ©2021 Moody's Investors Services, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates – used with limited permission, "Medians - State debt rose 2.5% in 2020, spurred by pandemic-linked borrowing" (June 14, 2021), https://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBM 1276415



Economic Debt per Personal Income

We use economic debt to rank the states in terms of the total debt burden on a state's tax base. Since our 2021 State of the States report, economic debt increased by 4.5%.

Conning defines economic debt for each state as its net tax-supported debt + unfunded pension liabilities + unfunded OPEB (other post-employment benefits) liabilities. Each state's economic debt is then divided by its personal income to create our metric.

Calendar year 2020 saw record municipal debt issuance of \$484 billion, and 2021 nearly surpassed that record at \$480 billion. New issuance increased by 15.8% while refundings declined by 25.9% year over year.¹¹ The strong issuance in 2020 resulted in the Net Tax-Supported Debt burden (as calculated by Moody's Investors Service, Inc.) increasing by 2.5% between 2019 and 2020. We expect that next year's State of the States report will note that this number will increase again in 2021 based on the year's issuance.

Pension systems have increasingly pressured state budgets as liabilities rise and returns have declined in recent years, causing annual contributions to increase. However, the strong equity markets of 2021 bolstered state pension funding ratios to their highest levels since the Great Recession – higher than 80%, according to The Pew Charitable Trusts.¹²

Returns helped temper the year-over-year increase in aggregate net plan liabilities but the overall burden still grew, which may have also been impacted by the level of annual contributions and changes in discount rates. Contributions have increased while discount rates generally have gone down, in some cases offsetting each other, according to Pew. As we outlined previously, states not making full annual required contributions to their plans will pressure funding levels in the future. Furthermore, despite the strong recovery in FY 2021, Pew projects average annual returns will decline to 6% over the next 20 years, below many states' 7% assumed rate of return.¹³

"A wealthier population may be able to support a higher tax burden, but the math comes undone when wealthier residents move out of a state and leave behind a debt burden for a smaller and potentially less affluent population base."

Strong personal income growth enabled 37 states to reduce economic debt as a percentage of personal income. This is a positive development, as a state's fixed costs drive the debt-burden level a state must budget for, which in turn must be paid for by tax-paying residents. As such, we view wealth growth that exceeds fixed cost growth as a long-term positive development.

Economic debt is a slow-moving metric, as we normally do not expect to see many changes year over year and there was only one change in our top five for 2022. **Tennessee** moved up two spots from our 2021 ranking, going from 7 to 5, while **North Dakota** dropped seven spots, from 5 to 12. **Tennessee** was able to lower its overall burden while greatly increasing personal income (it ranked ninth in personal income growth). **North Dakota**'s pension and OPEB liabilities drastically increased year over year, which contributed to its drop in rank.

Among the 13 states that saw an increase in economic debt as a percentage of personal income, several were in the Northeast. Vermont, New York, Connecticut and Massachusetts saw this metric worsen by more than one percentage point, as did Delaware, Hawaii and North Dakota.

State Tax Revenue

All of the above discussed metrics in some way determine a state's ability to collect taxes.

Conning's tax revenue growth indicator, as measured by the U.S. Census Bureau by calendar year, highlights the main sources of revenue a state relies on and how those revenues change annually. All but one state (**Wyoming**, down 1%), experienced positive tax revenue growth in 2021 and total state collections increased by 22% year over year.

¹¹ The Bond Buyer, "2021 In Statistics Annual Review," February 22, 2022, https://arizent.brightspotcdn.com/b0/6b/b311a3f14a2eaf81986af87211a2/2021-yearend-stats.pdf

^{12 © 2021} The Pew Charitable Trusts, "The State Pension Funding Gap: Plans Have Stabilized in Wake of Pandemic," September 2021,

https://www.pewtrusts.org/-/media/assets/2021/09/the_state_pension_funding_gap.pdf



As we have found in the past, tax revenue might be up, down or steady depending on, among other things, the state's major economic sectors or its revenue system and, more recently, the prevalence of COVID-19. With the economy in 2021 continuing its pandemic recovery and with people returning to work, income taxes performed very well. Sales tax collections also performed well, supported by residents spending more on the heels of federal stimulus payments and a reopening economy.

Oil-producing states rebounded in 2021 from a lackluster 2020, with **Alaska** and **North Dakota** jumping from the bottom of the metric's ranking to the top five. With oil prices increasing into 2022 due to the Ukraine war and the U.S. increasing exports, we would expect the oil- and natural-gas-producing states to continue to do well in 2022.

Vermont declined from top five to bottom five. Its high reliance on property taxes benefitted the state in 2020 but harmed its rank in 2021. We note that our rankings are relative to other states and **Vermont** still posted a 10% increase in tax revenue collections in 2021.

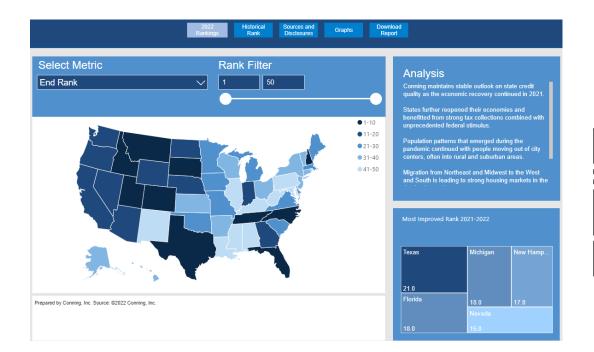
Sources of year-over-year tax revenue growth varied for those states with larger increases in tax collections. **Idaho**, which saw the largest year-over-year tax revenue growth, experienced both double-digit growth in sales and income taxes. The state has experienced strong population growth in recent years, which Conning has identified as one of the major predicting factors of state credit quality as it drives up economic output and subsequent tax revenues. Idaho's population and economic boom continued through the pandemic, in part driven by a lower cost of living compared to regional metro areas like Seattle, Portland and San Francisco.

Nationwide, total tax collections increased 21.5% year over year, supported by individual income, corporate income and sales taxes which accounted for 82.7% of total tax revenue collections in 2021. Corporate income tax receipts increased the most of all categories by 63.5%, followed by individual income taxes at 23.2%.

Tax collections vary across states. For instance, eight states — Alaska, Florida, Nevada, South Dakota, Texas, Washington, Wyoming and now Tennessee — do not levy personal income taxes (New Hampshire collects taxes on interest and dividends) and five states — Alaska, Delaware, Montana, Oregon and New Hampshire — do not have a general sales tax. Property tax collections typically do not account for a large portion of state revenues (1.5% of total 2021 state tax collections) and are not often used for state operations but instead redistributed to local governments.

Interactive Analysis Available

Please visit our website to explore State of the State metrics.



You may also scan the QR code below to access the interactive analysis.





Conning's Municipal Credit Research Team

Conning manages more than \$9 billion of municipal bonds held in client portfolios. Its dedicated municipal research team follows the firm's existing holdings and makes recommendations for new purchases.



Karel Citroen is a Director and Head of Municipal Credit Research. Prior to joining Conning in 2015, he was in municipal portfolio surveillance with MBIA and previously was a banking and securities lawyer for financial institutions in the Netherlands. Mr. Citroen earned an LL.M from the University of Amsterdam and an MBA from Yale University and is a member of the Municipal Analyst Group of New York.



Samantha Henry is a Vice President on the Municipal Credit Research team. She was previously employed at California-based Gurtin Municipal Bond Management, a PIMCO company, where she held positions on the Marketing and Credit Research teams. Ms. Henry is a graduate of the University of Connecticut with a degree in journalism and communications and is a member of the Municipal Analyst Group of New York.

About Conning

Conning (<u>www.conning.com</u>) is a leading investment management firm with a long history of serving the insurance industry. Conning supports institutional investors, including insurers and pension plans, with investment solutions, risk modeling software, and industry research. Founded in 1912, Conning has investment centers in Asia, Europe and North America.

©2022 Conning, Inc. All rights reserved. The information herein is proprietary to Conning and represents the opinion of Conning. No part of the information above may be distributed, reproduced, transcribed, transmitted, stored in an electronic retrieval system or translated into any language in any form by any means without the prior written permission of Conning. This publication is intended only to inform readers about general developments of interest and does not constitute investment advice. The information contained herein is not guaranteed to be complete or accurate and Conning cannot be held liable for any errors in or any reliance upon this information. Any opinions contained herein are subject to change without notice. Conning, Inc., Goodwin Capital Advisers, Inc., Conning Investment Products, Inc., a FINRA-registered broker-dealer, Conning Asset Management Limited, Conning Asia Pacific Limited, Octagon Credit Investors, LLC and Global Evolution Holding ApS and its group of companies are all direct or indirect subsidiaries of Conning Holdings Limited (collectively "Conning") which is one of the family of companies owned by Cathay Financial Holding Co., Ltd. a Taiwan-based company. C: 15024042A



Appendix A - Methodology and Description of Indicators

Conning analyzes 13 metrics indicative of state credit health to calculate our state rankings, measuring business climate, financial metrics, and economic data including income levels and housing activity.

Economic Debt Per Personal Income (8% weight)

A ranking of each state according to its economic debt as a percentage of 2021 annual personal income.

Conning defines economic debt for each state as its net tax-supported debt + unfunded pension liabilities + unfunded OPEB liabilities. Each state's economic debt is then divided by its personal income.

Sources: ©2021 Moody's Investors Services, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates – used with limited permission, "Medians - State debt rose 2.5% in 2020, spurred by pandemic-linked borrowing" (June 14, 2021), https://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBM_1276415, Bureau of Economic Analysis, U.S. Department of Commerce (2021), "State Annual Personal Income, 2021 (Preliminary) and State Quarterly Personal Income, 4th Quarter 2021," (March 23, 2022), https://www.bea.gov/news/2022/personal-income-state-2021, "Bureau of Economic Analysis, U.S. Department of Commerce (2021), "State Annual Personal Income, 2021 (Preliminary) and State Quarterly Personal Income, 4th Quarter 2021," (March 23, 2022), https://www.bea.gov/news/2022/personal-income-state-2021, "Department-2021 and @2022 Standard & Poor's Financial Services LLC," U.S. States Weigh Risk Reduction In Managing Pension And OPEB Liabilities" (September 20, 2021) https://www.capitalig.com/clOpotNet/CreditResearch.SPResearch.aspx?bocumentld=493612028, From=SNP_CRS

Reserves (8% weight)

A ranking of states that compares available funds to expenditures. Each state's total funds—the sum of its General Fund balance and budget stabilization fund—are divided by state expenditures.

Source: @2021 The National Association of State Budget Officers (NASBO), "The Fiscal Survey of States (Fall 2021)," https://www.nasbo.org/reports-data/fiscal-survey-of-states

Debt Per Capita (8%)

Dividing net tax-supported state debt by population provides a measure of a state's debt burden.

Sources: ©2021 Moody's Investors Services, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates – used with limited permission, "Medians - State debt rose 2.5% in 2020, spurred by pandemic-linked borrowing" (June 14, 2021), https://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBM_1276415 and Census Bureau, U.S. Department of Commerce (2022), "Annual Estimates of the Resident Population for the United States, Regions, States, District of Columbia, and Puerto Rico: April 1, 2020 to July 1, 2021" <a href="https://data.census.gov/cedsci/table?https://datale?https://data.census.gov/cedsci/table?https

Gross Domestic Product (GDP) Growth by State (8% weight)

A ranking of each state's annualized real GDP growth.

Source: Bureau of Economic Analysis, U.S. Department of Commerce (2021), https://apps.bea.gov/iTable/ITable/ITable/ITable/ITable/ITable/ITable/Itable

Gross Domestic Product Per Capita (8% weight)

A ranking that compares each state's annualized real GDP divided by its population.

Sources: Bureau of Economic Analysis, U.S. Department of Commerce (2022), "Regional Data" https://apps.bea.gov/iTable/iTable.cfm?regid=70&step=1&isuri=1&acrdn=1#regid=70&step=1&isuri=1&acrdn=1&step=1&st

Year-over-Year Employment Growth (8% weight)

A ranking of states based on year-over-year total employment growth from March 2021 to March 2022 (preliminary).

Source: Bureau of Labor Statistics, U.S. Department of Labor (2022), "Table 3. Employees on nonfarm payrolls by state and selected industry sector, seasonally adjusted" https://www.bls.gov/ news.release/laus.t03.htm

Personal Income Per Capita (8% weight)

A ranking of states by Personal Income per Capita.

Sources: Bureau of Economic Analysis, U.S. Department of Commerce (2021), "State Annual Personal Income, 2021 (Preliminary) and State Quarterly Personal Income, 4th Quarter 2021," (March 23, 2022), https://www.bea.gov/news/2022/personal-income-state-2021-preliminary-and-4th-quarter-2021 and Census Bureau, U.S. Department of Commerce (2022), "Annual Estimates of the Resident Population for the United States, Regions, States, District of Columbia, and Puerto Rico: April 1, 2020 to July 1, 2021" https://data.census.gov/cedsci/table?hidePreview=true&tid=PEPPOP2021.NST_EST2021_POP



Appendix A - Methodology and Description of Indicators (continued)

Unemployment Rate (8% weight)

A ranking of states by the average their unemployment rates over the most recent 12 months (April 2021 – March 2022).

Source: Bureau of Labor Statistics, U.S. Department of Labor (2022), "State unemployment rates over the last 10 years, seasonally adjusted," https://www.bls.gov/charts/state-employ-ment-rates-animated.htm

Year-over-Year Personal Income Growth (8% weight)

A ranking of states by personal income growth, comparing year over year growth from 2020 to 2021.

Source: Bureau of Economic Analysis, U.S. Department of Commerce (2021), "State Annual Personal Income, 2021 (Preliminary) and State Quarterly Personal Income, 4th Quarter 2021," (March 23, 2022), https://www.bea.gov/news/2022/personal-income-state-2021-preliminary-and-4th-quarter-2021

One-Year Change in Home Prices (8% weight)

A ranking of states based on one-year change HPI, 4Q2020 - 4Q2021.

Source: Federal Housing Finance Agency (FHFA) (2021), "States (Seasonally Adjusted and Not Adjusted," https://www.fhfa.gov/DataTools/Downloads/Pages/House-Price-Index-Datasets.aspx#qpo

Tax Revenue Growth (8%)

A ranking of states by annual total tax revenue growth 2020-2021.

Source: Census Bureau, U.S. Department of Commerce (2021), "Quarterly Summary of State & Local Tax Revenue Data Tables," https://www.census.gov/programs-surveys/qtax/data/ tables.2021.List 1064654542.html

Tax Foundation's State Business Tax Climate Index (4% weight)

"The Tax Foundation's State Business Tax Climate Index enables business leaders, government policymakers, and taxpayers to gauge how their states' tax systems compare. While there are many ways to show how much is collected in taxes by state governments, the *Index* is designed to show how well states structure their tax systems and provides a road map for improvement."

Source: ©2022 Tax Foundation, "2022 State Business Tax Climate Index," https://taxfoundation.org/2022-state-business-tax-climate-index/

Population Change (8% weight)

A ranking of states by annual change in population from 2020 to 2021.

Source: Census Bureau, U.S. Department of Commerce (2022), "Annual Estimates of the Resident Population for the United States, Regions, States, District of Columbia, and Puerto Rico: April 1, 2020 to July 1, 2021" https://data.census.gov/cedsci/table?hidePreview=true&tid=PEPPOP2021.NST_EST2021_POP

Additional Source Information

©2022 Standard & Poor's Financial Services LLC (and its affiliates, as applicable). This may contain information obtained from third parties, including ratings from credit ratings agencies such as Standard & Poor's. Reproduction and distribution of third party content in any form is prohibited except with the prior written permission of the related third party. Third party content providers do not guarantee the accuracy, completeness, timeliness or availability of any information, including ratings, and are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, or for the results obtained from the use of such content. THIRD PARTY CONTENT PROVIDERS GIVE NO EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE. THIRD PARTY CONTENT PROVIDERS SHALL NOT BE LIABLE FOR ANY DIRECT, INCIDENTAL, EXEMPLARY, COMPENSATORY, PUNITIVE, SPECIAL OR CONSEQUENTIAL DAMAGES, COSTS, EXPENSES, LEGAL FEES, OR LOSSES (INCLUDING LOST INCOME OR PROFITS AND OPPORTUNITY COSTS OR LOSSES CAUSED BY NEGLIGENCE) IN CONNECTION WITH ANY USE OF THEIR CONTENT, INCLUDING RATINGS. Credit ratings are statements of opinions and are not statements of fact or recommendations to purchase, hold or sell securities. They do not address the suitability of securities or the suitability of securities for investment purposes, and should not be relied on as investment advice.



Appendix B-State Rankings by Credit Indicator

Alabama 32.36 42 26 36 26 39 47 37 47 10 27 48 22 20 39 Aleske 22.24 33 41 12 28 1 7 50 49 46 41 10 47 32 3 Artors 20.92 16 8 28 12 25 59 23 20 24 25 41 1 4 23 Artors 27.42 31 25 22 15 42 49 26 34 17 15 45 18 49 44 Colorado 17.08 10 11 16 20 34 9 17 12 32 14 9 20 17 20 Comecticut 29.40 34 50 21 50 36 36 30 43 42 2 36 25 47 Delaware 27.04 29 46 6 45 9 8 4	State	Raw Score	End Rank	Economic Debt	Reserves	Debt per Capita	Tax Rev Growth	GDP/Cap	GDP Growth	Employment Growth	Unemployment Rate Avg	Personal Inc Change YoY	Pers Inc/ Cap	HPI Change	Population Growth	Tax Climate
Arbona 20.92 16 8 28 12 25 39 23 20 24 25 41 1 4 23 Arbanese 27.92 31 25 22 15 42 49 26 34 17 15 45 18 19 44 Celitomis 22.40 19 36 36 40 5 4 3 2 50 13 4 16 47 48 Celorado 17.68 10 11 16 20 34 9 37 12 32 14 9 20 17 20 Connection 23.40 34 60 21 50 3 66 6 20 3 20 4 8 4 Georgia 18.48 13 19 13 23 19 25 15 9 34 45 22 12 48 41 Haveil 18.12 11 18 32 6 13 28 5 <td>Alabama</td> <td>32.36</td> <td>42</td> <td>26</td> <td>36</td> <td>26</td> <td>39</td> <td>47</td> <td>37</td> <td>47</td> <td>10</td> <td>27</td> <td>48</td> <td>22</td> <td>20</td> <td>39</td>	Alabama	32.36	42	26	36	26	39	47	37	47	10	27	48	22	20	39
Arkamass 27.92 31 25 22 15 42 49 26 34 17 15 45 18 19 44 California 22.40 19 36 36 40 5 4 3 2 50 13 4 16 47 48 Colorado 17.06 10 11 16 20 34 9 17 12 32 14 9 20 17 20 Connecticut 29.40 34 50 21 50 3 6 36 30 43 42 2 36 25 47 Delawere 27.04 29 46 6 45 9 8 42 46 37 29 26 30 6 16 20 3 20 4 8 4 Georgia 18.19 14 43 27 32 3 34 45 22 12 48 41 Idawn 18.12 11 18 32	Alaska	29.24	33	41	12	28	1	7	50	49	46	41	10	47	32	3
California 22.40 19 36 36 40 5 4 9 2 50 13 4 16 47 48 Colorado 17.68 10 11 16 20 34 9 17 12 32 14 9 20 17 20 Connectiont 29.40 34 50 21 50 3 6 36 30 43 42 2 36 25 47 Delsware 27.04 29 46 6 45 9 8 42 46 37 29 26 30 6 16 Flords 13.44 1 15 17 19 10 38 6 6 20 3 20 4 8 4 Georgin 18.86 13 19 13 23 19 25 15 9 16 21 14 43 1 17 Hawaii 31.88 39 49 13 21 22 30	Arizona	20.92	16	8	28	12	25	39	23	20	24	25	41	1	4	23
Colvredo 17.68 10 11 16 20 34 9 17 12 32 14 9 20 17 20 Connecticut 29.40 34 50 21 50 3 6 36 30 43 42 2 38 25 47 Determere 27.04 29 46 6 45 9 8 42 46 37 29 26 30 6 18 Florida 13.44 1 15 17 19 10 38 6 6 20 3 20 4 8 4 Georgia 18.96 13 19 13 21 42 13 21 36 10 15 32 Hawaii 31.88 39 49 15 48 43 27 15 42 23 11 44 49 36 Indion 18.12 </td <td>Arkansas</td> <td>27.92</td> <td>31</td> <td>25</td> <td>22</td> <td>15</td> <td>42</td> <td>49</td> <td>26</td> <td>34</td> <td>17</td> <td>15</td> <td>45</td> <td>18</td> <td>19</td> <td>44</td>	Arkansas	27.92	31	25	22	15	42	49	26	34	17	15	45	18	19	44
Connecticut 29.40 34 60 21 50 3 6 36 30 43 42 2 36 25 47 Delaware 27.04 29 46 6 45 9 8 42 46 37 29 26 30 6 16 Floridi 13.44 1 15 17 19 10 38 6 6 20 3 20 4 8 4 Georgia 18.96 13 19 13 23 19 25 15 9 16 21 36 10 15 32 Hawaii 31.88 39 49 15 48 43 27 32 3 34 45 22 12 44 43 1 17 Ilinois 32.26 43 47 50 44 44 43 21 22 30 46 26	California	22.40	19	36	36	40	5	4	3	2	50	13	4	16	47	48
Delsware 27.04 29 46 6 45 9 8 42 46 37 29 26 30 6 16 Fonda 13.44 1 15 17 19 10 38 6 6 20 3 20 4 8 4 Georgia 18.86 13 19 13 23 19 25 15 9 16 21 36 10 15 32 Hwanii 31.88 39 49 15 48 43 27 32 3 34 45 22 11 44 49 36 Idaho 1740 8 6 30 13 21 26 12 1 44 49 36 Imiana 18.12 11 18 32 6 13 28 5 21 5 7 33 33 21 9 Iwa	Colorado	17.68	10	11	16	20	34	9	17	12	32	14	9	20	17	20
Fionda 1.3.44 1 1.5 1.7 1.9 1.0 3.8 6 6 2.0 3 2.0 4 8.8 4 Georgia 18.96 1.3 1.9 1.3 2.3 1.9 2.5 1.5 9 1.6 2.1 3.6 1.0 1.5 3.2 Hawaii 31.88 39 4.9 1.5 4.8 4.3 2.7 3.2 3 3.4 4.5 2.2 1.2 4.8 4.1 Idaho 1.74 8 6 30 1.3 1.1 4.6 1.6 2.6 1.2 1 4.4 3 1 7 Illinois 32.56 4.3 4.7 5.0 4.4 2.4 1.3 2.7 1.5 4.2 2.3 1.1 4.4 4.9 3.3 2.1 1.7 Illinois 32.5 4.3 3.3 4.4 4.6 1.9 1.2 4.3 2.1 2.1 2.1 3.3 3.3 2.1 1.4 3.3 3.3 2.1 <t< td=""><td>Connecticut</td><td>29.40</td><td>34</td><td>50</td><td>21</td><td>50</td><td>3</td><td>6</td><td>36</td><td>30</td><td>43</td><td>42</td><td>2</td><td>36</td><td>25</td><td>47</td></t<>	Connecticut	29.40	34	50	21	50	3	6	36	30	43	42	2	36	25	47
Georgia 18.96 13 19 13 23 19 25 15 9 16 21 36 10 15 32 Hawaii 31.88 39 49 15 48 43 27 32 3 34 45 22 12 48 41 Idaho 17.40 8 6 30 13 11 46 16 26 12 1 44 3 1 17 Illinois 32.56 43 47 50 44 24 13 27 15 42 23 11 44 49 36 Indiana 18.12 11 18 32 6 13 28 5 21 5 7 33 32 21 22 30 46 26 38 Kansas 30.16 35 23 25 32 33 22 40 50 44	Delaware	27.04	29	46	6	45	9	8	42	46	37	29	26	30	6	16
Havaii 31.88 39 49 15 48 43 27 32 3 34 45 22 12 48 41 Idaho 1740 8 6 30 13 11 46 16 26 12 1 44 3 1 17 Ilinois 32.56 43 47 50 44 24 13 27 15 42 23 11 44 49 36 Indiana 18.12 11 18 32 6 13 28 5 21 5 7 33 32 21 22 30 46 26 38 Kansas 30.16 35 23 25 32 33 22 40 50 4 35 25 42 34 24 Kentucky 33.52 46 44 26 38 37 44 30 38 27	Florida	13.44	1	15	17	19	10	38	6	6	20	3	20	4	8	4
Idaho 17.40 8 6 30 13 11 46 16 26 12 1 44 3 1 17 Illinois 32.56 43 47 50 44 24 13 27 15 42 23 11 44 49 36 Indiana 18.12 11 18 32 6 13 28 5 21 5 7 33 33 21 9 Iowa 25.92 27 3 33 4 46 19 12 43 21 22 30 46 26 38 Kansas 30.16 35 23 25 32 33 22 40 50 4 35 25 42 34 24 Kentucky 33.52 46 44 26 38 37 44 30 38 27 18 40 50 42 <	Georgia	18.96	13	19	13	23	19	25	15	9	16	21	36	10	15	32
Illinois 32.56 43 47 50 44 24 13 27 15 42 23 11 44 49 36 Indiana 18.12 11 18 32 6 13 28 5 21 5 7 33 33 21 9 Iowa 25.92 27 3 33 4 46 19 12 43 21 22 30 46 26 38 Kansas 30.16 35 23 25 32 33 22 40 50 4 35 25 42 34 24 Kentucky 33.52 46 44 26 38 37 44 30 38 27 18 46 35 27 18 Louisiana 40.08 50 37 47 34 41 35 46 37 33 34 40 50 46 42 Maine 25.64 24 34 31 24 16 1	Hawaii	31.88	39	49	15	48	43	27	32	3	34	45	22	12	48	41
Indiana18.1211183261328521573333219Iowa25.9227333446191243212230462638Kansas30.16352325323322405043525423424Kentucky33.524644263837443038271846352718Louisiana40.085037473441354637333440504642Maine25.642434312416412428262629111433Mayland36.96494245424417442741438483846Massachusetts25.68254533498111838331324534Miningan25.36222011187371314404934284012Minesota26.76171741302315183973214433345Missouri25.802621141030363132	Idaho	17.40	8	6	30	13	11	46	16	26	12	1	44	3	1	17
towa 25.92 27 3 33 4 46 19 12 43 21 22 30 46 26 38 Kanses 30.16 35 23 25 32 33 22 40 50 4 35 25 42 34 24 Kentucky 33.52 46 44 26 38 37 44 30 38 27 18 46 35 27 18 Louisiana 40.08 50 37 47 34 41 35 46 37 33 34 40 50 46 42 Maine 25.64 24 34 31 24 16 41 24 28 26 26 29 11 14 33 Maryland 36.96 49 42 45 42 44 17 44 27 41 43 8 48 38 46 Messachusetts 25.68 25 45 33 49 8	Illinois	32.56	43	47	50	44	24	13	27	15	42	23	11	44	49	36
Kansas30.16352325323322405043525423424Kentucky33.524644263837443038271846352718Louisiana40.085037473441354637333440504642Maine25.642434312416412428262629111433Maryland36.96494245424417442741438483846Massachusetts25.68254533498111838331324534Michigan25.36222011187371314404934284012Minnesota26.76171741302315183973214433345Mississippi35.764732423726503436362450234230Mississippi35.764732423726503436362450234235Missouri25.80262114103036 </td <td>Indiana</td> <td>18.12</td> <td>11</td> <td>18</td> <td>32</td> <td>6</td> <td>13</td> <td>28</td> <td>5</td> <td>21</td> <td>5</td> <td>7</td> <td>33</td> <td>33</td> <td>21</td> <td>9</td>	Indiana	18.12	11	18	32	6	13	28	5	21	5	7	33	33	21	9
Kentucky 33.52 46 44 26 38 37 44 30 38 27 18 46 35 27 18 Louisiana 40.08 50 37 47 34 41 35 46 37 33 34 40 50 46 42 Maine 25.64 24 34 31 24 16 41 24 28 26 26 29 11 14 33 Maryland 36.96 49 42 45 42 44 17 44 27 41 43 8 48 38 46 Massachusetts 25.68 25 45 33 49 8 1 11 8 38 33 1 32 45 34 Michigan 25.66 27 11 18 7 37 13 14 40 43 33 45 <t< td=""><td>Iowa</td><td>25.92</td><td>27</td><td>3</td><td>33</td><td>4</td><td>46</td><td>19</td><td>12</td><td>43</td><td>21</td><td>22</td><td>30</td><td>46</td><td>26</td><td>38</td></t<>	Iowa	25.92	27	3	33	4	46	19	12	43	21	22	30	46	26	38
Louisiana40.085037473441354637333440504642Maine25.642434312416412428262629111433Maryland36.96494245424417442741438483846Massachusetts25.68254533498111838331324534Michigan25.36222011187371314404934284012Minnesota26.76171741302315183973214433345Mississippi35.764732423726503436362450234230Missouri25.802621141030363132222837312435Nebraska18.6812191451222401418342935New Hampshire14.643242921201621885619126New Jersey30.80364849471214<	Kansas	30.16	35	23	25	32	33	22	40	50	4	35	25	42	34	24
Maine 25.64 24 34 31 24 16 41 24 28 26 26 29 11 14 33 Maryland 36.96 49 42 45 42 44 17 44 27 41 43 8 48 38 46 Massachusetts 25.68 25 45 33 49 8 1 11 8 38 33 1 32 45 34 Michigan 25.66 22 20 11 18 7 37 13 14 40 49 34 28 40 12 Minnesota 26.76 17 17 41 30 23 15 18 39 7 32 14 43 33 45 Mississippi 35.76 47 32 42 37 26 50 34 36 36 24 50 23	Kentucky	33.52	46	44	26	38	37	44	30	38	27	18	46	35	27	18
Maryland36.96494245424417442741438483846Massachusetts25.68254533498111838331324534Michigan25.36222011187371314404934284012Minnesota26.76171741302315183973214433345Mississippi35.764732423726503436362450234230Missouri25.802621141030363132222837312433Montana15.80429105214372351231635Nevada20.9215144017493141471128797New Hampshire14.643242921201621885619126New Jersey30.8036484947121429744375293950	Louisiana	40.08	50	37	47	34	41	35	46	37	33	34	40	50	46	42
Massachusetts 25.68 25 45 33 49 8 1 11 8 38 33 1 32 45 34 Michigan 25.36 22 20 11 18 7 37 13 14 40 49 34 28 40 12 Minnesota 26.76 17 17 41 30 23 15 18 39 7 32 14 43 33 45 Mississippi 35.76 47 32 42 37 26 50 34 36 36 24 50 23 42 30 Mississippi 35.76 47 32 42 37 26 50 34 36 36 24 50 23 42 30 Missouri 25.80 26 21 14 10 30 36 31 32 22 28 37 31	Maine	25.64	24	34	31	24	16	41	24	28	26	26	29	11	14	33
Michigan25.36222011187371314404934284012Minnesota26.76171741302315183973214433345Mississippi35.764732423726503436362450234230Missouri25.802621141030363132222837312413Montana15.80429105214372351231635Nebraska18.6812191451222401418342935New Hampshire14.643242921201621885619126New Jersey30.8036484947121429744375293950	Maryland	36.96	49	42	45	42	44	17	44	27	41	43	8	48	38	46
Minnesota 26.76 17 17 41 30 23 15 18 39 7 32 14 43 33 45 Mississippi 35.76 47 32 42 37 26 50 34 36 36 24 50 23 42 30 Mississippi 35.76 47 32 42 37 26 50 34 36 36 24 50 23 42 30 Missouri 25.80 26 21 14 10 30 36 31 32 22 28 37 31 24 13 Montana 15.80 4 29 10 5 21 43 7 23 5 12 31 6 3 5 5 14 43 29 35 Nebraska 18.68 12 1 45 12 22 40 1 48 34 29 35 New Hampshire 14.64 3 24 29<	Massachusetts	25.68	25	45	33	49	8	1	11	8	38	33	1	32	45	34
Mississippi 35.76 47 32 42 37 26 50 34 36 36 24 50 23 42 30 Missouri 25.80 26 21 14 10 30 36 31 32 22 28 37 31 24 13 Montana 15.80 4 29 10 5 21 43 7 23 5 12 31 6 3 5 Nebraska 18.68 12 1 9 1 45 12 22 40 1 4 18 34 29 35 New Hampshire 14.64 3 24 29 21 20 16 2 18 8 5 6 19 12 6 New Jersey 30.80 36 48 49 47 12 14 29 7 44 37 5 29 39 50	Michigan	25.36	22	20	11	18	7	37	13	14	40	49	34	28	40	12
Missouri25.802621141030363132222837312413Montana15.80429105214372351231635Nebraska18.6812191451222401418342935Nevada20.9215144017493141471128797New Hampshire14.643242921201621885619126New Jersey30.8036484947121429744375293950	Minnesota	26.76	17	17	41	30	23	15	18	39	7	32	14	43	33	45
Montana 15.80 4 29 10 5 21 43 7 23 5 12 31 6 3 5 Nebraska 18.68 12 1 9 1 45 12 22 40 1 4 18 34 29 35 Nevada 20.92 15 14 40 17 49 31 4 1 47 11 28 7 9 7 New Hampshire 14.64 3 24 29 21 20 16 2 18 8 5 6 19 12 6 New Jersey 30.80 36 48 49 47 12 14 29 7 44 37 5 29 39 50	Mississippi	35.76	47	32	42	37	26	50	34	36	36	24	50	23	42	30
Nebraska 18.68 12 1 9 1 45 12 22 40 1 4 18 34 29 35 Nevada 20.92 15 14 40 17 49 31 4 1 47 11 28 7 9 7 New Hampshire 14.64 3 24 29 21 20 16 2 18 8 5 6 19 12 6 New Jersey 30.80 36 48 49 47 12 14 29 7 44 37 5 29 39 50	Missouri	25.80	26	21	14	10	30	36	31	32	22	28	37	31	24	13
Nevada 20.92 15 14 40 17 49 31 4 1 47 11 28 7 9 7 New Hampshire 14.64 3 24 29 21 20 16 2 18 8 5 6 19 12 6 New Jersey 30.80 36 48 49 47 12 14 29 7 44 37 5 29 39 50	Montana	15.80	4	29	10	5	21	43	7	23	5	12	31	6	3	5
New Hampshire 14.64 3 24 29 21 20 16 2 18 8 5 6 19 12 6 New Jersey 30.80 36 48 49 47 12 14 29 7 44 37 5 29 39 50	Nebraska	18.68	12	1	9	1	45	12	22	40	1	4	18	34	29	35
New Jersey 30.80 36 48 49 47 12 14 29 7 44 37 5 29 39 50	Nevada	20.92	15	14	40	17	49	31	4	1	47	11	28	7	9	7
•	New Hampshire	14.64	3	24	29	21	20	16	2	18	8	5	6	19	12	6
New Mexico 32.00 41 30 3 25 48 42 45 49 4 49 30 47 36 28	New Jersey	30.80	36	48	49	47	12	14	29	7	44	37	5	29	39	50
	New Mexico	32.00	41	30	3	25	48	42	45	49	4	49	30	47	36	28



Appendix B-State Rankings by Credit Indicator

State	Raw Score	End Rank	Economic Debt	Reserves	Debt per Capita	Tax Rev Growth	GDP/Cap	GDP Growth	Employment Growth	Unemployment Rate Avg	Personal Inc Change YoY	Pers Inc/ Cap	HPI Change	Population Growth	Tax Climate
New York	30.84	37	40	46	46	2	2	25	11	48	48	3	40	50	49
North Carolina	17.48	9	10	20	16	22	30	8	16	25	8	38	9	11	11
North Dakota	19.88	14	12	2	3	4	5	48	29	11	19	13	49	44	19
Ohio	31.96	40	16	23	29	32	26	35	44	30	40	32	37	37	37
Oklahoma	25.44	23	4	7	9	36	34	47	41	13	31	42	25	16	26
Oregon	21.84	18	28	5	39	14	24	21	13	29	17	21	21	30	22
Pennsylvania	32.91	44	31	35	31	31	20	33	25	45	47	17	41	41	29
Rhode Island	33.36	45	39	48	41	38	32	20	22	35	44	19	24	35	40
South Carolina	23.72	21	33	18	11	35	45	14	35	18	16	43	8	5	31
South Dakota	16.72	6	2	24	14	27	23	28	45	3	2	16	14	10	2
Tennessee	17.12	7	5	44	7	18	33	1	17	19	9	39	5	13	8
Texas	16.32	5	35	8	8	15	11	19	5	38	10	24	17	7	14
Utah	14.32	2	7	43	22	6	21	9	19	2	6	35	2	2	10
Vermont	31.88	38	43	39	27	47	40	43	24	8	50	23	15	18	43
Virginia	27.16	30	22	27	36	17	18	39	33	15	38	15	39	28	25
Washington	21.64	17	27	36	43	40	3	10	10	31	20	7	13	23	15
West Virginia	36.28	48	38	4	35	28	48	38	48	28	39	49	45	43	21
Wisconsin	29.24	32	13	19	33	29	29	41	42	14	36	27	38	31	27
Wyoming	22.52	20	9	1	2	50	10	49	31	23	46	12	26	22	1

Prepared by Conning, Inc. Sources: ©2022 Conning, Inc. and publicly available information.