# State of the States

June 2020
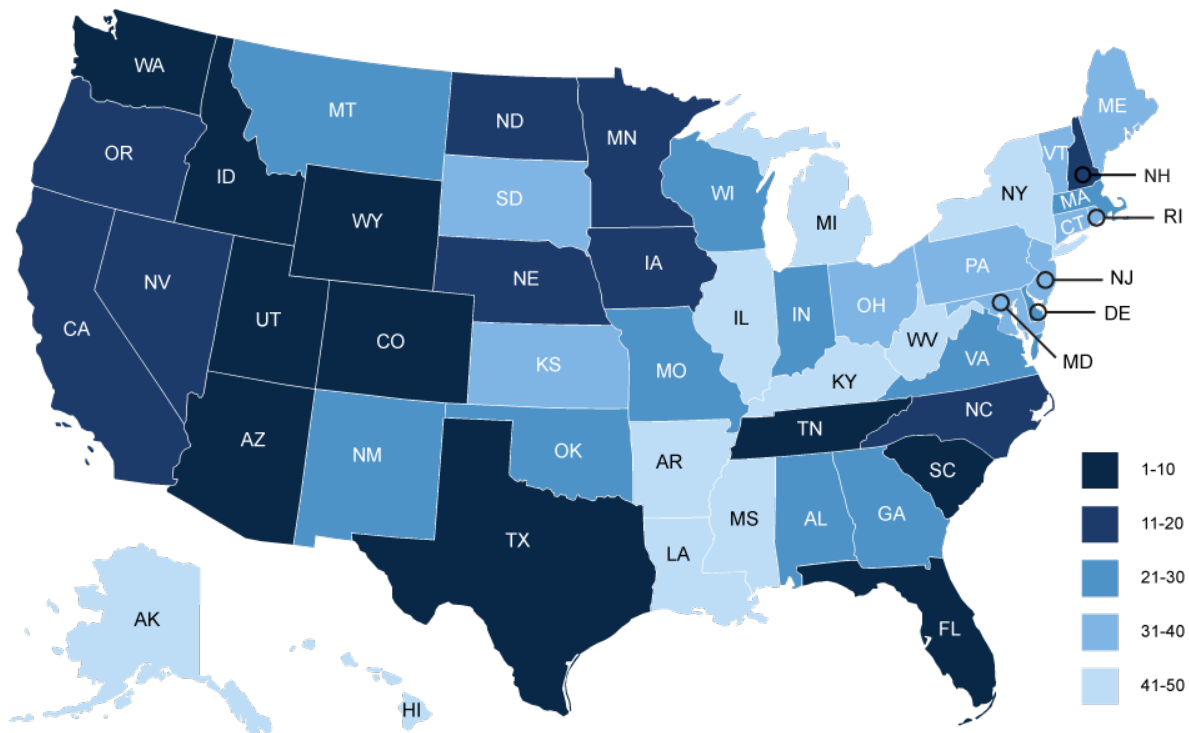
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# Conning Changes Outlook to Negative

## Key Findings

»   Conning changes its outlook to negative from stable on state credit quality
»   Impact of COVID-19 will be significant and long-lasting for some states
»   State economic strength continues to move west and southwest
»   Revenue volatility will test some states' reserves more than others
»   Slumping oil prices likely a drag on states heavily reliant on crude revenue
»   Balance sheets will become more levered with debt and pension liabilities set to increase
»   Methodology: increased weight on population changes, new tax climate metric

### Exhibit 1: State of the States Rank June 2020



Legend:
- 1-10
- 11-20
- 21-30
- 31-40
- 41-50

# State of the States

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## Contents

## Executive Summary: Conning Changes Its Outlook to Negative

Conning believes state credit quality had been the strongest it had been in a decade. However, we have revised our outlook to negative, as the COVID-19 pandemic will force states to make difficult budget decisions and possibly dip into reserves to address shortfalls, despite the unprecedented amount of relief from the federal government. Our negative outlook reflects our expectation that over the next 12 months many indicators will worsen. This does not imply that all the states will perform equally. As our rankings suggest, some states are much better positioned to deal with today's stresses, either through stronger balance sheets, their ability to benefit from better economic conditions, and/or socio-economic trends that could offset some of the current concerns.

Our 2020 report builds on our 2019 findings and the areas of most concern last year remain front of mind today, with the added worry that the COVID-19 impact will only pressure them further. We are focused on reserves, as they provide some cushion when revenues drop, and fixed costs because they reduce budget flexibility. In 2020, with economies contracting at a record pace, we expect sales and income tax revenues will decline while expenditures related to fighting the pandemic increase. Even with federal aid, the long-term impact will be significant. Concerns remain regarding pensions and one only has to open the newspaper to quickly see how the sharp decline in the equity markets, along with historically low interest rates, have reduced funded ratios for many state-run plans.[1] Finally, oil prices have taken a dramatic tumble, which will add insult to injury for some states. It is too early to identify the amount of stress that the COVID-19 pandemic and related fallout will mean for states going forward. However, at this point we can say with relative certainty that tax collections will come down.

[1] Moody's Investor Service calculates a 21.1% drop in pension assets to increase the liability by roughly 50%. ©2020 Moody's Investors Services, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates – used with limited permission. Source: 24 March 2020 Sector Comment.

## Methodology Changes

This year's report introduces a new indicator that uses tax climate to attempt to capture which states might be better positioned to deal with some of these interruptions. We introduced this ranking[2] — Tax Foundation's State Business Tax Climate Index — last year and now make it an official indicator with a 4% weighting. (We use this measure to replace the ALEC-Laffer Economic Outlook Ranking 2018, which carried an 8% weight.)

Population growth continued to be a focus in this year's report, as it drives the other indicators. States that tend to see their populations increase benefit almost by default from expanding economies and improving financial positions. This year, we increased the weight of this indicator to 8% from 4%, as we believe this to be an important driver of future economic conditions.

Finally, we have replaced our median household income measure with personal income per capita, leaving the weighting the same at 8%. We also made a minor change to how we use unemployment rates. Our metrics are fully documented in Appendix A.

## 2020 Findings: Western States Continue Their Dominance

**Utah (#1)** took top honors again this year for the fifth year in a row. Strong underlying economic conditions and population growth with low debt levels and a favorable tax climate have been hallmarks of **Utah** now for half a decade. The same can be said for **Colorado (#2)**, **Washington (#3)** and **Idaho (#4)**, which have been top-ranked states for several years. Interestingly, our top four ranked states are contiguous in the Northwest. We have highlighted before how the socio-economic and economic success of the states in our rankings is a regional story; this year is no exception.

**South Carolina (#5)** moved up 17 spots from last year and moved into the top 10 for the first time since we started producing these rankings in 2007. It has benefited from strong population growth and a healthy job market. As we explain later, contrary to popular belief, its tax climate is below average; however, it has been able to strengthen its economy without making concessions when it comes to taxing its residents and corporations. **Nebraska (#14)**, which moved up five spots, benefited from strong tax revenue growth and debt levels that are among the lowest of all 50 states.

Our report collects our indicators into groups that rank socio-economic conditions, economic activity and financial metrics. **Indiana (#29)**, **Alaska (#44)**, **West Virginia (#47)**, **South Dakota (#32)** and **Michigan (#43)** were the five states that dropped the most this year, anywhere from 11 to 19 spots. Alaska's reliance on oil-related severance taxes continues to negatively impact its economy. **West Virginia** fell mostly because of weak economic growth, despite having healthy reserves and favorable home price appreciation. **Alaska** is one of seven states that we identified in 2019 as having a significant reliance on the oil and gas industry, and it performed poorly again this year, joined by **Oklahoma (#24)**, which dropped six spots. But states with some reliance on oil-related revenues, like **Texas (#8)** and **Montana (#23)**, only dropped by two spots each, underscoring the importance of a diversified economy.

2. © Tax Foundation, "2019 State Business Tax Index Climate," https://files.taxfoundation.org/20180925174436/2019-State-Business-Tax-Climate-Index.pdf

**Exhibit 2: Top Five and Bottom Five States with Commentary**

| Top Five States | Comment | Bottom Five States | Comment |
|---|---|---|---|
| 1. Utah | Vibrant economy and growing tax base with low debt levels and a favorable tax climate. | 46. Illinois | Very weak reserves and a high debt burden. Socio-economic indicators are also lagging. |
| 2. Colorado | Strong economy with above-average population and personal income growth. | 47. West Virginia | Weak economic growth (GDP, unemployment) across the board and slow population growth. Reserves and housing price index growth are a strength. |
| 3. Washington | Rapidly expanding economy and job market with rising personal income continue to attract new residents. | 48. Mississippi | Weak economic performance with some of the lowest scores in the socio-economic indicators. |
| 4. Idaho | Growing tax base with strong housing market and employment growth, and a relatively low debt burden. | 49. Louisiana | A high unemployment rate and low population growth pull Louisiana down. GDP per capita is a strength. |
| 5. South Carolina | Strong population growth with a healthy job market and growing economy. | 50. Kentucky | Weak financials, especially reserves. Socio-economic indicators like personal income/capita and population growth are also low. Business tax climate is a positive. |

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

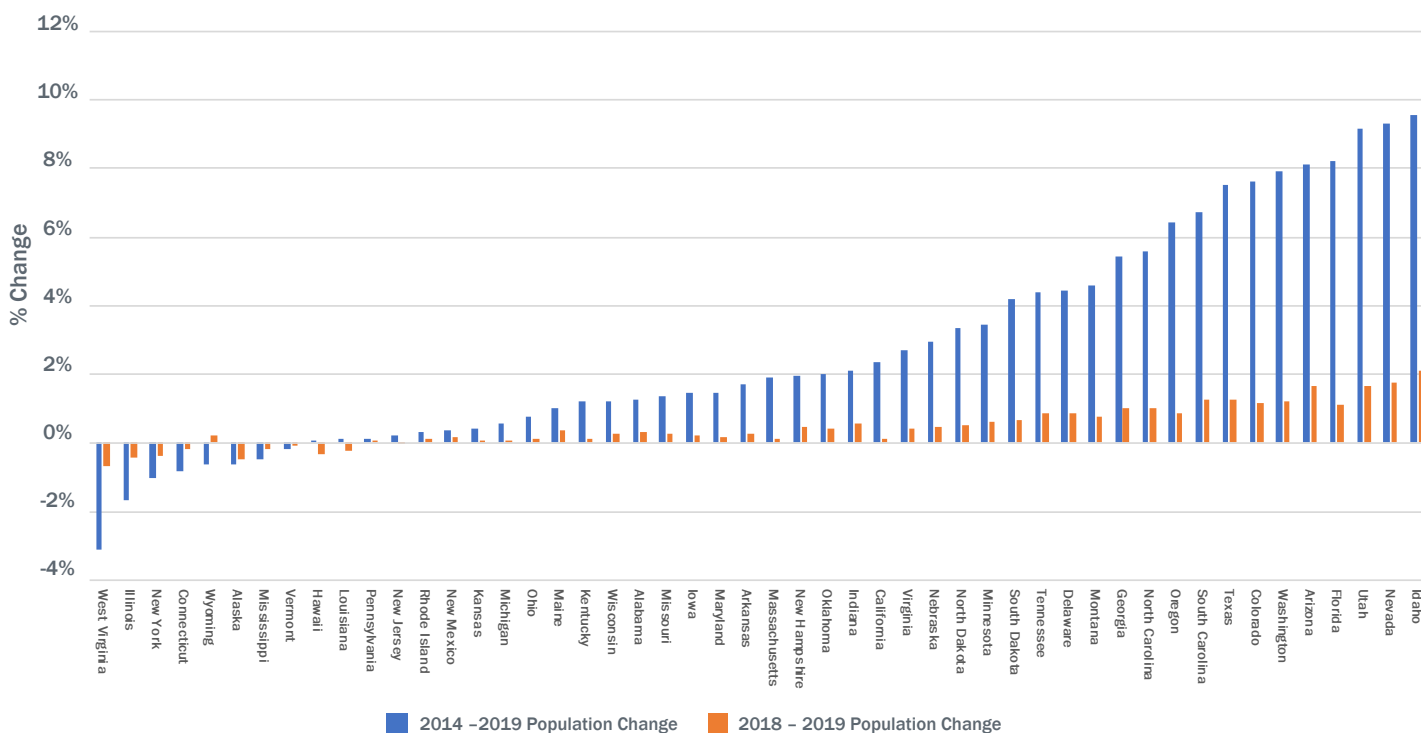## Indicators: Socio-economic Conditions

Socio-economic factors, which include population changes, income and the tax code, affect a state's overall condition. The following outlines the importance of these indicators as well as changes incorporated into this year's ranking methodology.

### Population Change: An Indicator of Greater Importance

Last year we analyzed two factors associated with population changes — income taxes and personal income growth — and concluded that personal income growth was more closely related to population changes.

The correlation between personal income growth and population changes serves as a useful predictor of future credit quality, given that a state's financial resources typically grow with its tax base. As such, we increased the weight of population change for this year's ranking to 8% from 4%. We showed last year that population changes are important determinants of credit quality because when people leave a state, they walk away from a liability, which then falls on a smaller population base. This subsequently increases the cost of living, which may cause some residents to seek more affordable places to live, further perpetuating a cycle of declining population.

**Exhibit 3: Population Change**



Prepared by Conning, Inc. Source: Census Bureau, U.S. Department of Commerce, https://www.census.gov/data/datasets/time-series/demo/popest/2010s-state-total.html

This effect is reflected in the exhibit above, which highlights the total past five years of population changes, including the most recent year-over-year change. It supports the notion that the states with positive longer-term population changes continued that trend through 2019. We liken this to a snowball that, as it rolls down a mountain, continues to grow as it collects more snow.

This year's population data from the U.S. Census Bureau shows a pattern we have noticed for several years: In general, people are moving to the southern and western regions. In the Mountain Region, states like **Nevada (#13)**, **Arizona (#7)**, **Utah (#1)** and **Colorado (#2)** are experiencing growth. Many of these states experienced similar growth in previous years as well. **Wyoming (#6)** was able to buck a negative five-year trend in 2019 (+0.2%). Year-over-year growth rates tend to be sticky and, as such, it is difficult for a state to reverse its population decline. The exhibit above shows that states with a negative or low population growth rate are concentrated in the Northeast.

## The "Why" Behind Moves

We can infer a lot from these population change numbers; however, it does not directly address some of the underlying reasons behind why people choose to move. For state-specific moving patterns, we reviewed the 2019 United Van Lines survey, which asks why people move from one state to another.[3]

**Exhibit 4: Why People Move**

| Reason | Percent |
|---|---|
| New job opportunity | 48% |
| Closer to family | 24% |
| Retirement | 20% |
| Lifestyle change | 13% |

Prepared by Conning, Inc. Source: United Van Lines, "2019 National Movers Study Reveals Idaho as a Top Moving Destination," https://www.unitedvanlines.com/newsroom/movers-study-2019?

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[3.] United Van Lines, "2019 National Movers Study Reveals Idaho as a Top Moving Destination," https://www.unitedvanlines.com/newsroom/movers-study-2019?

Baby Boomers (55-74 years old) moved more than any other age group in 2019, accounting for 45% of all inbound moves. Retirement was the number one reason behind inbound population growth in 2019 in **Idaho (+2.1%)**, **Nevada (+1.7%)** and **Arizona (+1.7%)**. It is also a main driver for the Northeast states that are experiencing population declines. For example, retirement was the primary reason for moving out of state for 28.8% of **New York (-0.4%)** respondents and 34.8% of **Connecticut (-0.2%)** respondents. Jobs are still the number one reason why people leave those states, according to the survey, and it is also true for some Midwestern states like **Illinois (-0.4%)**.

## State Tax Climate: Comparing Tax Systems

We have shown how population changes tend to be sticky, which makes it hard for states to buck negative trends. This is especially difficult for states facing budget shortfalls, since absent reducing the expenditure side of their income statement, all they have left to do is increase taxes, which can act like a deterrent for people to move to certain states. This relationship led us to add the Tax Foundation's State Business Tax Climate Index[4] rank into our 2020 State of the States ranking, with a weight of 4%. Exhibit 5 lists the five best- and worst-ranked states by the Tax Foundation.

### Exhibit 5: Tax Foundation Business Tax Climate Rank

| Best Business Tax Climate | | Worst Business Tax Climate | |
|---|---|---|---|
| Wyoming | 1 | Arkansas | 46 |
| South Dakota | 2 | Connecticut | 47 |
| Alaska | 3 | California | 48 |
| Florida | 4 | New York | 49 |
| Montana | 5 | New Jersey | 50 |

Prepared by Conning, Inc. Source: © Tax Foundation, "2020 State Business Tax Climate,"
https://files.taxfoundation.org/20191021155857/2020-State-Business-Tax-Climate-Index-PDF.pdf

The Tax Foundation 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. 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 of underperforming states.

The Tax Foundation's higher-ranked states are similar in that they do not levy certain taxes, like a corporate income tax, individual income tax or sales tax. 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.

The Tax Foundation report notes that it is both the mix of taxes levied and their complexity that either props up or drags down a state's ranking. States with high individual marginal tax rates, like **California (13.3%)**, **New York (8.82%)** and **New Jersey (10.75%)**, score poorly as shown in Exhibit 5.

**Wisconsin**, **Michigan** and **Georgia** improved their positions in the Tax Foundation's State Business Tax Climate Index the most, by eight, five and four spots, respectively. Some movement was due to other states dropping and some due to the lowering of certain taxes. States that declined the most include **Kansas**, which dropped seven spots, and **North Carolina** and **Massachusetts**, which dropped three spots each.

The importance of a state's taxing regime is not only emphasized by its potential impact on retirement decisions, business locations and subsequent jobs, which all lead to population movements. In some cases, a state's tax climate impacts revenue volatility, which, in an environment like we are experiencing due to the COVID-19 pandemic, is an important bellwether for future credit quality. This is something we will touch on in our conclusion to this year's report.

## Personal Income Growth: People Moving to the Jobs

Last year we explained our slight bias for personal income growth over an assessment of a state's tax climate as a predictor for population growth and eventual credit quality. We think it is an important distinction because low taxes alone do not tell the whole story. Our 2019 analysis discovered a much higher correlation between population growth and personal income growth than between population growth and a state's tax climate. As noted in the United Van Lines' Movers Study, career change is the primary reason people move. Exhibit 6 highlights the relationship between personal income growth in a state as well as population growth, and it suggests that the two are very much related.

**Exhibit 6: Personal Income Growth vs. Population Growth 2010 – 2019**

Prepared by Conning, Inc. Sources: Bureau of Economic Analysis, U.S. Department of Commerce (2010-2019), https://apps.bea.gov/itable/iTable.cfm?ReqID=70&step=1 and Census Bureau, U.S. Department of Commerce (2020), https://www.census.gov/data/datasets/time-series/demo/popest/2010s-state-total.html, "Annual Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico: April 1, 2010 to July 1, 2019"

In the top right of the chart are states we highlighted last year as well, like **Colorado**, **Washington** and **Utah**, which, since 2010, have had above-average population and personal income growth. That trend continued in 2019 with all three states ranking in the top six for our personal income growth indicator. **Colorado** increased by 6.1%, **Utah** by 5.9% and **Washington** by 5.7%, well above the 4.3% average among all states. All of our top 10 ranked states in terms of personal income growth rates had positive population growth year over year. In contrast, six out of our 10 bottom-ranked states in terms of personal income growth had negative population growth year over year.

On the other end of the spectrum, states like **Connecticut** and **West Virginia** continue to see their populations decline, down 0.2% and 0.7% in 2019, respectively and, not surprisingly, have recorded some of the lowest personal income changes over a nine-year period. We noted last year that **Illinois** was an outlier because its economic anchor, the city of Chicago, skewed the overall state results when it comes to personal income growth and that it tends to have solid personal income changes but low population changes. However, in 2019 **Illinois** posted the second-lowest amount of personal income growth, showing that the reliance on a strong economic hub like Chicago has its limits. **Rhode Island** and **Nebraska** round out the five states with the lowest personal income growth in 2019.

## Home Price Index: Growing States See Rising Values

A healthy underlying economy with an abundance of jobs should attract new residents and increase demand for housing. The Federal Housing Finance Agency's Housing Price Index (HPI), which measures sales prices of homes in a 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, the purchase prices of homes should reflect this confidence in a generally rising trend.

**Idaho** ranked No. 1 in 4Q 2018 - 4Q 2019 HPI change and year-over-year population growth. The next-highest ranked states for HPI growth were **Utah**, **Arizona**, **Washington** and **Indiana**, which ranked fourth, third, seventh, and 18th in year-over-year population growth, respectively.

Our weakest two states in terms of HPI growth, **Illinois** and **Connecticut**, experienced year-over-year HPI growth of 2.02% and 1.93%, respectively. These states have struggled to recover from the Great Recession, even during the longest economic expansion in U.S. history. **Connecticut's** HPI is still trailing its pre-recession high reached in 1Q 2007; similarly, **Illinois'** HPI also peaked at that time and has yet to exceed it.

While strong HPI growth is a positive credit indicator both for our rankings in this report and our credit analysis, states that have experienced ongoing rising prices are at risk of becoming too expensive for their underlying population. Rising prices in the Pacific Region (**Hawaii**, **Alaska**, **Washington**, **Oregon**, **California**) could push residents eastward (as we are already seeing in Idaho) and dissuade potential new residents from moving west. In cities like San Francisco and Seattle, where the HPI has more than doubled since 2000,[5] residents are under pressure from low housing supply and low wage growth. In the future, especially following the massive rise in unemployment due to COVID-19, we could see some populations shift away from these expensive West Coast cities.

## Indicators: Economic Activity

Our State of the States ranking methodology captures economic activity in several ways, such as GDP and several employment-related measures like the unemployment rate.

### GDP: Strength in the West

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.

Our top five performing states in annual GDP growth were **Washington**, **Utah**, **South Carolina**, **Florida** and **Arizona**; our lowest were **Oklahoma**, **North Dakota**, **Wyoming**, **Alaska** and **West Virginia**. We see strength in the western states, which all saw GDP growth above 5% measured from the four quarters ending December 2018 to December 2019.

**Washington** is a good example of a state that has both a diverse set of industries and population growth (up 13.2% from 2010 to 2019). Washington's GDP is made up of a variety of industries as defined by the North American Industry Classification System (NAICS), none of which largely outstrip the others as a share of total GDP. This balanced landscape insulates the state's GDP (and underlying economy) from one-off crashes in an industry like oil-and-gas extraction (to which Washington has very little exposure). This diversification helped the state weather the Great Recession when its GDP only declined by 0.6% from 2008-2009 while the lowest-ranked states like **Wyoming** and **Alaska** saw declines of 15.3% and 9.4%, respectively.

### Exhibit 7: Top Five and Bottom Five GDP Growth 2018 - 2019

| State | 2020 Rank | State | 2020 Rank |
|---|---|---|---|
| Washington | 1 | Oklahoma | 46 |
| Utah | 2 | North Dakota | 47 |
| South Carolina | 3 | Wyoming | 48 |
| Florida | 4 | Alaska | 49 |
| Arizona | 5 | West Virginia | 50 |

Prepared by Conning, Inc. Source: Bureau of Economic Analysis, U.S. Department of Commerce (2018-2020), https://taxfoundation.org/publications/state-business-tax-climate-index/

Rounding out the top five, **Utah**, **South Carolina**, **Florida** and **Arizona** have experienced strong population growth over the past nine years and a strong economy that generally produces more jobs for those new residents, which further feeds economic expansion.

**West Virginia's** GDP grew by just 1.0% year over year and experienced a population exodus of -0.7%, supporting our view that healthy population growth is essential to expand a state's economic activity.

5. Federal Housing Finance Agency (FHFA) 2018-19, https://www.fhfa.gov/DataTools/Downloads/Pages/House-Price-Index-Datasets.aspx#qpo

## GDP Per Capita: Large Differences

Measuring GDP on a per capita basis accounts for the size discrepancy of states, allowing us to measure a state's efficient use of its population. Large states that do not produce as much relative to their population stand out as having unused potential output.

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. New York is supported by the economic hub of New York City and has the highest GDP per capita at $90,044.

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.

At the other end of the spectrum, we have states with low economic activity relative to their population size. **Mississippi's** 4Q 2019 annualized GDP was $120 billion, not the worst relative to other states but its higher population of 2.9 million drags its GDP per capita down to the lowest at $40,465.

## Employment Growth and Unemployment Rate: Watch for COVID-19 Impact

Given that people relocate for jobs, we should expect to see some correlation between the states that perform well in the population growth metric and those that also perform well in the employment growth metric, as seen in Exhibit 8.

Employment growth shows that a state's underlying economy can support further population growth with new jobs and industries. Up until March 2020, employment trends were mostly positive. From February 2019 to February 2020, 42 states saw improvement in their employment numbers, with **Texas**, **Idaho**, **Arizona**, **Rhode Island** and **Utah** experiencing the most growth. These five states all had year-over-year growth of more than 2.5% while the worst performing states (**Wyoming**, **South Dakota**, **Illinois**, **Vermont** and **West Virginia**) all experienced negative growth. Illinois is of particular concern because a declining population coupled with job losses makes it difficult for the state to organically grow out of its distressed financial situation.

### Exhibit 8: Population, Employment Growth

| Population Growth State | 2020 Rank | Employment Growth State | 2020 Rank |
|---|---|---|---|
| Idaho | 1 | Texas | 1 |
| Nevada | 2 | Idaho | 2 |
| Arizona | 3 | Arizona | 3 |
| Utah | 4 | Rhode Island | 4 |
| Texas | 5 | Utah | 5 |
| South Carolina | 6 | Colorado | 6 |
| Washington | 7 | Washington | 7 |
| Colorado | 8 | South Carolina | 8 |
| Florida | 9 | New Mexico | 9 |
| North Carolina | 10 | Virginia | 10 |

Prepared by Conning, Inc. Sources: Census Bureau, U.S. Department of Commerce (2020), https://www.census.gov/data/datasets/time-series/demo/popest/2010s-state-total.html; News release and Bureau of Labor Statistics, U.S. Department of Labor (2020), https://www.bls.gov/news.release/laus.t03.htm
Population https://www.census.gov/data/datasets/time-series/demo/popest/2010s-state-total.html
Employment https://www.bls.gov/news.release/laus.t03.htm

For a more comprehensive view of a state's unemployment rate, we use unemployment rates as reported by the Bureau of Labor Statistics and take an average of the most recent 12 months (previously we ranked only the most recent month's unemployment data) as it provides a more comprehensive view of a state's unemployment rate. **Utah** and **Colorado** are again in the top five while **Alaska** and **West Virginia** rank at and near the bottom.

At the time of writing this report, unemployment claims are at record highs, far exceeding those seen during the Great Recession.[6] With a spike in the unemployment rate expected for the second quarter, states will be dependent on federal aid to help cover the unemployment costs.

## Indicators: 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 we use as indicators in for our State of the States rankings like reserves, economic debt, debt per capita, and tax revenue growth.

### States Better Positioned with Stronger Reserve Balances

In a period of stress, such as the impending crisis related to the COVID-19 pandemic, reserves offer states a buffer to cover losses in revenue. Favorably, states entered 2020 with stronger reserves than they have prior to other downturns. In fact, in FY 2019 total reserve balances reached all-time highs both nominally and as a percent of General Fund expenditures.[7]

We measured a state's financial cushion by its FY 2020 enacted General Fund reserve balance plus rainy-day fund balances (reserved and unreserved) as a percentage of budgeted General Fund expenditures. We consider a reserve equal to 10% or more of General Fund expenditures to be healthy. Nineteen states had total reserve balances of less than 10% of General Fund expenditures, and the average state reserve balance was 14.9%, which is up from about 13.6% last year and well above 2009's 8.9%.

The bottom five states in terms of total reserve balance were mostly unchanged year over year, with **New Jersey** and **Arkansas** swapping spots. **Wyoming** and **Alaska** maintained their top one and two positions, while **North Dakota** and **New Mexico** entered the top five in 2020 (ranked 10th and ninth in 2019, respectively).

Stronger reserves are a result of recent revenue growth and expenditures being managed appropriately, which has led to budget surpluses. Conversely, when revenues decline due to unforeseen events, reserves may be tapped to make up the difference. In FY 2019's favorable revenue environment, no states reported mid-year budget cuts due to a revenue shortfall and 46 states reported that General Fund revenues exceeded their targets for 2019 — a trend that is not likely to persist in FY 2020 given the ongoing effects of the pandemic. Moreover, states had already planned to spend down their reserves in FY 2020, with total reserve balances projected — prior to the pandemic — to drop to 10.9% from 13% of expenditures.[7]

Management is important when considering reserve balances, especially when balances are low. **New Jersey (#46 for reserves)** has spent down its reserve funds to balance its budget during past economic downturns, such as the Great Recession when revenues dropped by almost $5 billion.[8] With a total balance of only 3.3% of General Fund expenditures — which weakened from an already low 4.3% in FY 2019 — it has little to draw from during this cycle. **Illinois (#49 for reserves)** is in even worse shape, with a total reserve balance of only 1.6% of General Fund expenditures. However, its small balance marks an improvement from FY 2019's 1.3% and 0.4% in FY 2018.
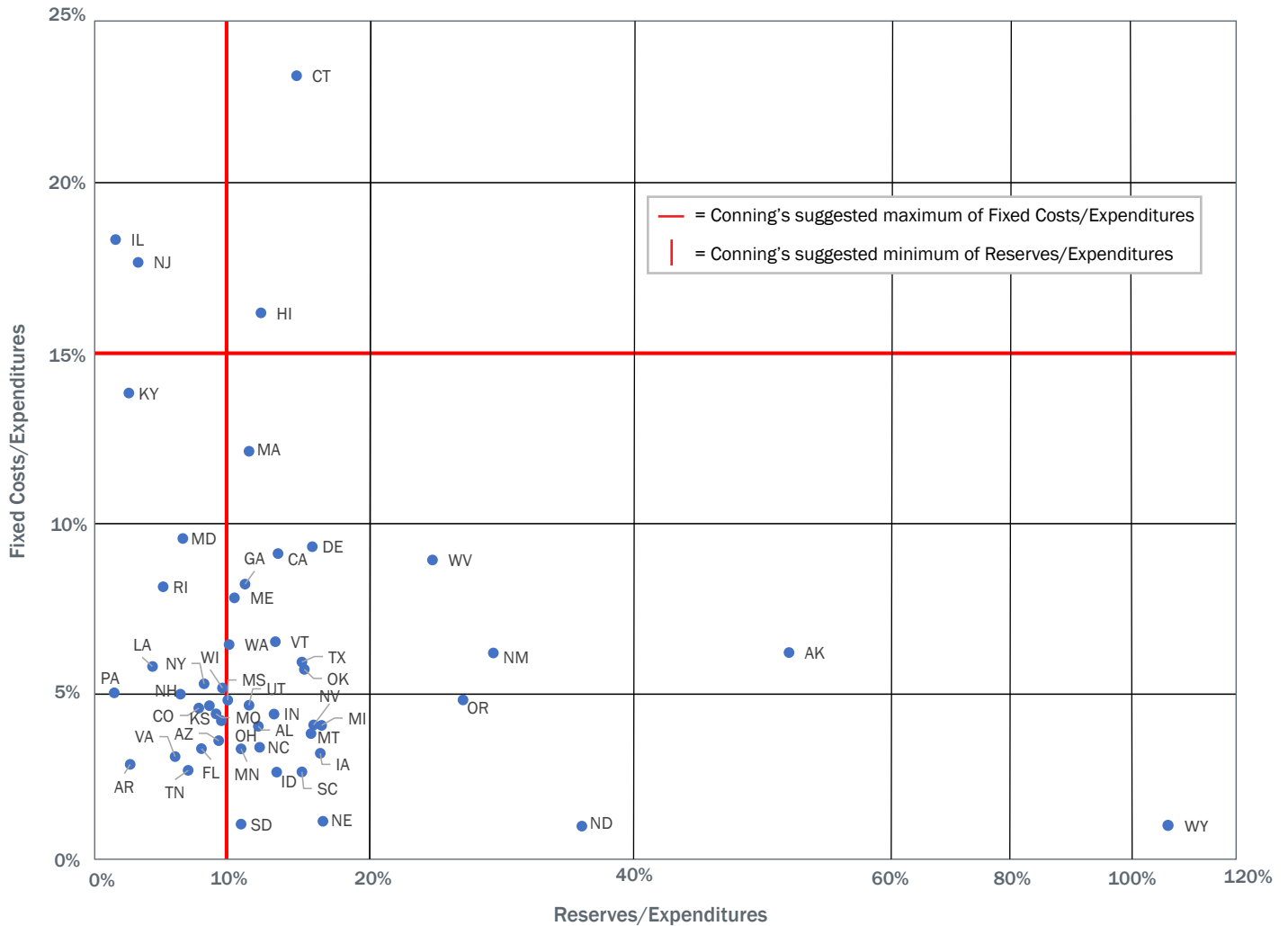
Conversely, **Connecticut**, which moved up from #40 in 2019 to #16 in 2020 for reserves, grew its total reserve balance to 15.3% of General Fund expenditures, allowing it a greater buffer to handle revenue declines. This is up from 13.0% in FY 2019 and 6.3% in FY 2018.

6. ©Tax Foundation, as of May 14, 2020, "Visual Guide to Unemployment Benefit Claims, *https://taxfoundation.org/unemployment-insurance-claims/?*

7. ©2019 The National Association of State Budget Officers (NASBO), *https://www.nasbo.org/reports-data/fiscal-survey-of-states*

8. Gov. Phil Murphy, State of New Jersey. (June 2019), *https://www.nj.gov/governor/news/news/562019/approved/20190621c.shtml*

**Exhibit 9: Fixed Costs and Reserves vs Expenditures**



Prepared by Conning, Inc. Sources: ©2019 The National Association of State Budget Officers (NASBO) https://www.nasbo.org/reports-data/fiscal-survey-of-states, Fixed Costs/Expenditures: Made from data available from Investortools.

Exhibit 9 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 reserve balances that are more than 10% of their General Fund expenditures and fixed costs that are less than 15% of their General Fund expenditures. States like **Alaska** (52.6% reserves/expenditures, 6.2% fixed costs/expenditures), **Wyoming** (109.0%, 1.4%) and **North Dakota** (36.9%, 1.1%) fall into this category. However, with the added strain of an oil price crash in this economic shutdown, these states, which rely on the oil industry, will see their reserves shrink to a greater extent than if they were just faced with a recession.

States with the highest fixed costs include **Connecticut**, **Illinois**, **New Jersey** and **Kentucky**. As a state that relies on income taxes, Connecticut's revenues could experience volatility in a down economy. This is especially apparent in the current environment, as the pandemic caused millions of people to lose their jobs while the tax filing deadline has also been postponed. **Connecticut's** reserve growth will provide a budgetary cushion as it grapples with high fixed costs and potential revenue declines. **Connecticut** (15.3%, 23.1%) has built up its rainy-day fund to record levels ($2.5 billion) and is better positioned to address the economic slowdown than it was going into the Great Recession.
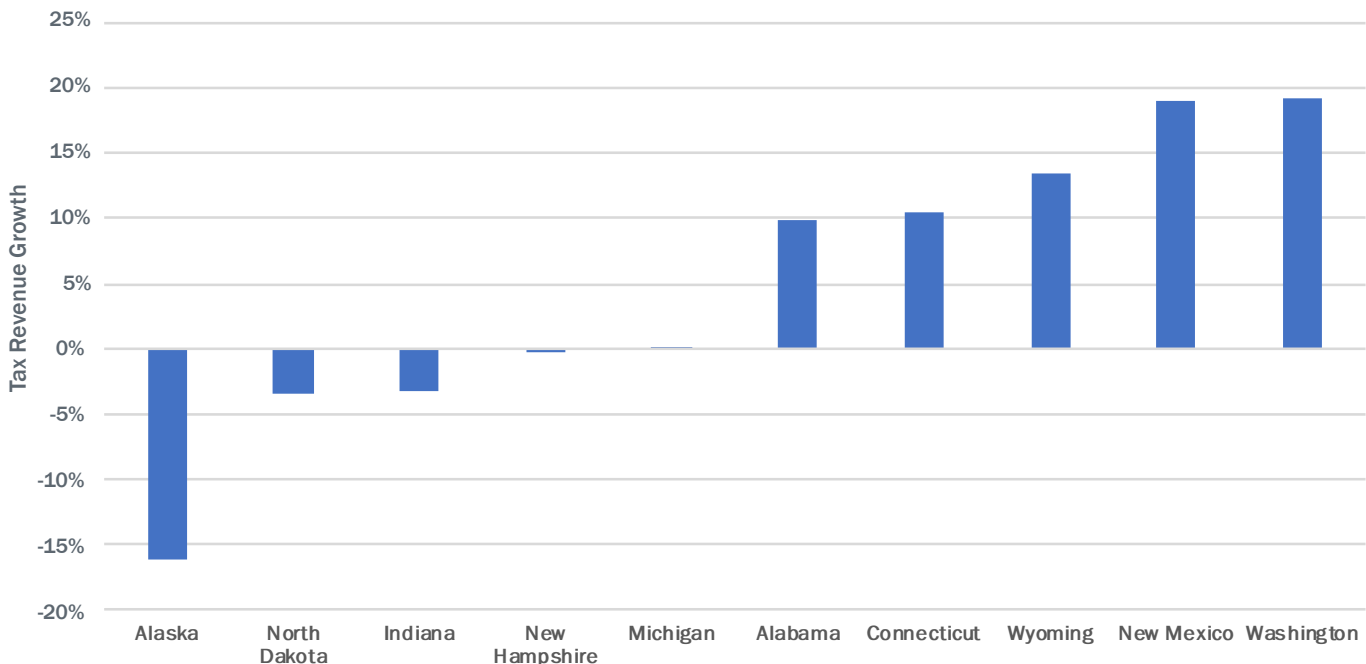
## Tax Revenue Growth: State Fortunes Can Change Rapidly

States that rely on economically sensitive revenue sources require additional reserves to provide flexibility during volatile times. Taxes such as those levied on sales and gross receipts and income tend to shift with the economy, while property taxes typically lag economic swings, allowing state and local governments time to adjust.

Nationwide, states' total tax revenues grew by about 6.6% from calendar year 2018 to 2019.[9] Prior to the COVID-19 pandemic, FY 2020 revenue forecasts had projected a 2.6% increase in General Fund revenues, with sales and use taxes and personal income taxes expected to rise by 4.5% and 2.7%, respectively.[10] Fourteen states had projected a revenue decline for FY 2020 even before the pandemic. Calendar years and fiscal years often do not align for municipal issuers as the latter tend to have June 30 year-ends to better match the fiscal year-ends with their tax collection cycles.

Conning's tax revenue growth indicator, as measured by the Census Bureau by calendar year, signifies the main sources of revenue a state relies on and how those revenues changed year over year. Most states experienced positive tax revenue growth in 2019, while four states saw declines (see Exhibit 10). Notably, states that ranked in the top five last year swung to the bottom five this year, which could reflect atypical growth in 2019. **Alaska's** ranking moved from No. 1 to No. 50, which may also reflect the state's particularly volatile revenue structure. **New Hampshire**, **Indiana** and **North Dakota** also moved from the top five to the bottom five. **Washington**, which ranked 49th last year, moved to the top spot in terms of tax revenue growth this year.

**Exhibit 10: Highest and Lowest Tax Revenue Growth CY 2018 – 2019**



Prepared by Conning, Inc. Source: Census Bureau, U.S. Department of Commerce (2020), https://www.census.gov/content/census/en/data/tables/2019/econ/qtax/historical/q4.html

[9] Census Bureau, U.S. Department of Commerce (2020), *https://www.census.gov/data/tables/2019/econ/qtax/historical.Q4.html*

[10] ©2019 The National Association of State Budget Officers (NASBO), *https://www.nasbo.org/reports-data/fiscal-survey-of-states*

## Where Does Tax Revenue Growth Come From?

Nationwide, sales and gross receipts taxes plus individual income taxes accounted for 84.3% of tax revenue collections in 2019; however, tax collections vary across the states and, in some, revenues from taxes account for less than 25% of general revenues. For instance, seven states — **Alaska**, **Florida**, **Nevada**, **South Dakota**, **Texas**, **Washington** and **Wyoming** — do not levy personal income taxes (and **New Hampshire** and **Tennessee** only collect 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, and are not often used for state operations, but instead redistributed to local governments.[11]

A small portion of states — including **Alaska**, which saw the largest decline in tax revenues from 2018 to 2019 — rely on severance taxes for the majority of their tax revenues. These taxes, levied on the extraction or production of natural resources such as oil and gas, are especially volatile and will likely be further strained by the pandemic.

Sources of year-over-year growth varied for those states with larger increases in tax collections. **Washington**, which saw the largest year-over-year tax revenue growth, does not collect income taxes but experienced a 24.3% increase in sales and gross receipts taxes, which may have been partially driven by the implementation of an online sales tax. More than 30% of its General Fund revenues were derived from broad-based sales taxes. **Washington** said that its sound overall General Fund revenue growth (3.3% in FY 2019) owed much to its expanding economy, hiring and housing markets.[12] **Washington** was ranked 49th in terms of tax revenue growth for the 2017–2018 calendar year, which could also account for its higher growth in 2019.

**New Mexico** experienced a similar increase in tax revenues, which was mostly driven by an increase in individual income tax collections. The state also placed in the top five last year in terms of tax revenue growth. Future income tax collections may be negatively impacted by several factors, including job losses and delayed income tax filing deadlines. The stock market disruption caused by the COVID-19 pandemic may also affect income tax payments due to the impact on capital gains, especially in states with a large portion of high-income taxpayers.

**Exhibit 11: Top 10 Crude Oil-Producing States, Thousands Barrels Per Day and Top Five Severance Taxes as a % of Total Taxes**
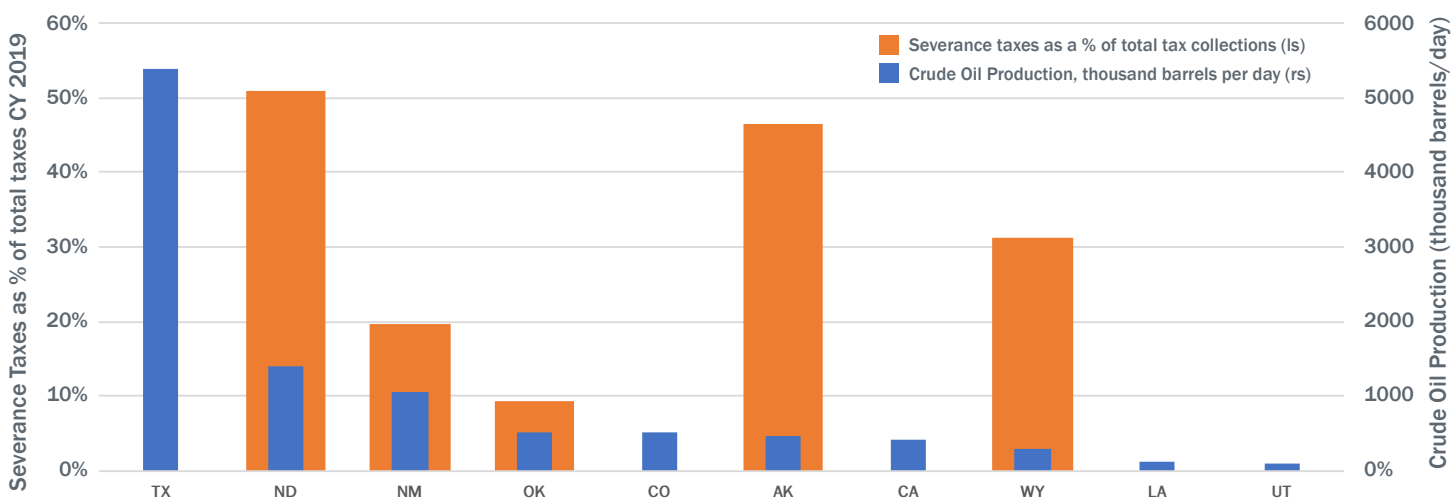


Prepared by Conning, Inc. Sources: Census Bureau, U.S. Department of Commerce (2020), https://www.census.gov/data/tables/2019/econ/qtax/historical.Q4.html and U.S. Energy Information Administration, U.S. Department of Energy (2020), https://www.eia.gov/state/rankings/#/series/46

[11] Note: Local collection of state-imposed taxes is classified by the U.S. Census Bureau as state tax revenue. "If the state imposes the tax, such as establishing a base millage for a property tax dedicated to public schools, AND there is a mandatory redistribution to other local governments of the taxes collected based on a state-controlled formula, the Census Bureau assigns the tax to the state government."

[12] State of Washington Comprehensive Annual Financial Report (FY19), ofm.wa.gov/sites/default/files/public/accounting/report/CAFR/2019/CAFR19.pdf

[13] Census Bureau, U.S. Department of Commerce (2020), https://www.census.gov/data/tables/2019/econ/qtax/historical.Q4.html

[14] U.S. Energy Information Administration, U.S. Department of Energy (2020), https://www.eia.gov/state/rankings/#/series/46

## Increasing Difficulties for Oil-Dependent States Emphasize Importance of Diversified Economy

Our previous report outlined how declining oil prices from 2014 to 2016 stressed budgets in several oil-producing states. On April 20, oil prices experienced a historic decline, even dropping to below $0 a barrel. Persistently low oil prices could have material implications for some states' FY 2020 financial positions and will make for difficult budget decisions in FY 2021.

This is because lower oil prices affect state severance tax collections, which equaled $14.2 billion nationwide in 2019, down 2.1% from 2018. Though this only represents about 1.3% of total tax collections nationwide, individual states rely much more heavily on this tax, as shown in Exhibit 11. Lower oil prices (plus fewer vehicles on the road) will also reduce gas tax collections, which accounted for 4.8% of the nation's total tax collections in 2019.

**Alaska** experienced a 16.1% decline in tax revenues from 2018 to 2019, driven by a 31.6% decline in severance taxes. While the state saw the largest decline in tax revenues in 2019, it also posted the second-highest reserve balance, which should provide some flexibility as it navigates oil price volatility and the effects of the pandemic.

**North Dakota** and **Michigan**, which ranked in the bottom five for tax revenue growth, also experienced declines in severance tax revenues. **North Dakota**, the second-highest producer of crude oil in the U.S., experienced a 3.4% decline in tax revenues from 2018 to 2019, with severance taxes declining by 6.7%. **Michigan**, the 18th-highest producer of crude oil in the U.S., experienced a 29.4% year-over-year decline in severance taxes; however, these collections only accounted for 0.07% of total tax revenues in CY 2019. Its 3.7% decline in sales and gross receipts taxes was more influential on its lower revenue growth for the year, given that these taxes accounted for 47.1% of total tax revenues.

## Benefits of a Diversified State Economy

Conning uses the GDP growth indicator to identify trends in states' economies, and a subdivision of the growth rate — the individual sectors that contribute to a state's GDP growth as defined by NAICS — allows us to pinpoint sectors that are supporting or harming a state's economy, like the oil and gas extraction sector.

**Texas** (#34 for tax revenue growth) has historically derived a large portion of its GDP and overall economic activity from the oil and mining sectors. While this was still the case in 2019, the degree to which Texas relies on the oil and mining industry has subsided somewhat, making room for other industries to expand. In 1980 the mining industry (which includes oil and gas extraction) accounted for 17.1% of GDP. Fast forward to 2010 and the industry contributed 9.9% to GDP, and further to 2019 when the contribution has shrunk to 8.1%. Over the past nine years the finance, insurance, real estate, rental and leasing (all one) industry has grown the most from 13.5% of GDP in 2010 to 15.6% of GDP in 2019,[15] to pick up some of the slack left by the oil and gas industry. Having a diversified underlying economy reduces a state's exposure to one-time industry shocks as we are experiencing now with record low oil prices.

**Alaska**, however, is heavily reliant on the oil industry and its GDP fluctuates with the price of oil. From 2015 to 2016, when oil prices dropped below $40 per barrel, Alaska's GDP shrank by 2.5% while Texas' dropped by just 0.2%. In the current environment of prolonged low oil prices, we expect to see better performance from Texas than Alaska and will revisit this in our next report to assess the dual impact of COVID-19 and the oil crash.

## Recently Stable Tourism Revenues Likely to Turn Negative

Similar to oil-dependent states, states reliant on tourism dollars — i.e., hotel rooms, conventions and other events — are susceptible to revenue fluctuations during economic crises. The pandemic has caused a precipitous and unprecedented decline in tourism activity, as people stayed home and events were canceled nationwide. The total financial impact on tourism-reliant states is unknown, given the uncertainty of the pandemic's duration as well as the timing and amount of federal stimulus available to states. The severe drop in tourism-related activity is expected to be temporary and may slowly reverse as states reopen and events are rescheduled.

**Hawaii** and **Nevada** are two states whose economies rely heavily on tourism: In 2018, tourism accounted for about 16% of Nevada's economy and 10% of Hawaii's (though these figures do not include transportation-related dollars, which are also tied to tourism activity).[16] From 2018 to 2019 — prior to the pandemic — these states experienced modest growth in tax revenue collections. Their FY 2020 budgeted reserves were also adequate, with **Hawaii's** total reserve balance equal to 12.6% of budgeted General Fund expenditures and Nevada's equal to 16.6%.[17] These reserves should help each state to withstand unforeseen losses in revenue.

[15.] Bureau of Economic Analysis, U.S. Department of Commerce (2010, 2019), *https://apps.bea.gov/iTable/iTable.cfm?reqid=70&step=1&isuri=1&acrdn=1#reqid=70&step=1&isuri=1&acrdn=1*

[16.] Tim Henderson, "Coronavirus Will Slam States Dependent on Tourism," Pew Research Center, Washington, D.C., March 16, 2020, https://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2020/03/16/coronavirus-will-slam-states-dependent-on-tourism accessed online April 15, 2020.

[17.] ©2019 The National Association of State Budget Officers (NASBO), *https://www.nasbo.org/reports-data/fiscal-survey-of-states*

## Economic Debt: States with High Fixed Costs More Vulnerable to Revenue Loss

We use economic debt to rank the states in terms of the total debt burden on a state's tax base. As we previously reported, pension systems have increasingly pressured state budgets as liabilities rise and returns decline, causing annual contributions to increase. The market disruptions caused by the coronavirus pandemic will likely exacerbate this funding crisis and lead to increased fixed costs. For example, the California Public Employees' Retirement System reported a $69 billion loss in March.[18] **California** had a somewhat above-average economic debt going into this crisis, as it ranked No. 39 for this indicator.

### Exhibit 12: Total Economic Debt as a % Personal Income

| Five States with Highest Economic Debt | | Five States with Lowest Economic Debt | |
|---|---|---|---|
| State | Rank | State | Rank |
| New Jersey | 36.0% | Nebraska | 0.5% |
| Hawaii | 29.1% | Oklahoma | 0.9% |
| Illinois | 28.8% | Iowa | 1.1% |
| Connecticut | 28.4% | South Dakota | 1.1% |
| Delaware | 22.8% | Tennessee | 1.3% |

Prepared by Conning, Inc. Sources: Econ Debt: Moody's Debt medians June 2019, ©2019 Moody's Investors Services, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates – used with limited permission
https://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBM_1172874
©2019 Standard & Poor's Financial Services LLC (and its affiliates, as applicable) https://www.spglobal.com/ratings/en/research/articles/191203-u-s-states-are-slow-to-reform-opebs-as-decline-in-liabilities-masks-increased-risk-11256419
Data was also used from Investortools.
Personal Income: Bureau of Economic Analysis, U.S. Department of Commerce (2019) https://apps.bea.gov/itable/iTable.cfm?ReqID=70&step=1

When revenues are down, fixed costs — which are comprised of debt service, pension and other post-employment benefit (OPEB) contributions — make it more difficult for states to make expenditure cuts. The states with the weakest revenue growth in 2019 (**Alaska**, **North Dakota**, **Indiana**, **New Hampshire** and **Michigan**) did not post the highest fixed costs; in fact, **North Dakota** ranked No. 2 with fixed costs of only 1.14% of governmental funds expenditures (see Exhibit 9). Conversely, **Hawaii's** fixed costs of 16.2% landed the state in the bottom five, which could indicate difficulty cutting expenditures if its tourism revenues do drop significantly.

**Illinois**, **New Jersey** and **Connecticut** all suffer from poorly funded pension plans, whose annual fixed costs continue to hamper smooth budget planning sessions and pull funds away from other state programs. In last year's State of the States report we highlighted three roadblocks to improving a state's pension funded status: plan restructuring, underperformance and reduced contributions. Underperformance will continue to pose a risk this year as many state plan valuations have taken a hit due to the COVID-19 shutdowns, which have dramatically increased their liabilities. Coming into the crisis **Illinois** and **New Jersey** had the two highest net pension liabilities among states, followed closely by **Connecticut**, according to Investortools data. With the March market crash occurring near the end of many states' fiscal years (June 30), public pension debt could balloon from $1.2 trillion to $1.7 trillion in FY 2020. High fixed costs related to pension burdens will continue to pressure budget discussions for some of these states for a long time, absent structural reform.

**Illinois'** distressed fiscal situation — including high fixed costs — is not new and is expected to only deteriorate in the current environment. Its financial wellbeing is teetering on the edge as its pension situation deteriorates and the hopes of passing a progressive income tax in November dim.

**New Jersey** ranked 50th for economic debt for the second year, with a 36% economic debt to personal income ratio. Its economic debt is fueled by pension and OPEB liabilities, which accounted for 83.7% of the total.

**Kentucky**, which reports one of the highest fixed costs as a percent of governmental funds expenditures at 13.8%, features the worst funded retirement system (the non-hazardous employees' system, at about 13.7% funded).[19] The state is burdened by its total economic debt of 18.7% of personal income (ranked 45th).

## Debt Per Capita: Greater State Risk at Low Wealth Levels

We further analyze 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. **Connecticut** remains in the bottom slot with a debt per capita of $6,816. **Wyoming's** 2019 No. 1 position was bumped by **Nebraska**, which posted a debt per capita of just $23. This measure is additionally important when considering population change. For **Connecticut**, which experienced negative population growth in 2019, its debt burden will fall on fewer and fewer residents.

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[18]. Sacramento Bee, "CalPERS loses $69 billion in coronavirus stock market crash" (March 2020), https://www.sacbee.com/news/politics-government/the-state-worker/article241391841.html

[19]. Kentucky Retirement Systems' Comprehensive Annual Financial Report (2019), https://kyret.ky.gov/Publications/Books/Fiscal%20Year%202019%20CAFR.pdf

## Exhibit 13: Personal Income/Capita Rank vs. Debt/Capita Rank
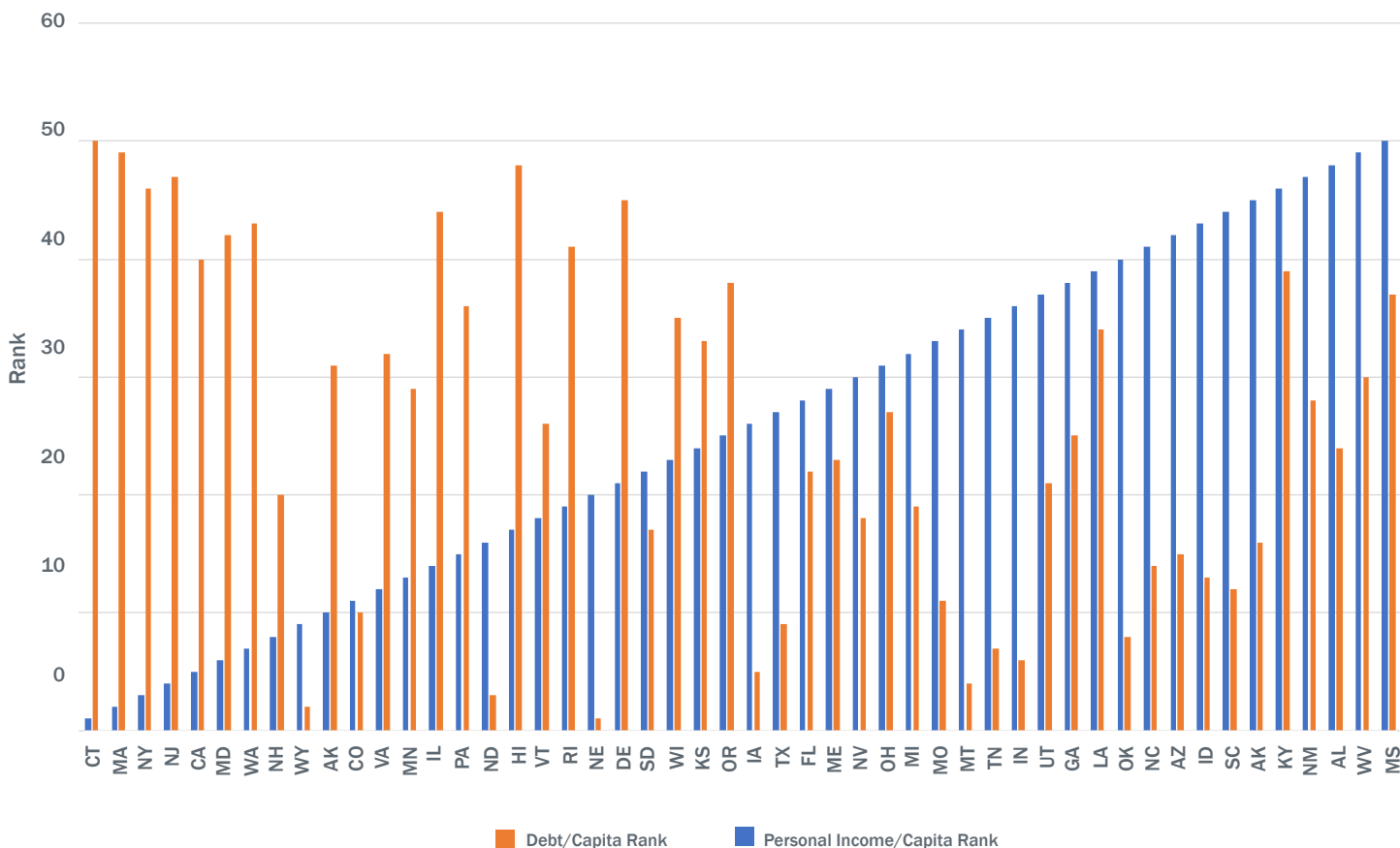


Prepared by Conning, Inc. Sources: ©2019 Moody's Investors Services, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates – used with limited permission, "Medians – Flat debt total signals cautious borrowing, despite infrastructure needs" (June 3, 2019) and Bureau of Economic Analysis, U.S. Department of Commerce (2019), "State Annual Personal Income, 2019 (Preliminary) and State Quarterly Personal Income, 4th Quarter 2019," (March 24, 2020), https://www.bea.gov/news/2020/state-annual-personal-income-2019-preliminary-and-state-quarterly-personal-income-4th and ©2019 Standard and Poor's Financial Services LLC (and its affiliates, as applicable), "U.S. States are Slow to Reform OPEBs As Decline in Liabilities Masks Increased Risk," (December 3, 2019) and data pulled from Investortools and compiled by Conning.

As Exhibit 13 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. This is important to keep in mind because in theory a wealthier population can incur a higher tax burden needed to support these higher debt levels. But the math comes undone when these wealthier residents move out of a state and leave behind a debt burden for a smaller and potentially less affluent population base.

## Conclusion

In this edition of Conning's State of the States report, we placed more emphasis on population changes and taxes in our methodology for ranking the states. This is because income taxes and population influence each other and changes tend to have a snowballing effect — one that is difficult to turn around and affects other indicators as it grows.

Furthermore, we took a deeper dive into the sources of state revenues and which states in particular have done well during the most recent economic expansion. We revisited the topic of reserves, which is particularly relevant during the current environment, with the COVID-19 pandemic impacting multiple revenue sources.

The introduction of the Business Tax Climate Index is significant since some states that have more singular sources of tax revenues. For example, the IRS has extended its income tax deadline from April to July and while states do not necessarily have to follow this deadline, many have. This means tax collections for states that levy an income tax will be lower for the fourth quarter of their fiscal year (most have a June 30 year-end). Some like **New Jersey**[20] have even extended their fiscal year-end in order to address the uncertainty around their tax collections in light of COVID-19.

We addressed the structure of state tax regimes and revenue sources. States with a high reliance on any one tax source are more vulnerable to disruptions in those segments of the economy. For example, in the current environment, with certain sectors of the economy having come to a halt and people having been laid off at records levels, some states will be impacted differently given their varying reliance on sales, income taxes and property taxes. Certain taxes, like those driven by oil production for example, are inherently more volatile than others, something the Pew Charitable Trusts has captured through its volatility scores.[21]

Only four states have volatility scores greater than 10. **Alaska** stands out at 37.59, which is no surprise given its reliance on economically sensitive oil tax revenues for 36% of operating revenues[22]. **North Dakota** and **Wyoming** similarly rely on oil-related revenues at 20.3% and 40%, respectively. **Vermont** has a relatively high reliance on property taxes (32% of total tax revenues in 2019), which fell sharply during the two recessions as captured in the volatility index time-range.

### Exhibit 14: Highest and Lowest Pew Volatility Scores

| State Name | 1998 – 2017 Volatility Scores | State Name | 1998 – 2017 Volatility Scores |
|---|---|---|---|
| Alaska | 37.59 | South Dakota | 2.68 |
| North Dakota | 16.12 | Kentucky | 2.74 |
| Wyoming | 13.64 | Maryland | 3.41 |
| Vermont | 10.35 | Arkansas | 3.71 |
| California | 8.59 | Pennsylvania | 3.73 |

Prepared by Conning, Inc. Source: Tax Revenue Volatility Varies Across States, Revenue Streams," ©1996-2020 The Pew Charitable Trusts, https://www.pewtrusts.org/en/research-and-analysis/articles/2018/08/29/tax-revenue-volatility-varies-across-states-revenue-streams

For the most part, the states we listed with the lowest volatility scores tend to have a balanced distribution between sales and income taxes for sources of revenues. **South Dakota** is one notable exception, in part because its sales tax collection held up well through the two prior recessions (~ FY 2001 and FY 2008-2009).

It is too early to analyze the impact of the COVID-19 pandemic on the states; however, data from the past two recessions can help us predict which states may be most affected. Conservatively we conclude that a relatively high reliance on sales taxes isn't necessarily a bad thing in this shelter-in-place environment, especially since a 2018 Supreme Court[23] ruling expanded a state's ability to collect sales taxes from online retailers.

The current budget cycle (ending in June) is going to be very telling. We showed last year that on the heels of one of the longest economic expansions on record, some states were not in great fiscal shape in terms of reserves, pension funding levels, and housing statistics. This year's State of the States rankings, which provide an objective measure of a state's relative rank, showed minimal year-over-year changes. We expect that might be different in next year's report.

## About This Report

Conning's State of the States report is our proprietary, ongoing ranking of the U.S. states by credit outlook. States are the largest issuers of municipal bonds and we believe that a sound understanding of their credit quality is a prerequisite to effective municipal bond investing. This report forms the basis for our internal ratings, which also consider security features and fiscal management, yielding a comprehensive assessment of both credit quality and direction. This analysis centers our disciplined approach to constructing and managing municipal bond portfolios.

[20]. ©2020 Bloomberg L.P. "New Jersey to Move Fiscal Year End to September From June" April 1, 2020, https://www.bloomberg.com/news/articles/2020-04-01/new-jersey-to-move-fiscal-year-end-to-september-from-june

[21]. Mary Murphy, Akshay Iyengar & Alexandria Zhang: "Tax Revenue Volatility Varies Across States, Revenue Streams," Pew Research Center, Washington, D.C., August 29, 2018. Pew's calculation of volatility scores is based on data from the U.S. Census Bureau's State Government Tax Collections historical data series for 1997 to 2017, accessed June 27, 2018, and the National Conference of State Legislatures' "State Tax Actions" reports for 1997 to 2016, accessed in April 2018.

[22]. S&P Global Rating, March 12, 2019, "With Oil Price Volatility, Recent Economic Gains in U.S. Oil-Producing States are at Risk," ©2019 Standard & Poor's Financial Services LLC (and its affiliates, as applicable)

[23]. `South Dakota v. Wayfair, 138 S. Ct. 2080 (2018), https://www.supremecourt.gov/opinions/17pdf/17-494_j4el.pdf

## 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.

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## About Conning

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

## 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. For the June 2020 edition of the State of the States we made three significant changes.

1. We replaced the ALEC-Laffer Economic Outlook Ranking 2018 (8% weight) with the Tax Foundation's State Business Tax Climate Index which we now weight 4%;

2. We replaced Median Household Income with Personal Income per Capita leaving the weighting the same at 8%;

3. We increased the weighting of Population Growth from 4% to 8%;

4. We changed the time period for the unemployment rate metric from a single point in time to an average of the most recent 12 month's unemployment rates. The weighting of 8% remains the same.

### Economic Debt Per Personal Income (8% weight)

A ranking of each state according to its economic debt as a percentage of 2019 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: ©2019 Moody's Investors Services, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates – used with limited permission, "Medians - Flat debt total signals cautious borrowing, despite infrastructure needs" (June 3, 2019), https://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBM_1172874 and Bureau of Economic Analysis, U.S. Department of Commerce (2019), "SAINC1 - Personal Income Summary: Personal Income, Population, Per Capita Personal Income," (March 24, 2020), https://apps.bea.gov/itable/iTable.cfm?ReqID=70&step=1 and ©2019 Standard & Poor's Financial Services LLC (and its affiliates, as applicable), "U.S. States Are Slow To Reform OPEBs As Decline In Liabilities Masks Increased Risk" (December 3, 2019), https://www.capitaliq.com/CIQDotNet/CreditResearch/SPResearch.aspx?DocumentId=43173941&From=SNP_CRS

### Reserves as Percentage of General Fund Expenditures (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: ©2019 The National Association of State Budget Officers, "Fiscal Survey of the States (Fall 2019)," 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: ©2019 Moody's Investors Services, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates – used with limited permission, "Medians - Flat debt total signals cautious borrowing, despite infrastructure needs" (June 3, 2019), https://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBM_1172874 and Census Bureau, U.S. Department of Commerce (2019), "Annual Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico: April 1, 2010 to July 1, 2019" https://www.census.gov/data/datasets/time-series/demo/popest/2010s-state-total.html

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

A ranking of each state's annualized current dollar GDP growth.

Source: Bureau of Economic Analysis, U.S. Department of Commerce (2020), https://apps.bea.gov/regional/downloadzip.cfm

### Gross Domestic Product per capita (8% weight)

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

Sources: Bureau of Economic Analysis, U.S. Department of Commerce (2019), https://apps.bea.gov/regional/downloadzip.cfm and Census Bureau, U.S. Department of Commerce (2019), "Annual Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico: April 1, 2010 to July 1, 2019" https://www.census.gov/data/datasets/time-series/demo/popest/2010s-state-total.html

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

A ranking of states based on year-over-year total employment growth from February 2019 to February 2020 (preliminary).

Source: Bureau of Labor Statistics, U.S. Department of Labor (2020), "Table 3. Employees on nonfarm payrolls by state and selected industry sector, seasonally adjusted" https://www.bls.gov/web/laus.supp.toc.htm

## Appendix A — Methodology and Description of Indicators *(continued)*

### 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 (2019), "SAINC1 - Personal Income Summary: Personal Income, Population, Per Capita Personal Income," (March 24, 2020), https://apps.bea.gov/itable/iTable.cfm?ReqID=70&step=1 and Census Bureau, U.S. Department of Commerce (2019), "Annual Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico: April 1, 2010 to July 1, 2019" https://www.census.gov/data/datasets/time-series/demo/popest/2010s-state-total.html

### Unemployment Rate (8% weight)

A ranking of states by the average their unemployment rates over the most recent 12 months
(March 2019 – February 2020).

Source: Bureau of Labor Statistics, U.S. Department of Labor (2020), https://www.bls.gov/charts/state-employment-and-unemployment/state-unemployment-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 2019–2020.

Source: Bureau of Economic Analysis, U.S. Department of Commerce (2019), "SAINC1 - Personal Income Summary: Personal Income, Population, Per Capita Personal Income," (March 24, 2020), https://apps.bea.gov/itable/iTable.cfm?ReqID=70&step=1

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

A ranking of states based on one-year change in HPI, 4Q 2018–4Q 2019.

Source: Federal Housing Finance Agency (FHFA) (2019), https://www.fhfa.gov/DataTools/Downloads/Pages/House-Price-Index-Datasets.aspx#qpo

### Tax Revenue Growth (8% weight)

A ranking of states by annual total tax revenue growth 2018–2019.

Source: Census Bureau, U.S. Department of Commerce (2019), https://www.census.gov/programs-surveys/qtax/data/tables.2019.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: © Tax Foundation, "2020 State Business Tax Climate," https://files.taxfoundation.org/20191021155857/2020-State-Business-Tax-Climate-Index-PDF.pdf

### Population Change (8% weight)

A ranking of states by annual change in population from 2018 to 2019.

Source: Census Bureau, U.S. Department of Commerce (2019), "Annual Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico: April 1, 2010 to July 1, 2019" https://www.census.gov/data/datasets/time-series/demo/popest/2010s-state-total.html

### Additional Source Information

## Appendix B—State Rankings by Credit Indicator*

| State | Raw Score | End Rank | Tax Climate 4% | Economic Debt/ Personal Income 8% | Reserves/ General Fund Expenditures 8% | Debt per Capita 8% | Tax Revenue Growth 8% | GDP per Capita 8% | GDP Growth 8% | Employment Growth 8% | Unemployment Rate Avg 8% | Personal Income Growth 8% | Personal Income per Capita 8% | One Year HPI Change 8% | Population Growth 8% |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Alabama | 24.8 | 27 | 40 | 30 | 23 | 24 | 5 | 46 | 18 | 27 | 10 | 25 | 48 | 9 | 25 |
| Alaska | 33.08 | 44 | 3 | 42 | 2 | 31 | 50 | 7 | 49 | 38 | 50 | 40 | 10 | 44 | 49 |
| Arizona | 17.68 | 7 | 20 | 11 | 34 | 15 | 6 | 40 | 5 | 3 | 45 | 4 | 42 | 3 | 3 |
| Arkansas | 34.72 | 45 | 46 | 24 | 47 | 16 | 37 | 48 | 27 | 37 | 29 | 32 | 45 | 43 | 26 |
| California | 23.12 | 20 | 48 | 39 | 17 | 40 | 7 | 4 | 13 | 16 | 39 | 14 | 5 | 36 | 35 |
| Colorado | 14.12 | 2 | 17 | 17 | 39 | 10 | 40 | 13 | 7 | 6 | 5 | 1 | 11 | 11 | 8 |
| Connecticut | 30.92 | 40 | 47 | 47 | 16 | 50 | 4 | 3 | 32 | 35 | 33 | 48 | 1 | 50 | 44 |
| Delaware | 23.24 | 21 | 11 | 46 | 11 | 45 | 10 | 6 | 42 | 22 | 37 | 27 | 21 | 6 | 12 |
| Florida | 18.96 | 10 | 4 | 12 | 38 | 22 | 26 | 39 | 4 | 14 | 14 | 15 | 28 | 14 | 9 |
| Georgia | 24.16 | 25 | 32 | 14 | 26 | 25 | 45 | 29 | 21 | 26 | 22 | 17 | 38 | 12 | 11 |
| Hawaii | 31 | 42 | 37 | 49 | 21 | 48 | 27 | 12 | 26 | 44 | 7 | 45 | 17 | 27 | 46 |
| Idaho | 15.4 | 4 | 21 | 6 | 18 | 13 | 30 | 47 | 6 | 2 | 12 | 3 | 43 | 1 | 1 |
| Illinois | 38.2 | 46 | 35 | 48 | 49 | 44 | 35 | 11 | 29 | 48 | 36 | 49 | 14 | 49 | 48 |
| Indiana | 26.24 | 29 | 10 | 23 | 20 | 6 | 48 | 33 | 39 | 42 | 18 | 35 | 36 | 5 | 18 |
| Iowa | 22.16 | 18 | 42 | 3 | 9 | 5 | 9 | 21 | 41 | 45 | 9 | 11 | 26 | 48 | 29 |
| Kansas | 30.24 | 37 | 34 | 22 | 36 | 33 | 38 | 27 | 38 | 25 | 16 | 31 | 24 | 33 | 38 |
| Kentucky | 40.64 | 50 | 24 | 45 | 48 | 39 | 43 | 44 | 37 | 43 | 43 | 41 | 46 | 34 | 33 |
| Louisiana | 39.88 | 49 | 41 | 37 | 45 | 34 | 39 | 31 | 43 | 29 | 48 | 42 | 39 | 46 | 45 |
| Maine | 26.52 | 31 | 33 | 34 | 29 | 23 | 29 | 41 | 20 | 32 | 13 | 18 | 29 | 23 | 24 |
| Maryland | 28.2 | 33 | 43 | 41 | 41 | 42 | 14 | 10 | 24 | 17 | 27 | 36 | 6 | 41 | 32 |
| Massachusetts | 23.52 | 22 | 36 | 44 | 24 | 49 | 16 | 2 | 15 | 19 | 11 | 21 | 2 | 39 | 34 |
| Michigan | 31.2 | 43 | 12 | 25 | 8 | 19 | 46 | 36 | 40 | 39 | 40 | 34 | 32 | 26 | 39 |
| Minnesota | 23.08 | 19 | 45 | 16 | 27 | 29 | 21 | 15 | 36 | 28 | 17 | 22 | 13 | 25 | 17 |
| Mississippi | 39.88 | 48 | 31 | 32 | 31 | 37 | 32 | 50 | 33 | 40 | 49 | 39 | 50 | 47 | 43 |
| Missouri | 26.4 | 30 | 14 | 21 | 35 | 11 | 41 | 37 | 19 | 31 | 20 | 28 | 33 | 19 | 28 |
| Montana | 23.88 | 23 | 5 | 26 | 12 | 4 | 31 | 43 | 31 | 12 | 26 | 33 | 34 | 29 | 15 |
| Nebraska | 20.4 | 14 | 28 | 1 | 7 | 1 | 8 | 16 | 45 | 23 | 15 | 46 | 20 | 38 | 21 |
| Nevada | 20.28 | 13 | 7 | 13 | 10 | 18 | 23 | 30 | 9 | 30 | 34 | 9 | 30 | 42 | 2 |
| New Hampshire | 22 | 17 | 6 | 27 | 42 | 20 | 47 | 18 | 10 | 36 | 4 | 20 | 8 | 20 | 20 |
| New Jersey | 30.4 | 38 | 50 | 50 | 46 | 47 | 11 | 9 | 30 | 18 | 30 | 37 | 4 | 32 | 41 |
| New Mexico | 24.4 | 26 | 22 | 31 | 4 | 28 | 2 | 42 | 28 | 9 | 46 | 5 | 47 | 21 | 31 |

*(X% = weighting)

## Appendix B—State Rankings by Credit Indicator*

| State | Raw Score | End Rank | Tax Climate 4% | Economic Debt/ Personal Income 8% | Reserves/ General Fund Expenditures 8% | Debt per Capita 8% | Tax Revenue Growth 8% | GDP per Capita 8% | GDP Growth 8% | Employment Growth 8% | Unemployment Rate Avg 8% | Personal Income Growth 8% | Personal Income per Capita 8% | One Year HPI Change 8% | Population Growth 8% |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| New York | 30.92 | 41 | 49 | 36 | 37 | 46 | 25 | 1 | 25 | 24 | 38 | 43 | 3 | 37 | 47 |
| North Carolina | 20.76 | 15 | 15 | 10 | 22 | 14 | 33 | 32 | 17 | 13 | 34 | 16 | 41 | 10 | 10 |
| North Dakota | 20.08 | 12 | 16 | 7 | 3 | 3 | 49 | 8 | 47 | 15 | 1 | 30 | 16 | 45 | 19 |
| Ohio | 30.56 | 39 | 38 | 19 | 33 | 27 | 22 | 25 | 34 | 41 | 41 | 38 | 31 | 16 | 36 |
| Oklahoma | 24.12 | 24 | 27 | 2 | 13 | 8 | 19 | 38 | 46 | 33 | 19 | 26 | 40 | 22 | 22 |
| Oregon | 19.92 | 11 | 8 | 28 | 5 | 38 | 15 | 24 | 8 | 21 | 31 | 13 | 25 | 24 | 13 |
| Pennsylvania | 29.64 | 36 | 29 | 33 | 50 | 36 | 28 | 20 | 23 | 20 | 44 | 19 | 15 | 28 | 40 |
| Rhode Island | 28.2 | 34 | 39 | 40 | 44 | 41 | 24 | 23 | 11 | 4 | 28 | 47 | 19 | 15 | 37 |
| South Carolina | 17.52 | 5 | 30 | 20 | 14 | 12 | 18 | 45 | 3 | 8 | 6 | 10 | 44 | 18 | 6 |
| South Dakota | 26.96 | 32 | 2 | 4 | 27 | 17 | 42 | 22 | 44 | 47 | 21 | 44 | 22 | 30 | 16 |
| Tennessee | 18.8 | 9 | 18 | 5 | 40 | 7 | 20 | 35 | 16 | 11 | 23 | 12 | 35 | 8 | 14 |
| Texas | 18.2 | 8 | 13 | 35 | 14 | 9 | 34 | 17 | 12 | 1 | 25 | 7 | 27 | 35 | 5 |
| Utah | 12.6 | 1 | 9 | 8 | 24 | 21 | 17 | 28 | 2 | 5 | 3 | 2 | 37 | 2 | 4 |
| Vermont | 29.44 | 35 | 44 | 43 | 19 | 26 | 36 | 34 | 14 | 49 | 2 | 23 | 18 | 40 | 42 |
| Virginia | 21.32 | 16 | 25 | 18 | 43 | 32 | 12 | 19 | 22 | 10 | 8 | 24 | 12 | 31 | 23 |
| Washington | 15.32 | 3 | 19 | 29 | 30 | 43 | 1 | 5 | 1 | 7 | 42 | 6 | 7 | 4 | 7 |
| West Virginia | 38.52 | 47 | 23 | 38 | 6 | 30 | 44 | 49 | 50 | 50 | 47 | 50 | 49 | 7 | 50 |
| Wisconsin | 25.52 | 28 | 26 | 15 | 32 | 35 | 13 | 26 | 35 | 34 | 24 | 29 | 23 | 13 | 27 |
| Wyoming | 17.56 | 6 | 1 | 9 | 1 | 2 | 3 | 14 | 48 | 46 | 32 | 8 | 9 | 17 | 30 |

*(X% = weighting)

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