

State of the States

June 2019

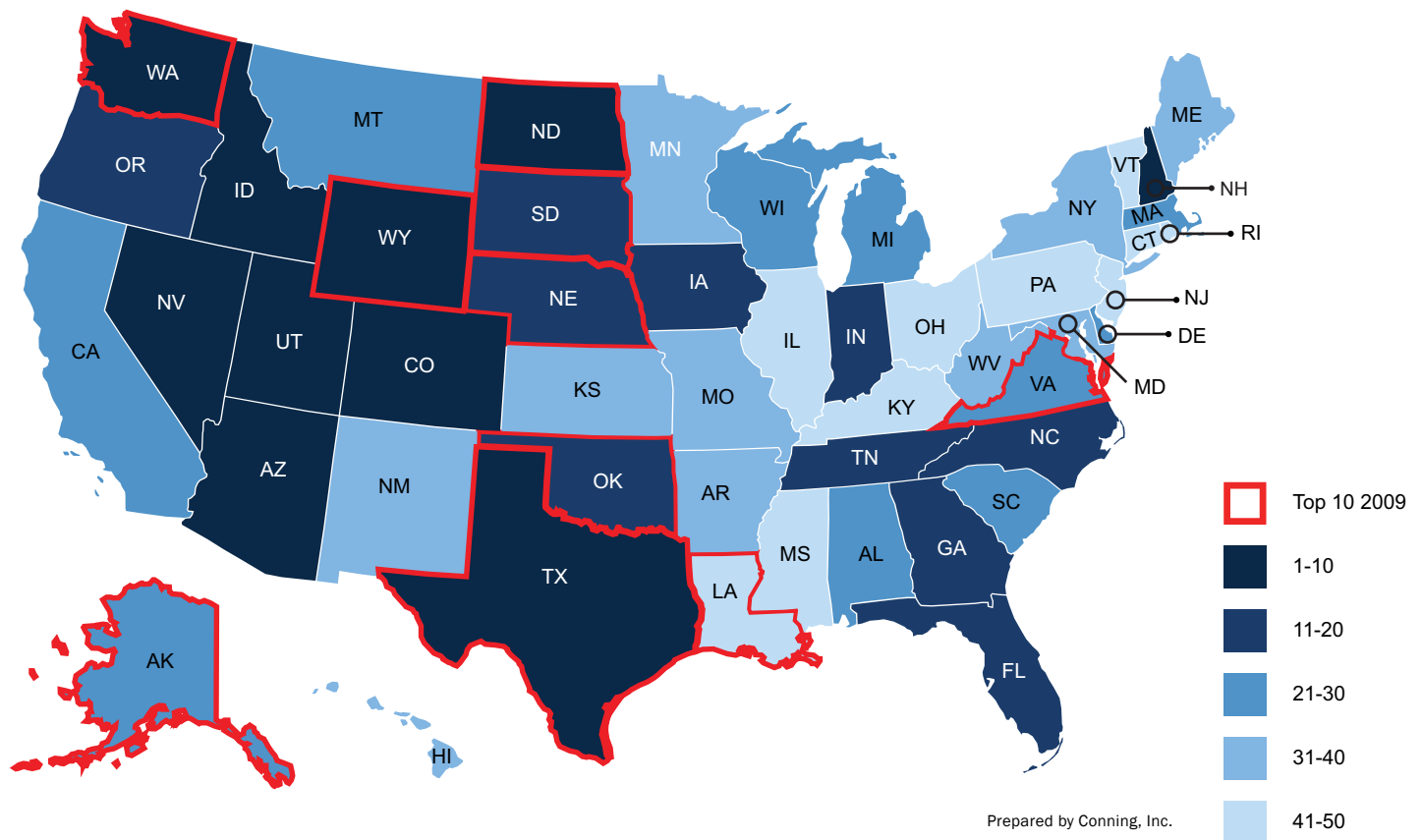
ASSET MANAGEMENT | WHITE PAPER

U.S. State Credit Quality 2009 – 2019: A Stable Outlook for 2019 and Insights on the Decade Since the Financial Crisis

Key Findings

- » Conning maintains its stable outlook on state credit quality
- » Highest-ranked states are west of the Mississippi
- » State credit quality is improving overall but regionally patchy
- » States' recession preparedness has generally improved since 2009, but some are at high risk
- » Pension funding levels are poor despite a 10-year equity bull market
- » Oil-producing states are still recovering from the oil-price lows of 2014-2016
- » Jobs are the main migration driver among states

State of the States Rank – June 2019



Prepared by Conning, Inc.

Executive Summary – Conning Maintains its Stable Outlook on State Credit Quality

June 2019 marks the 10-year anniversary of the official end of the U.S.'s Great Recession. This retrospective edition of our State of the States report reviews the evolution of state credit quality during the past 10 years, in addition to our traditional study of current state credit quality.

Conning's stable outlook on state credit quality reiterates our position from October 2018. State credit quality is improving overall but regionally patchy, and the highest-ranked states remain west of the Mississippi River. Our top-ranked states one to five are **Utah, Nevada, Idaho, Colorado** and **North Dakota**; our lowest ranked 46-50 are **Connecticut, Rhode Island, Mississippi, Louisiana** and **Kentucky**.

Our analysis indicates that economic growth continues, as measured by employment, personal income and home prices, although it's uneven among states. **Arizona** (#9), **Utah** (#1), **Nevada** (#2) and **Washington** (#10) score especially well in these categories.

Our review examines credit-quality issues that have made headlines in recent years:

- » The health of states' reserves and their preparedness for the next recession;
- » The issue of fixed costs, as they are difficult to reduce;
- » The funding status of state pension plans;
- » The fact that tax collections are up across the board;
- » The status of oil-patch states and the impact of fluctuating crude prices;
- » The key factors in population shifts;
- » The reluctance of states to add debt while pension liabilities have increased.

A 10-year GDP growth cycle has some thinking the U.S. is due for an economic downturn, and we find that states overall are better prepared for a recession now than in 2009. General Fund reserve balances now average 13% of General Fund expenditures versus 9% a decade ago. (Conning considers a healthy ratio to be least 10%, and 20 states are still below that in 2019.) Fixed costs are

the other side of the preparedness question, and several states are facing significant infrastructure spending and pension obligations that may challenge their fiscal stability should a downturn come soon.

Public pension liabilities have risen for several reasons in the past 10 years despite the equity bull market. A decade of historically low interest rates has meant lower discount rates, requiring sponsors to set aside greater amounts to meet obligations for future retirees. Meanwhile, those lower interest rates have meant weaker-than-expected returns for fixed-income investments, hurting plan asset growth. To top it off, greater strains on state budgets have caused several states to skip scheduled plan contributions. The result: a widening gap between plan assets and liabilities as evidenced by lower funded ratios.

Several states dependent on oil production also suffered when oil prices fell drastically in 2014 and remained low for two years. However, these states have benefitted from the recent recovery in oil prices, with oil-producers **Alaska** (#27), **North Dakota** (#5) and **New Mexico** (#39) being three out of the top four states for tax revenue growth in 2018.

States have boosted their rainy-day funds and have been conservative in issuing new-money debt, such as **Nebraska** (#19) and **Wyoming** (#8). Alternatively, headline grabbers like **New Jersey** (#44), **Kentucky** (#50) and **Illinois** (#41) continue to score poorly due to their balance sheets, often the result of issues surrounding underfunded pension plans. These issues persist in some cases even though the broader equity and fixed income markets performed well in FY 2018.

Conning also finds that jobs and opportunities are the lead drivers of interstate migration, not individual state tax rates—at least not directly. Job growth does appear strongest in locales that have more taxpayer-friendly structures—but not all, as **Vermont** (#45) was the top move-to state in 2018,¹ and has a generally considered high tax climate.² It appears socio-economic conditions trump taxes.

¹ © United Van Lines 2018 National Movers Study, <https://www.unitedvanlines.com/contact-united/news/movers-study-2018>

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

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The 2019 State of the States Results: Credit Quality Improving Overall But Regionally Patchy

Our State of the States report uses 13 credit indicators to compare state credit quality and assign a ranking. Our methodology, which is explained in Appendix A, calculates a weighted-average raw score for all states and then we rank them with #1 being the highest and #50 being the lowest.

The metrics capture the health of a state’s balance sheet, economic performance, debt burden, business climate and population changes. While a ranking system, a downward move does not necessarily mean a state is doing poorly. Financial and economic health can remain strong but a state may be surpassed by another’s even stronger performance. Overall, we find that state credit quality remains stable although, as is often the case, some regions are performing better than others.

In a comparison to our October 2018 State of the States rankings, the new top state **Utah** switched places with former top state **Colorado** (now #4). **Nevada** (#2) took over **Idaho** (#3) and **North Dakota** (#5) bumped out **Texas** (now #6) to round out the top five. Our bottom five saw two new entrants, **Connecticut** (#46, slipping two spots) and **Rhode Island** (#47, down 19 spots), followed by **Mississippi** (#48), **Louisiana** (#49) and **Kentucky** (#50). **Exhibit 1** offers Conning’s analysis of the top five and bottom five states in terms of their credit quality.

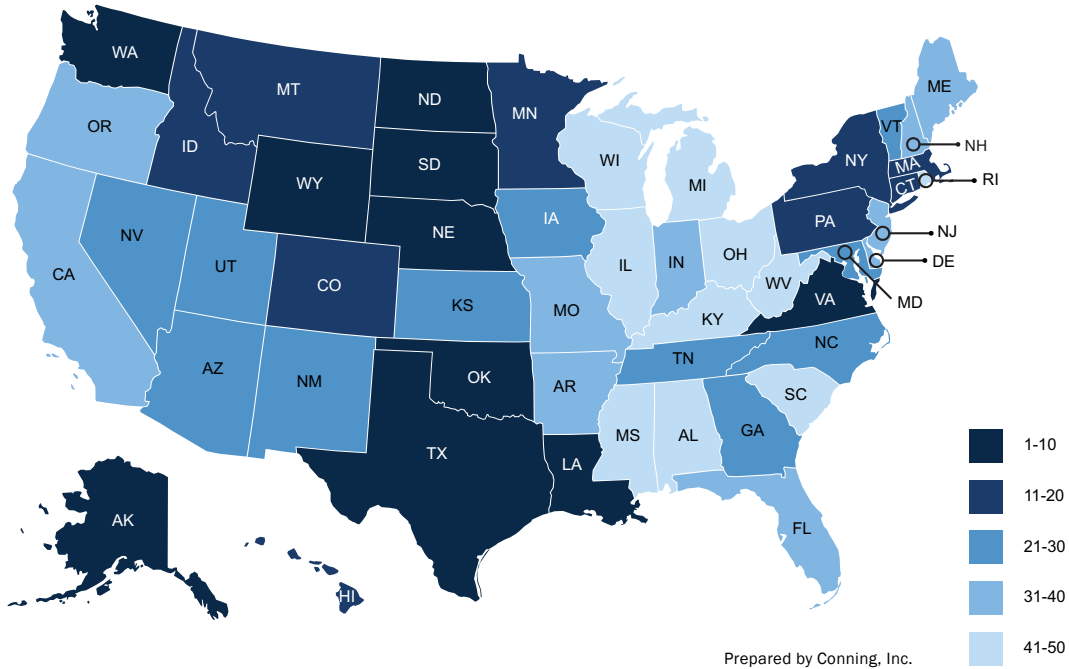
Exhibit 1: Overviews of the Top- and Bottom-Five-Ranked States

Top Five States	Comment	Bottom Five States	Comment
1. Utah	Vibrant economy that has been rapidly expanding. Population growth consistently outpaced the nation.	46. Connecticut	Sluggish economy, weak housing market, little population growth and high debt burden, but median household income outpaces the nation.
2. Nevada	Employment growth and a strong housing-market recovery spurring above-average economic growth.	47. Rhode Island	Weak GDP growth, employment and personal income growth falling behind other states. One-year home price change is a strength.
3. Idaho	High ranking reflects strong balance sheet and generally good economic conditions.	48. Mississippi	Weak economy and below-average socio-economic conditions; balance sheet is manageable.
4. Colorado	Strong economy and low unemployment continue to attract new citizens and grow tax base.	49. Louisiana	Weak labor and housing market conditions, below-average population growth and poor reserve levels. Strong 2018 GDP growth.
5. North Dakota	Favorable business climate, healthy labor market and strong tax revenue growth. Very low debt burden.	50. Kentucky	Dragged down by pension liabilities and few reserves. Slow tax and GDP growth, weak socio-economic conditions. Robust labor market growth.

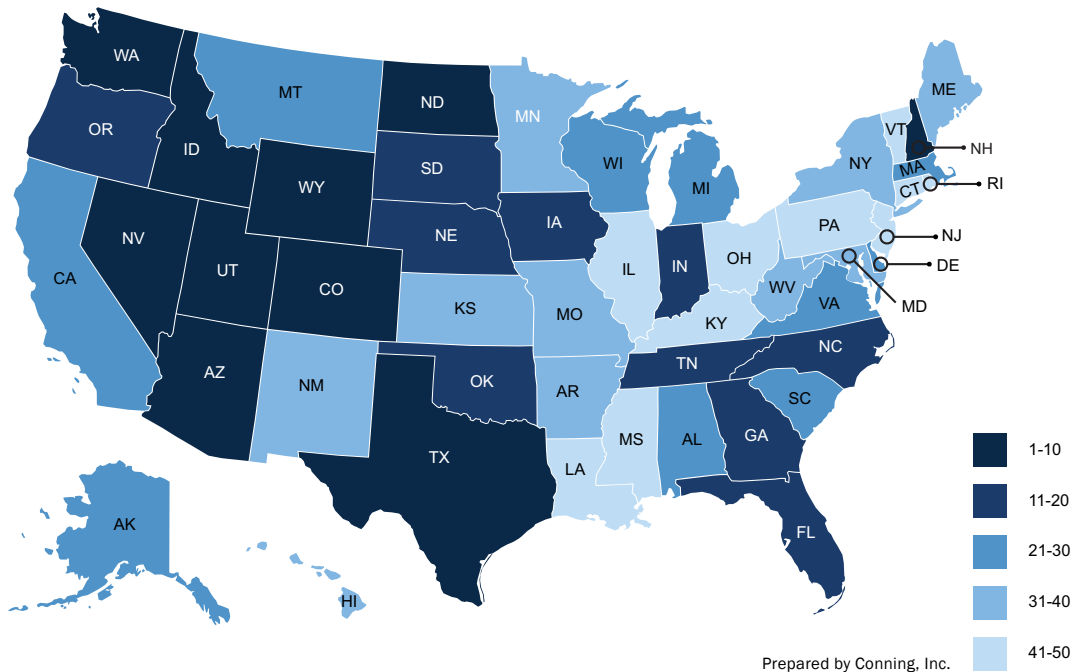
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A 2009 – 2019 Retrospective: Key Findings of the Past Decade

State of the States Rank – June 2009



State of the States Rank – June 2019



Changing Ranks: Driving Forces Behind Changes In State Credit Quality

In the words of American writer Pearl S. Buck, “If you want to understand today, you have to search yesterday.” Thus, we analyze our state rankings from 2009 to the present to learn how states have fared during the period and the conclusions we may draw.

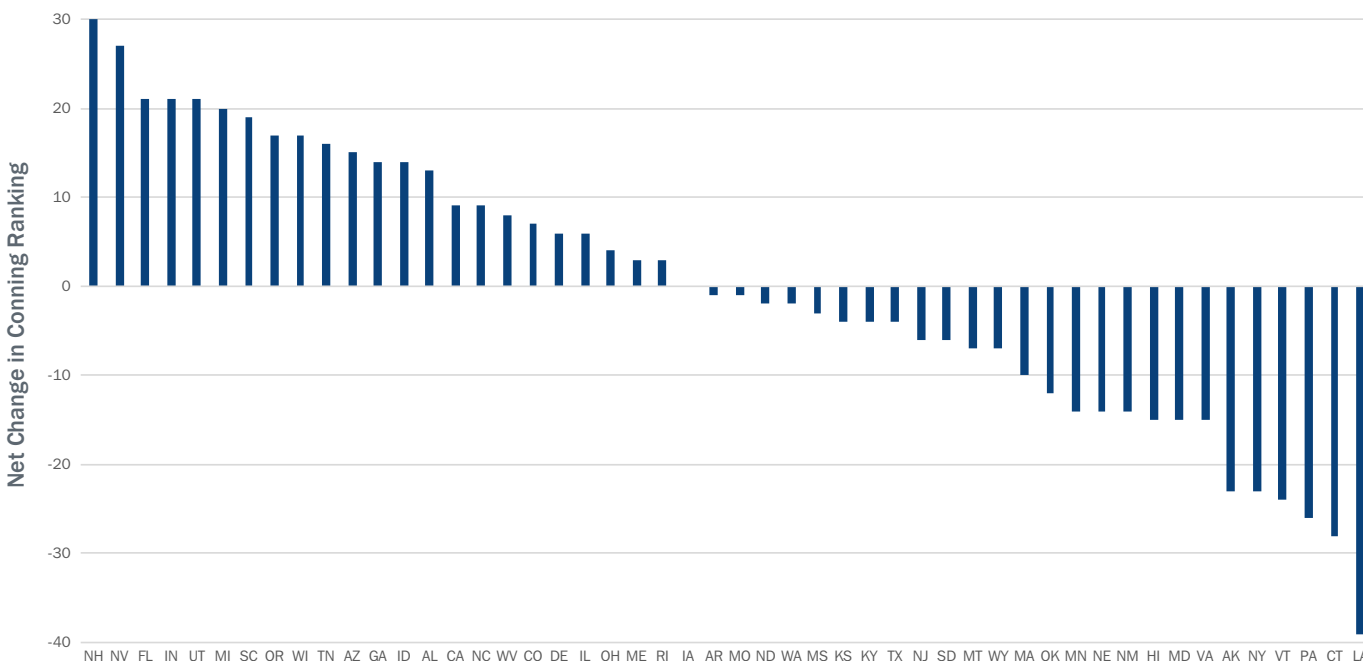
The credit quality of several states has shifted—both positively and negatively—during the past decade. The total change in each state’s ranking is displayed in **Exhibit 2**.

The housing crisis crippled several states, including **California** (+9 overall spots since 2009), **Florida** (+21 spots) and **Nevada** (+27 spots), but these states are among today’s most improved. Along with a recovery in housing, these states have also shored up their finances, steadied GDP growth, and lured new residents. The states falling furthest were **Pennsylvania** (-26 spots), **Connecticut** (-28 spots), and **Louisiana** (-39 spots). Only four were top-10-ranked states in both 2009 and 2019: **North Dakota** (#3 / #5), **Washington** (#8 / #10), **Texas** (#2 / #6) and **Wyoming** (#1 / #8). Five were ranked in the bottom 10 in both years: **Ohio** (#47 / #43), **Kentucky** (#46 / #50), **Mississippi** (#45 / #48), **Rhode Island** (#50 / #47), and **Illinois** (#48 / #42). The results underscore a point: rankings are sticky and changes in credit quality tend to take time.

Geographically, our analysis suggests credit quality follows a theme popularized by another writer, journalist Horace Greeley: “Go west, young man.” In 2009, only three of the top 10 states were in the Western United States as defined by the U.S. Census Bureau;³ in the decade since, the highest-ranked states have shifted even farther west, with now seven of the top 10 in the Western United States.

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Exhibit 2: Changes in Conning’s State Rankings, 2009-2019



Prepared by Conning, Inc. Source: ©2009-2019 Conning, Inc. “State of the States” reports.

³ Census Bureau, U.S. Department of Commerce, “Census Regions and Divisions of the United States,” <https://www2.census.gov/programs-surveys/sahie/reference-maps/2014/us-regdiv.jpg>

Our analysis of the five top- and lowest-ranked states highlight specific trends, but also illustrates how states are now closer in terms of credit quality (as defined by our rankings) than they were 10 years ago.

For example, the difference in the unemployment rate between the bottom five and top five states is now 2.9% (2.5% versus 5.4%); 10 years ago the difference and the rates were higher: 6.3% (4.2% versus 10.5%).⁴ The difference in GDP growth between the leading and lagging states has remained about the same, although growth overall has improved. GDP for the top five states is 6.9% while only 2.8% for the bottom five, for a difference of 4.1%; 10 years ago the difference was 4.4%, but the top five states were averaging 4.2%, versus -0.2% for the bottom five.

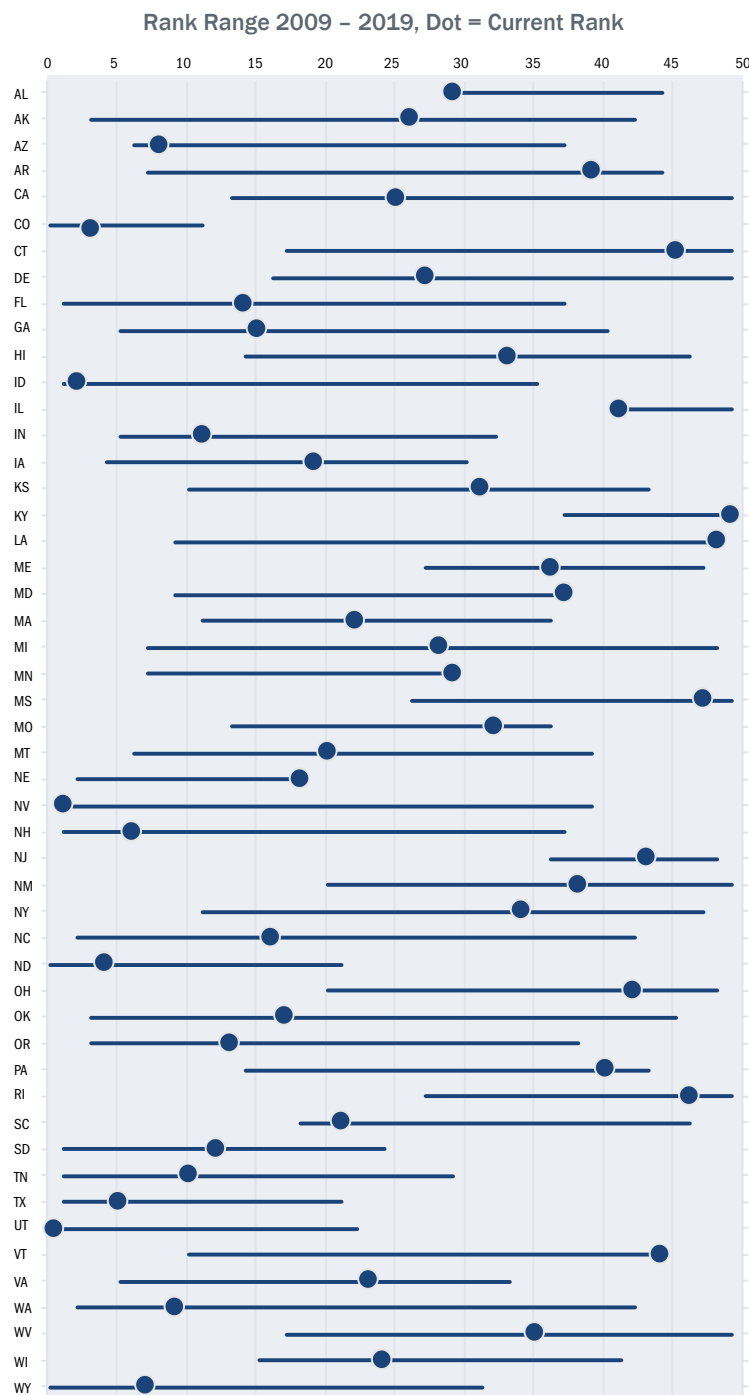
States whose housing markets were impacted the most have mostly recovered. Hard-hit states like **Arizona** (2009: #24; 2019: #9), **California** (#35 / #26), **Florida** (#36 / #15), and **Nevada** (#29 / #2) have rebounded strongly with home price increases of 90%, 113%, 78% and 80%, respectively, between the fourth quarter of 2010 and the fourth quarter of 2018.⁵ A rise in housing prices is a strong indicator of state economies that are doing well, as evidenced by people moving there, finding jobs, seeing their income grow and contributing toward the state’s economy in terms of GDP.

States like **Utah** and **Oregon** can attribute their respective improvements in rankings to other factors. For example, **Utah** (#22 / #1) reached the number one spot in our latest State of the States’ rankings because it experienced above-average positive migration⁶, with these new residents finding jobs, growing their income and contributing to the state’s economy.

Other states, such as **Oregon** (#31 / #14), can attribute improvements in our rankings to improving balance sheets, with increasing reserves on the heels of tax revenue growth. Reserves have increased across the board since 2009 but, at the same time, states’ economic debt has not come down as pension and other post-employment benefit liabilities have increased.

Exhibit 3 shows each state’s highest and lowest ranking since Spring of 2009, with the blue dot showing the current ranking. We also profile on page 7 the states with the greatest advances/declines in our rankings.

Exhibit 3: State Ranking Range, 2009 – 2019



Prepared by Conning, Inc.

⁴ Bureau of Labor Statistics, U.S. Department of Labor, Local Area Unemployment Statistics, Unemployment Rates for States, Seasonally Adjusted, through February 2019, <https://www.bls.gov/web/laus/laumstrk.htm>

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

⁶ Census Bureau, U.S. Department of Commerce, “State Population Totals and Components of Change: 2010-2018,” https://www.census.gov/data/datasets/time-series/demo/popest/2010s-state-total.html#par_textim-

Most Improved States of the Last 10 Years:

1. **New Hampshire, +30 (2019: #7; 2009: #37)** In 2009, New Hampshire scored below most others in population growth, home price change and GDP growth. Today, the state's 2.4% unemployment rate⁷ ties it for lowest in the nation. It has strong wealth levels, good tax revenue growth and sees growth in precision manufacturing, biomed tech, high tech, and healthcare.⁸

The state also reminds us that performance can stop at the border: its neighbor, Vermont, has fallen 24 notches during the same period. New Hampshire benefits from proximity to the Boston Metro Area and a population more than twice Vermont's, and also scores better in the ALEC-Laffer State Economic Competitiveness Index, which reflects tax environment. For New Englanders looking to move to a state with no income tax, but who don't want to migrate to Florida, New Hampshire is the obvious choice. New Hampshire tops Vermont in 12 of our 13 May 2019 indicators (they are tied for first in unemployment rate), emphasizing that close proximity does not necessarily mean similar performance.

2. **Nevada, +27 (2019: #2; 2009: #29)** The recession hit Nevada hard: the gaming industry suffered from declining consumer discretionary spending and the state's housing collapse was one of the nation's worst. Between 2007 and 2010, Nevada experienced the largest per-capita decline in GDP of any state.⁹ In 2009, Nevada scored among the worst in home price change, unemployment and GDP growth, but it has since recovered impressively. In 2019, Nevada scores highest in population and employment growth, and also ranks high for business climate, home price change, and GDP growth.
3. **Utah, +21 (2019: #1; 2009: #22)** The top-ranked state today, Utah scored well in most indicators in 2009 but trailed in employment growth, reserves, and housing price change. Utah now has high scores for employment growth, business climate, income growth, GDP growth, population growth, and home price change. The state has the youngest median age in the nation¹⁰ and the third-highest birth rate¹¹ and benefits from a young and educated workforce, diverse mix of industries, and appealing business climate.

Largest Declines:

1. **Louisiana, -39 (2019: #49; 2009: #10)** As a major energy producer—it's second in the nation in oil and natural gas production—Louisiana's decline in the past decade was largely due to declining oil prices between 2014-2016. In 2018, the state began emerging from a 28-month recession (linked to lower energy prices)¹² that cost it more than 23,000 jobs. Understandably, Louisiana scored poorly this year in employment growth, unemployment rate, population growth, and home price change.
2. **Connecticut, -28 (2019: #46; 2009: #18)** Throughout the decade, Connecticut ranked near the top for wealth levels and near the bottom for debt burden. In 2009, the state had middling scores for employment growth, reserves, home price change, and GDP growth. Most of those indicators have since slipped and today the state ranks among the bottom 10 in nine of 13 indicators. Connecticut does score well for median household income, state GDP per capita, and a low unemployment rate.
3. **Pennsylvania, -26 (2019: #41; 2009: #15)** Pennsylvania saw moderate downward shifts in several indicators during the decade, the largest being in employment growth and reserves. At the end of FY 2018, the state's General Fund balance and rainy-day fund were equivalent to just 0.1% of its General Fund expenditures—the lowest of any U.S. state. Pennsylvania's population growth has lagged the U.S. since 2010 and it has the nation's seventh-oldest median age.¹³ These two factors likely contributed to employment growth that lagged the nation during the past six years.¹⁴

⁷ Bureau of Labor Statistics, U.S. Department of Labor, Local Area Unemployment Statistics, Unemployment Rates for States, Seasonally Adjusted, through February 2019, https://www.bls.gov/news.release/archives/laus_03222019.htm

⁸ State of New Hampshire Comprehensive Annual Financial Report, for the Fiscal Year Ended June 30, 2018, <https://www.nh.gov/treasury/documents/cafr-fy-2018.pdf>

⁹ State of Nevada Comprehensive Annual Financial Report, for the Fiscal Year Ended June 30, 2018, <http://controller.nv.gov/uploadedFiles/controller/nvgov/Content/FinRpts/CAFR/FY18All.pdf>

¹⁰ Census Bureau, U.S. Department of Commerce, American Fact Finder, https://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml?src=bkmmk

¹¹ Centers for Disease Control and Prevention, State and Territorial Data, <https://www.cdc.gov/nchs/fastats/state-and-territorial-data.htm#>

¹² State of Louisiana Comprehensive Annual Financial Report for the Fiscal Year ended June 30, 2018, <https://www.doa.la.gov/osrap/library/Publications/CAFR%20FY18%20FINAL.pdf>

¹³ Source: Census Bureau, U.S. Department of Commerce, America Fact Finder, https://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml?src=bkmmk

¹⁴ ©2019 Moody's Investors Services, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates – used with limited permission.

Recession Readiness: Reserve Balances Up Overall, But Several States At Risk To Recession

Liquidity is an important credit factor for states, especially when economic conditions weaken and take a toll on state financials. We evaluate liquidity in terms of a General Fund (a state’s primary fund) reserve balance (defined as General Fund balances + rainy-day fund balances) as a percentage of General Fund expenditures. This measure of fiscal health provides a state some leeway when budget gaps arise. Our analysis is captured in **Exhibit 4**.

States such as **Alaska**, with significant (if economically sensitive) oil-tax revenues, tend to have reserves that could cover expenditures for up to a year, but other states rely on reserves to protect against revenue volatility caused by recessions. Conning views a healthy state reserve balance as equal to 10% of its annual General Fund expenditures and suggests that states relying on economically sensitive revenues should carry higher balances. Per its own admission, Alaska’s budget “is primarily structured around petroleum and federal revenue ... [which] continue[s] to be of concern with fluctuating oil prices and lawmakers continuing to use [s]tate reserves to close budget gaps.”¹⁵

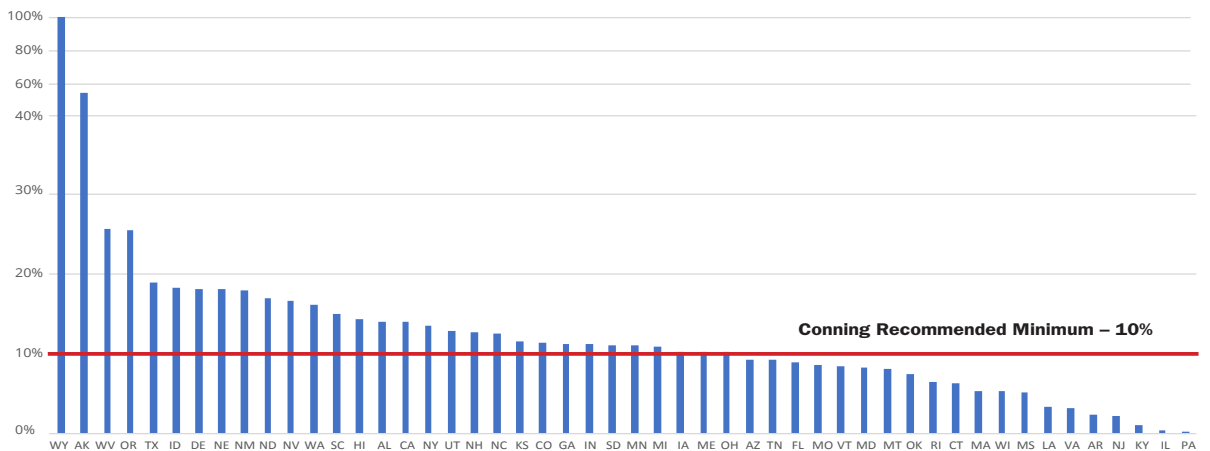
In 2009, the average state reserve balance was just shy of 9%. In 2019, reserve levels have improved four percentage points to

13% of General Fund expenditures, which translates to roughly two weeks of liquidity. The five states that saw the largest gains in their reserves were **Washington** (+36 spots when ranked on just reserves), **California** (+34), **Utah** (+28), **Kansas** (+22), and **South Carolina** (+22). On the opposite end of the spectrum are some of the oil-producing states: **Louisiana** (-38 spots), **Montana** (-32), **Oklahoma** (-30), and **Mississippi** (-26).

The median reserve balance is slightly lower at 11%, as several states with very high reserve balances affect the distribution. Individual state balance-reserve percentages are displayed in the graph below. As one can see, roughly 20 states have reserve balances below 10%. The bottom seven states are in risky territory, with fewer reserves available to fill budget gaps during a recession.

Lower-ranked states, such as **New Jersey** (#47 for reserves), use surplus revenue funds to build General Fund balances during upswings and expend it during economic downturns and emergencies. During FY 2009, in response to the national recession, New Jersey drained its entire surplus revenue fund to help balance its budget. Its reserve balance remains low today and it seems unprepared budget-wise should another recession strike soon.¹⁶

Exhibit 4: State Reserve Balances as % of General Fund Expenditures



Prepared by Conning, Inc. Source: ©2018, The National Association of State Budget Officers (NASBO), <https://www.nasbo.org/reports-data/fiscal-survey-of-states>

Fixed Costs: May Limit Flexibility

Expenditure growth that outpaces inflation (and in some cases revenue growth) strains state reserves. Identifying how much of these growing expenses are fixed costs is an important metric, and **Exhibit 5** lists each state’s fixed cost as a percentage of General Fund expenditures.

States’ fixed costs take up a share of their General Fund balances, including debt-service payments, pension contributions and other post-employment benefits (OPEB). As pension payments in heavily burdened states like **Connecticut** and **Kentucky** increase, these fixed costs, which we define as annual pension payments, annual OPEB payments, and debt service, crowd out other state programs like education and will hamstring states with low reserves in the event of another recession.

¹⁵ State of Alaska Comprehensive Annual Financial Report for the Fiscal Year July 1, 2017-June 30, 2018, <http://doa.alaska.gov/dof/reports/resource/2018cafr.pdf>

¹⁶ State of New Jersey Comprehensive Annual Financial Reports for Fiscal Years 2010-2018

Budgetary flexibility allows a state to more easily adapt in times of fiscal crisis, and high fixed costs may dampen the effects of General Fund expenditure cuts. For example, **Connecticut's** total fixed costs account for 28.0% of its General Fund expenditures; **Kentucky's** account for 25.5%. Offsetting these costs in a recession are the reserves that many states have built up since 2009. Connecticut's reserve balances are at record highs and should help cushion budgetary decisions during the next recession. **Kentucky**, however, with one of the lowest total reserve balances of any state, may struggle to balance both fixed costs and state aid programs (education, safety, etc.) in the next downturn.

Exhibit 5: Total Fixed Costs as % of General Fund Expenditures

Five States w/ Highest Percentage		Five States w/ Lowest Percentage	
State	%	State	%
Connecticut	28.0	Tennessee	3.9
Kentucky	25.5	Washington	4.4
California	24.2	Wisconsin	4.4
Hawaii	22.7	Nebraska	4.9
Vermont	22.3	Arizona	5.3

Prepared by Conning, Inc. Sources: Bloomberg, LP; Public Plans Data, 2001-2018, Center for Retirement Research at Boston College, Center for State and Local Government Excellence, and National Association of State Retirement Administrators; and ©2019 Standard & Poor's Financial Services LLC (and its affiliates, as applicable).

Exhibit 6 charts state fixed costs versus state reserves, both as a percentage of General Fund expenditures. The green cross represents the levels that Conning considers adequate for each metric (10% Reserves/Expenditures; 15% Fixed Costs/Expenditures).

Troubled states such as **Connecticut** (6.3% Reserves/Expenditures and 28.0% Fixed costs/Expenditures), **Kentucky** (1.1%, 25.5%), **Illinois** (0.4%, 20.7%), **New Jersey** (2.2%, 17.2%), and **Vermont** (8.5%, 22.3%) occupy the top left quadrant, signifying low reserve levels and high fixed costs. These states have historically had difficulty achieving balanced budgets. States in the bottom right quadrant are best positioned to deal with another recession with their high reserve levels and low fixed costs. **Alaska** (Ranked 2nd for Reserves/Expenditures) and **Wyoming** (1st) have built up reserves from oil revenues.

Exhibit 6: State Fixed Costs and Reserves vs Expenditures



Prepared by Conning, Inc. Sources: Bloomberg, LP; Public Plans Data, 2001-2018, Center for Retirement Research at Boston College, Center for State and Local Government Excellence, and National Association of State Retirement Administrators; and ©2019 Standard & Poor's Financial Services LLC (and its affiliates, as applicable).

Rising Pension Concerns: Higher Liabilities, Weaker Asset Growth, Skipped Contributions

Underfunded pension plans continue to strain state budgets. It is becoming increasingly difficult for states with lower funded plans to exceed their tread-water level of contributions and pay down their liability balances. During the past decade, state pensions have had three main roadblocks to improving their funded status: restructuring, underperformance, and reduced contributions. However, positive developments in 2018 helped the majority of states make progress in reducing their net pension liabilities.

Restructuring

Many states have been actively restructuring their plans, including pushing out the plans' amortization schedule and lowering assumed rates of return. The latter help ensure the plan is more realistic about performance but includes the immediate negative effect of increasing net pension liabilities.

Exhibit 7 shows that a one-percentage-point decrease in the assumed rate of return for Texas's largest pension plan (ERS Plan) to 4.36% from 5.36% will cause its reported net pension liabilities to increase 30.3%.

The Risk of Underperformance

Underperforming the return target also has a negative effect. As illustrated in **Exhibit 8**, the average assumed rate of return for all state pension plans has been fairly constant at about 7.6% (blue line). However actual plan returns have varied widely (orange line) and in years that the assumed rate of return underperformed, the growth of the average Unfunded Actuarial Accrued Liability (UAAL) increased (green line), most dramatically from 2015-2016 which saw a 12.7% YoY growth in average UAAL across all plans.

Impact of Under-Contributing

States have more control over their annual pension plan contributions, and state plans with the highest UAAL continually under-contributed to their plans during the last nine years (with the exception of **Connecticut** SERS). Conversely, state plans that are well-funded generally met or even exceeded their annual required contribution rate.

For example, **Kentucky** ERS, which has the lowest funded ratio of 16.3%, has only recently begun to make 100% of its required contributions. Before 2015, contributions rarely accounted for more than 60%. Compare that with **Washington's** LEOFF Plan 2, which contributed more than 100% of its Actuarially Determined Contribution every year from FY 2008 through FY 2017 and now has a funded ratio of 109%, the best of any U.S. state plan.

Of the 44 states that reported net pension liabilities (attributable to the state) in 2018, 29 were able to reduce their balance compared to 2017, a positive indication that states are taking progressive steps toward

Exhibit 7: Impact of Reducing Assumed Rate of Return Sensitivity of Net Pension Liability to Changes in Discount Rate

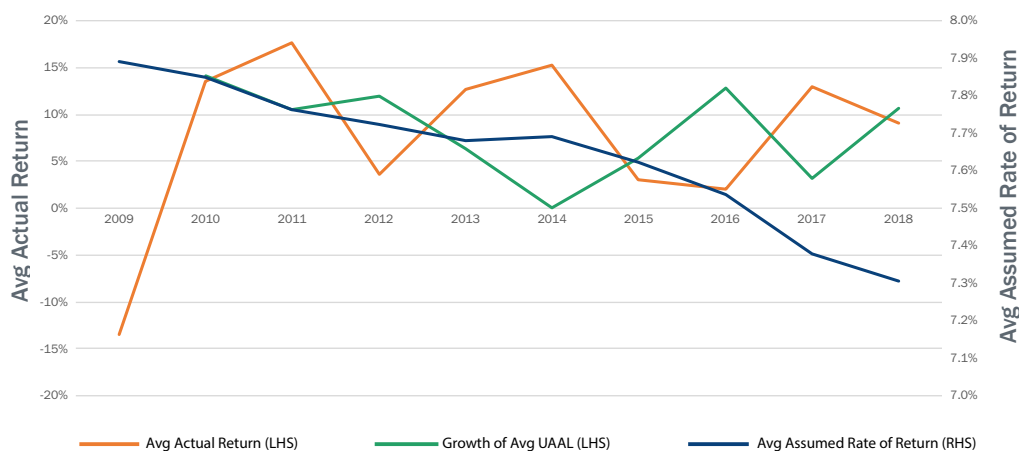
Texas ERS Plan (Amounts in Thousands)

	1% Decrease	Current Discount Rate	1% Increase
Discount Rate	4.36%	5.36%	6.36%
NPL	\$28,497,049	\$21,864,600	\$15,972,787
% change NPL	+30.3%	NA	-26.9%

Prepared by Conning, Inc.

Source: State of Texas Comprehensive Annual Financial Report for the Fiscal Year ended August 31, 2018, <https://comptroller.texas.gov/transparency/reports/comprehensive-annual-financial/>

Exhibit 8: Average Assumed Return vs Actual vs Growth of Average UAAL, 2009 – 2018



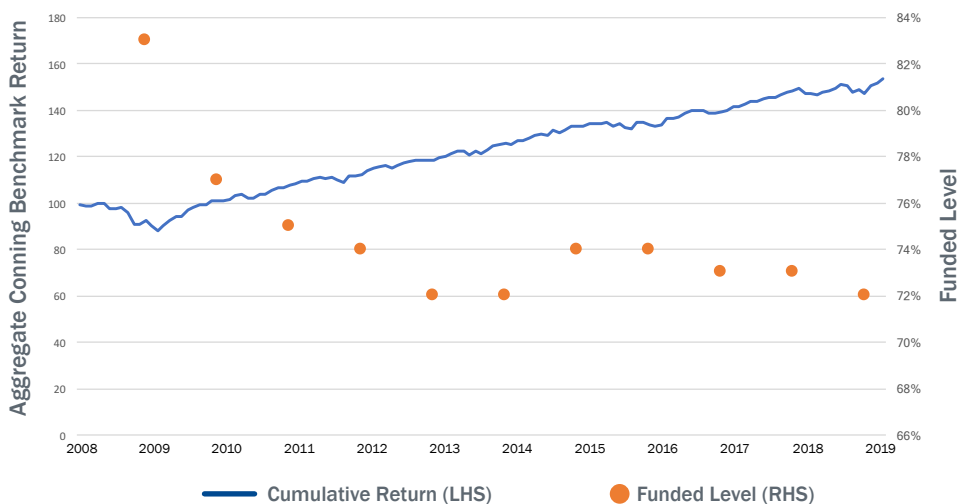
Prepared by Conning, Inc. Source: Public Plans Data, 2001-2018, Center for Retirement Research at Boston College, Center for State and Local Government Excellence, and National Association of State Retirement Administrators.

funding their pension plans. Of note is **Connecticut**, which saw the third-highest reduction.

Overall Impact: Funded Levels

Contrary to the decade-long economic expansion, pension funding levels have declined since 2009. As seen in **Exhibit 9**, the orange dots represent the average pension funding levels which have dropped from 83% in 2008 to 72% at the end of 2018. This contrasts with the significant gains of the overall market during the same period.¹⁷ Restructuring, underperforming returns, and underfunding have all contributed to lower funded levels during an expansionary period that we may be near the end of. Should a recession strike, the troubled states will have a difficult time controlling liability growth and could be forced to push the amortization period out further to avoid unaffordable pension payments in the near term.

Exhibit 9: Conning Aggregate Return vs Average Pension Funded Level, 2008 – 2019



Prepared by Conning, Inc. Source: Public Plans Data, 2001-2018, Center for Retirement Research at Boston College, Center for State and Local Government Excellence, and National Association of State Retirement Administrators.

Oil Impact: Lower Oil Prices Hurt Key Producing States

One event that affected many states' rankings was the decline in oil prices that began in 2014. The per-barrel price of Western Texas Intermediate crude began to drop during the fall of 2014 (see **Exhibit 10**) and continued to decline, albeit with some fluctuation, through early 2016. The quick change in oil prices hurt economic performance and created budgetary problems for several oil-producing states.

As of FY 2019, eight states depend on oil-related revenues for at least 2% of operating revenues per S&P:¹⁸

Alaska (36%), **Louisiana** (7.3%), **Montana** (2.0%), **New Mexico** (15.9%), **North Dakota** (20.3%), **Oklahoma** (5.2%), **Texas** (5.0%), and **Wyoming** (40%). In 2014, oil revenues made up an even larger percentage of General Fund revenues for some of these states. During the period of depressed oil prices, rig counts declined and employment levels fell in the oil and gas sector. Oil-patch states saw a decline in severance tax receipts and other mineral revenues. Personal income tax revenues were also affected by layoffs in the energy sector. In 2016, only one of the eight states—**Texas**—experienced growth in GDP per data from the Bureau of Economic Analysis.¹⁹

Exhibit 10: WTI Spot Price, 2014 – Present



Prepared by Conning, Inc. Source: U.S. Energy Information Administration, "Petroleum & Other Liquids, Spot Prices," https://www.eia.gov/dnav/pet/pet_pri_spt_s1_d.htm, Release Date 5/15/2019.

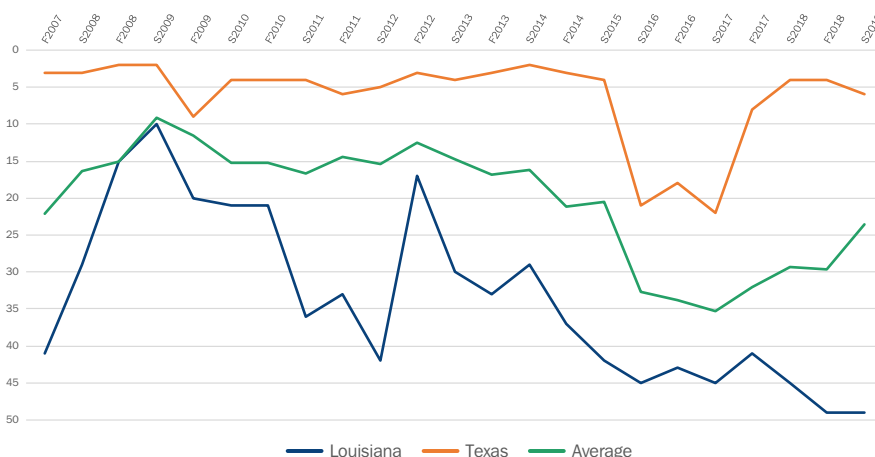
¹⁷ Based on an aggregate custom benchmark made up of the Bloomberg Barclays U.S. Aggregate (47%) and the S&P 500 Index (23%) nominal returns during the last 10 years.

¹⁸ ©2019 Standard & Poor's Financial Services LLC (and its affiliates, as applicable), S&P Global Rating, March 12, 2019 – With Oil Price Volatility, Recent Economic Gains in U.S. Oil-Producing States are at Risk

¹⁹ Bureau of Economic Analysis, U.S. Department of Commerce (2016).

The energy price crunch hurt some states more than others, but each of the eight major oil-producing states saw a drop in our State of the States rank between the Spring 2015 edition and the Spring 2016 edition. The average rank among all eight states in Spring 2014 was 16; by Spring 2017, that average rank had dropped to 35. Over the last year and a half, oil prices have improved and the economy has continued to strengthen. Our current average rank for the eight states is 27. **Exhibit 11** illustrates how their ranking slipped during the past 10 years with the exception of **Texas** (#2 / #6), which remained a top-10 state.

Exhibit 11: Historical Ranking of Eight Oil-Producing States*



*Alaska, Louisiana, Montana, New Mexico, North Dakota, Oklahoma, Texas, Wyoming

Prepared by Conning, Inc. Source: ©2007-2019 Conning, Inc. "State of the States" reports

Jobs Move the Masses: Populations Move to Jobs – But Tax Rates Matter

Population changes have an impact on a state's financial well-being, but what drives people to move? How important is a state's tax rate to its population growth?

Declining population may dent state tax revenue barring an increase in tax rates, and maintaining revenues is critical for states with a relatively high percentage of fixed costs. **Illinois** (fixed costs = 21% of General Fund expenditures) and **Connecticut** (28%) are some examples. One only has to open the newspaper and read about Illinois trying to revamp its income tax laws. Likewise, **Connecticut** is looking at tolls to increase its revenue base and leveraging out-of-state residents because its own tax base isn't growing as much.

Taxes

The Tax Cuts and Jobs Act of 2017 took effect on January 1, 2018 and included a \$10,000 cap on the deduction of state and local taxes (SALT) for federal tax filings. Some suggested the cap on SALT deductions would move population away from states with higher tax rates to states with lower rates. However, income taxes are not the primary reason people move from one state to another. We do, however, recognize the importance of tax rates as they relate to a state's business climate, which is why for years we have been using ALEC-Laffer State Economic Competitiveness Index.

Exhibit 12 features results from a survey done by United Van Lines²⁰—National Movers Study—that lists the states that saw the most move-ins and move-outs in 2018.

The chart helps illustrate the relationship between our State of the State rankings and movement of people, not unsurprising as population growth is one of our indicators. But the National Movers Study also reports that roughly half of the respondents said they moved for a job. Retirement, proximity to family, and lifestyle change were second, third and fourth, respectively, with 28.1%, 20.8% and 19.4%. Taxes are not directly mentioned in the survey results as a reason, but they could indirectly fall under "retirement" as one reads of retirees moving to states with no income tax, such as **Florida**.

Exhibit 12: Most moved-To and Moved-From States, 2018

Moved To*		Moved From*	
1.	Vermont (45)	1.	New Jersey (44)
2.	Oregon (14)	2.	Illinois (42)
3.	Idaho (3)	3.	Connecticut (46)
4.	Nevada (2)	4.	New York (35)
5.	Arizona (9)	5.	Kansas (32)
6.	South Carolina (22)	6.	Ohio (43)
7.	Washington (10)	7.	Massachusetts (23)
8.	North Carolina (17)	8.	Iowa (20)
9.	South Dakota (13)	9.	Montana (21)
10.	District of Columbia (NA)	10.	Michigan (29)

* (#) = 2019 State of States Ranking

Prepared by Conning, Inc. Source: United Van Lines 2018 National Movers Study, <https://www.unitedvanlines.com/contact-united/news/movers-study-2018>

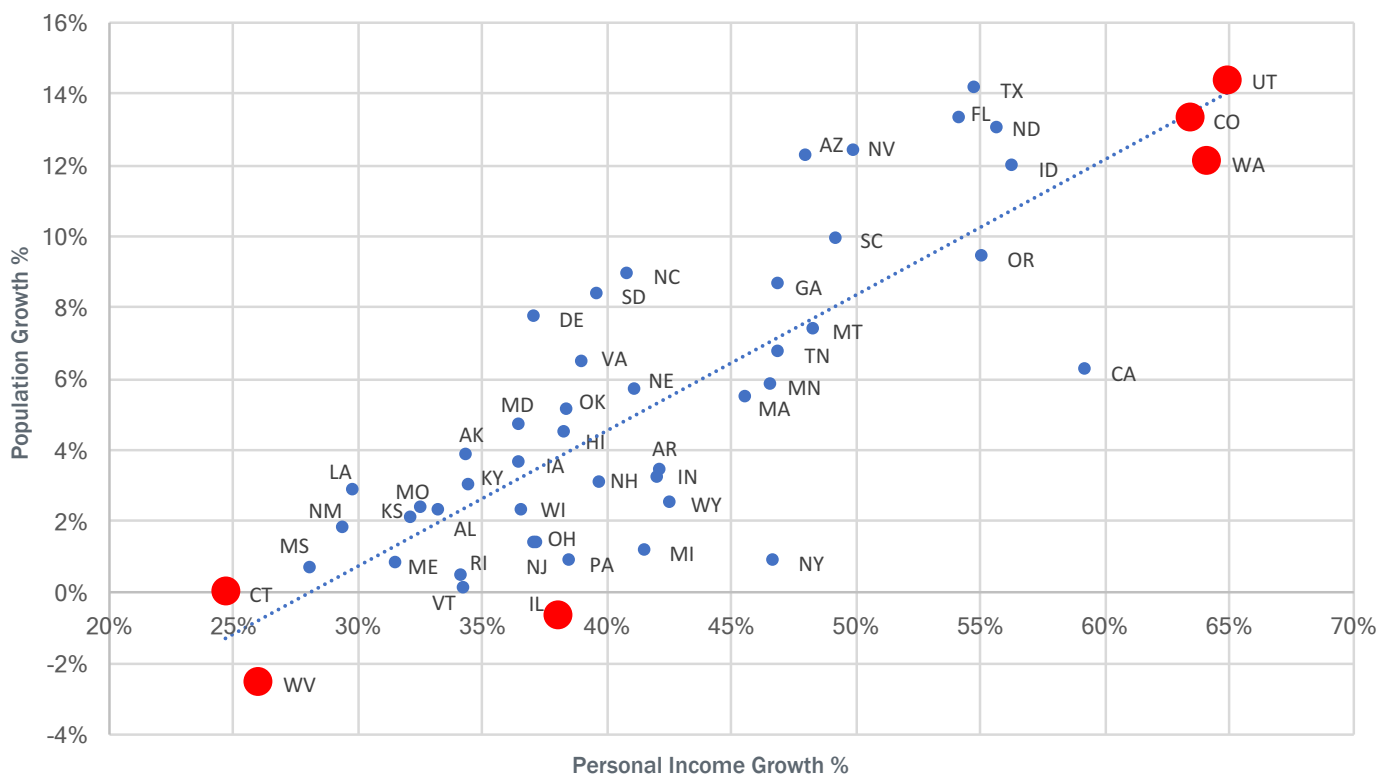
²⁰ United Van Lines 2018 National Movers Study, <https://www.unitedvanlines.com/contact-united/news/movers-study-2018>

We analyzed two factors associated with population changes: income taxes and personal income growth. To study population change versus a state's income tax rate, we used the Tax Foundation's State Business Tax Climate Index and the score assigned to each state for its individual income tax²¹. The data suggests that lower-ranked states have smaller positive population changes, but the statistical significance is small. Moreover, two states with no income tax—**Alaska** (-0.3%) and **Wyoming** (-0.2%)—had negative population changes in 2018²². But two other states with no income tax—**Florida** (+1.5%) and **South Dakota** (+1.0%)—had strong positive population changes in 2018. As such, the statistical significance is small when comparing these two factors.

Exhibit 13 focuses on state personal income growth and suggests that people move to where there are job opportunities, especially higher paying job opportunities. We plotted the correlation between population growth (y-axis) and personal income growth (x-axis) and found a much higher correlation.

In the top right are states like **Colorado**, **Washington** and **Utah** which, since 2009, have had population growth in excess of 13% and personal income growth greater than 63%. States like **Connecticut** and **West Virginia** have not benefitted from any population growth and, not surprisingly, have recorded some of the lowest personal income changes. **Illinois** is an outlier because its economic anchor, the city of Chicago, skews the overall state results when it comes to personal income growth. **Illinois** tends to have solid personal income changes but low population changes.

Exhibit 13: Personal Income Growth vs. Population Growth 2009 – 2018



Prepared by Conning, Inc. Sources: Bureau of Economic Analysis, U.S. Department of Commerce (2010-2018); Census Bureau, U.S. Department of Commerce, State Population Totals and Components of Change: 2010-2018, https://www.census.gov/data/datasets/time-series/demo/popest/2010s-state-total.html#par_textimage_1873399417

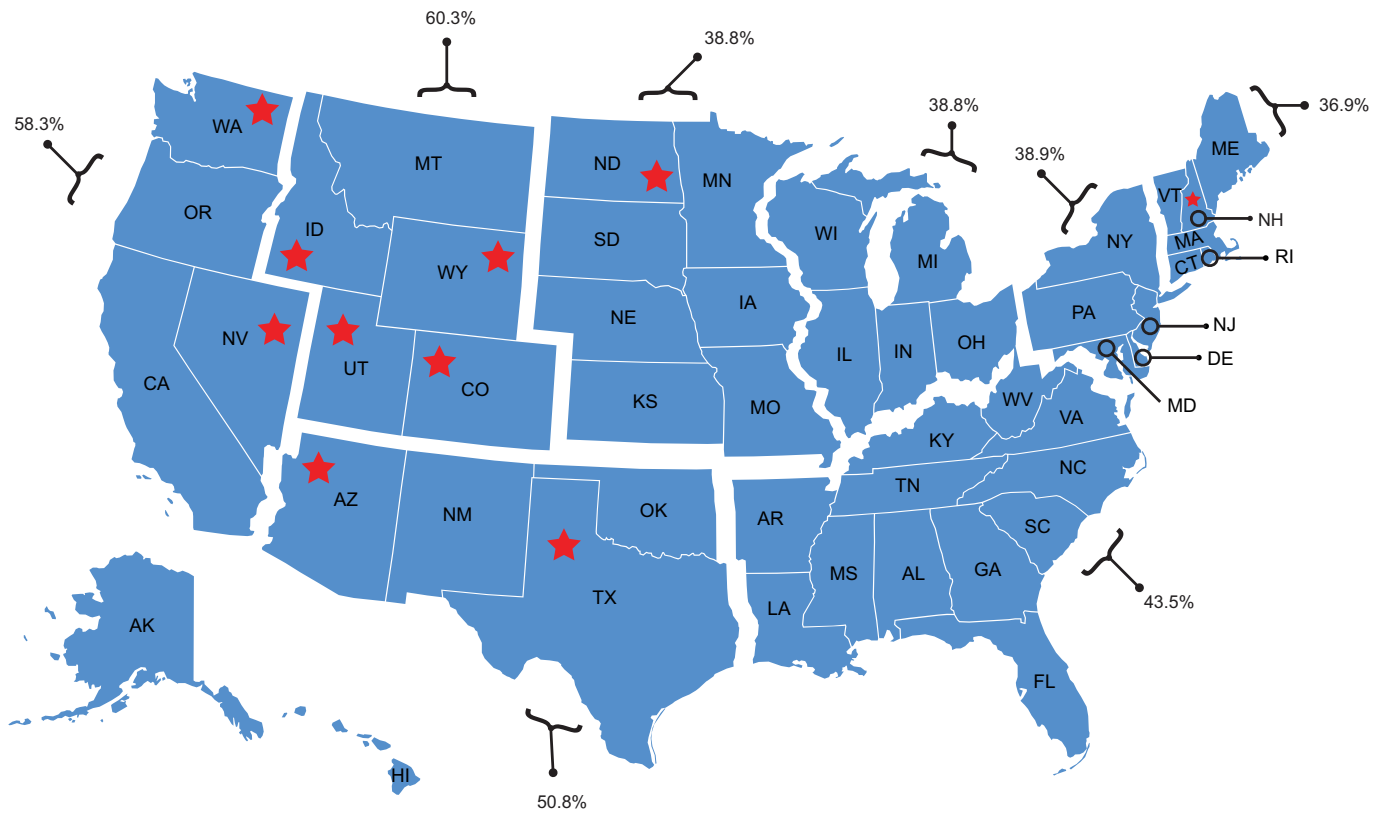
²¹ ©Tax Foundation, State Business Tax Climate Index, <https://files.taxfoundation.org/20180925174436/2019-State-Business-Tax-Climate-Index.pdf>

²² ©Census Bureau, U.S. Department of Commerce, State Population Totals and Components of Change: 2010-2018, https://www.census.gov/data/datasets/time-series/demo/popest/2010s-state-total.html#par_textimage_1873399417

Regional Differences

Going back to the end of the recession in 2009 when personal income started to rise, we see major differences between the regions. For example, the **Western** and **Rocky Mountain** states recorded growth rates of 58.3% and 60.3%, respectively, followed by the **Southwest** at 50.8%. On the other end of the spectrum, **New England**, the **Great Lakes** and **Plains** all had growth rates just shy of 40%. The **South** and **Mideastern** regions fell somewhere in the middle. The regional performances are highlighted in **Exhibit 14**.

Exhibit 14: BEA Personal Income Growth %, 2009 – 2018



Prepared by Conning, Inc.
 Source: Bureau of Economic Analysis, U.S. Department of Commerce, (2009-2018)

2019 Top 10 State of the States state

Final Thoughts

Conning strongly believes that credit differences and credit direction among states need to be a component of credit selection for both the states and local issuers. Published credit ratings alone are not enough for evaluating and predicting the direction of state credit quality. Ranking the credit quality of states using our 13 indicators allows us to quickly analyze a state's position in terms of its business climate, credit metrics, economic and income levels and housing activity. This report highlights that there are winners and losers among states and geographical biases are observable, though with exceptions. Our long-term perspective shows us to what degree even small changes in employment, GDP, housing prices, budgetary spending, and reserves factor into a state's credit quality and fiscal health. Moreover, our rankings tend to be sticky, in part because the metrics we use don't change quickly.

The economic recovery, combined with responsible state budget actions, continues to provide for improved aggregate state credit quality. However, the improvement in state credit quality has not been uniform. The strong reversal in home prices benefited some states more than others, while others have seen their economies grow due to employment and personal income growth. States have had to make tough decisions to both address their liabilities and rebuild reserves. However, a handful of states are continuing to cope with high legacy costs and slow employment growth. These states are not benefiting as much from the economic recovery and some are not well positioned to absorb any new macroeconomic shocks, such as a recession.

Furthermore, by analyzing economic debt per personal income, we try to derive a ranking of the states in terms of the total debt burden on a state's tax base. This is important as when people leave a state, they walk away from a liability

which then falls on a smaller population base. This is not unlike walking away from one's mortgage when moving out of state, something that is clearly unheard of. Yet when it comes to a state's liabilities, this does happen.

In addition to highlighting our states' rankings and changes over time, we discussed topical issues like pensions, fixed costs and reserves and focused on regional differences. Moreover, we looked at how personal income growth and population changes are a more useful predictor of future credit quality than underlying tax conditions.

As we look ahead and think about a possible recession, we favor states with healthy reserves and manageable fixed-cost burdens. We have demonstrated how personal income, unemployment and population growth are indicators of future credit quality, and we monitor these metrics more closely than debt and pension liabilities as they can change more quickly each year. Home prices tend to be a good "canary in the coal mine" indicator as well. The last recession was closely related to the collapse of the housing market and had a spillover effect on many other factors that determine the credit quality of a state and its underlying localities.

Conning thinks this 2009-2019 retrospective amalgamates state credit metrics to provide a comprehensive overview of state health and maintains a stable outlook for the 2020 fiscal year.

“Our long-term perspective shows us to what degree even small changes in employment, GDP, housing prices, budgetary spending, and reserves factor into a state's credit quality and fiscal health.”

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.

Conning's Municipal Credit Research Team

Conning manages nearly \$7 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 the Municipal Credit Research Group. 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 National Federation of Municipal Analysts and the Municipal Analyst Group of New York.



Diane Diaz is a Vice President and joined Conning in 2014. Previously, Ms. Diaz held positions in the public and non-profit sectors. Ms. Diaz earned a BA from the University of Pittsburgh and a Master of Public Administration from the University of Connecticut. She is a member of the National Federation of Municipal Analysts and the Municipal Analyst Group of New York.



Nolan Cicerrella is an Assistant Vice President and joined Conning in 2015. Previously, Mr. Cicerrella was employed by Bank of America as a Residential Credit Analyst. Mr. Cicerrella is a graduate of the University of Connecticut with a degree in economics and is currently pursuing an MBA from the University of Connecticut School of Business. He is a member of the Municipal Analyst Group of New York.

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Appendix A – Methodology and Description of Indicators

Conning analyzes 13 economic and government-obligation credit ratios to calculate our state rankings, measuring business climate, credit-specific metrics, economic and income levels, and housing activity. **Exhibit 15** sets forth the indicators and their respective weightings. We emphasize indicators that we think are forward-looking and correlate to future financial results. Below are the definitions and sources of each indicator.

Exhibit 15: Quantitative Measures of State Performance

Credit Metrics	Weighting 40%	Economic and Income Measures	Weighting 60%
ALEC-Laffer Economic Outlook Ranking 2018	8%	GDP per Capita	8%
Economic Debt per Personal Income	8%	Real State GDP Growth	8%
FY 2018 General Fund Balance as % of General Fund Expenditures	8%	Employment Growth	8%
Debt per Capita	8%	Unemployment Rate	8%
Tax Revenue Growth	8%	Median Household Income	8%
		Personal Income Growth	8%
		Home Price Growth	8%
		Population Growth	4%
		Total	100%

Prepared by Conning, Inc.

ALEC-Laffer State Competitive Environment (8% weight)

The index, created by economist Arthur Laffer, assigns an Economic Outlook rank based on a state's current standing in 15 state policy variables including top marginal personal and corporate income tax rates, property and sales tax burdens, and state minimum wage.

Source: ©2018 American Legislative Exchange Council (ALEC), Rich States Poor States, Authors: Dr. Arthur B. Laffer, Jonathan Williams, and Stephen Moore, 12th Edition, published April 16, 2018— used with permission, <https://www.alec.org/publication/rich-states-poor-states-12th-edition/>

Economic Debt Per Personal Income (8% weight)

A ranking of each state according to its economic debt as a percentage of 2018 annual personal income. Conning defines economic debt for each state as its net tax-supported debt + demand debt and direct loans (if any) + unfunded pension liabilities + unfunded OPEB liabilities. Each state's economic debt is then divided by its personal income.

Sources: ©2018 Moody's Investors Services, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates – used with limited permission, "Medians – State debt continues slow growth trend" (April 24, 2018) and Bureau of Economic Analysis, U.S. Department of Commerce (2018), "State Quarterly Personal Income, 4th quarter 2018 and State Annual Personal Income, 2018 (preliminary)," (March 26, 2019), <https://www.bea.gov/news/2019/state-quarterly-personal-income-4th-quarter-2018-and-state-annual-personal-income-2018> and © 2018 Standard & Poor's Financial Services LLC (and its affiliates, as applicable), "Rising U.S. States' OPEB Liabilities Signal Higher Costs Ahead" (November 28, 2018)

FY2018 General Fund Balance 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: ©2018 The National Association of State Budget Officers (NASBO), <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: ©2018 Moody's Investors Services, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates – used with limited permission, "Medians – State debt continues slow growth trend" (April 24, 2018) and Census Bureau, U.S. Department of Commerce (2018), https://www.census.gov/data/datasets/time-series/demo/popest/2010s-state-total.html#par_textimage_1873399417

Tax Revenue Growth (8%)

A ranking of states by annual total tax revenue growth 2017-2018.

Source: Census Bureau, U.S. Department of Commerce (2019), https://www.census.gov/data/tables/2018/econ/ntax/historical_Q4.html

Appendix A – Methodology and Description of Indicators (*continued*)

Gross Domestic Product per capita (8% weight)

A ranking that compares each state's 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 (2018), https://www.census.gov/data/datasets/time-series/demo/popest/2010s-state-total.html#par_textimage_1873399417

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

A ranking of each state's annualized GDP growth.

Source: Bureau of Economic Analysis, U.S. Department of Commerce (2019), <https://apps.bea.gov/regional/downloadzip.cfm>

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

A ranking of states based on year-over-year total employment growth from February 2018 to February 2019.

Source: Bureau of Labor Statistics, U.S. Department of Labor (2019), <https://www.bls.gov/web/laus.supp.toc.htm>

Unemployment Rate (8% weight)

A ranking of states by their February 2019 unemployment rate, which is the percentage of the labor force that is unemployed but actively seeking employment and is willing and able to work.

Source: Bureau of Labor Statistics, U.S. Department of Labor (2019), <https://www.bls.gov/news.release/laus.t01.htm>

Median Household Income (8% weight)

A ranking of states by median household income.

Source: Census Bureau, U.S. Department of Commerce (2019), https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_17_1YR_S1903&prodType=table

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

A ranking of states by personal income growth, comparing year over year growth from 2017-2018.

Source: Bureau of Economic Analysis, Department of Commerce (2019), <https://www.bea.gov/news/2019/state-quarterly-personal-income-4th-quarter-2018-and-state-annual-personal-income-2018>

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

A ranking of states based on one-year change HPI, 4Q2017-4Q2018.

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

Population Change (4% weight)

A ranking of states by annual change in population from April 2017 to April 2018.

Source: Census Bureau, U.S. Department of Commerce (2018), https://www.census.gov/data/datasets/time-series/demo/popest/2010s-state-total.html#par_textimage_1873399417

Appendix B—State Rankings by Credit Indicator*

State	Raw score	Rank	Laffer 8%	Economic Debt/PI 8%	GF Balance/GF Expenditures 8%	Debt/capita 8%	Tax Revenue Growth 8%	State GDP/capita 8%	Employment Growth 8%	GDP Growth 8%	Unemployment Rate 8%	Personal Income Growth 8%	One Year Home Price Change 8%	median household income	Population Growth 4%
Alabama	26.92	30	21	33	15	23	19	46	13	18	23	30	34	45	33
Alaska	26.16	27	31	49	2	34	1	7	38	16	51	26	41	7	48
Arizona	18	9	10	12	31	16	17	40	3	8	47	5	6	28	4
Arkansas	32.04	40	23	19	46	17	38	49	21	39	26	28	33	48	27
California	25.84	26	47	36	15	41	46	6	19	11	39	14	29	8	24
Colorado	14.76	4	17	25	22	11	15	14	12	10	23	4	17	11	7
Connecticut	34.96	46	41	48	40	50	14	4	48	49	26	42	49	5	42
Delaware	26.56	28	36	44	7	43	22	3	29	47	18	24	36	17	12
Florida	21.48	15	8	14	33	22	48	39	6	13	21	8	15	39	5
Georgia	21.76	16	18	26	23	25	31	28	8	23	30	17	4	32	14
Hawaii	27.88	34	45	45	14	48	13	15	40	43	5	50	4	3	47
Idaho	13.36	3	2	6	6	10	30	47	4	7	7	6	1	40	2
Illinois	33.4	42	48	46	49	45	16	12	27	35	40	16	43	16	49
Indiana	20.36	12	5	18	23	6	3	31	18	21	21	39	24	34	23
Iowa	23.8	20	25	4	28	5	18	21	46	50	1	25	37	25	25
Kansas	27.4	32	27	15	21	33	7	27	36	48	18	46	14	30	41
Kentucky	38.4	50	32	47	48	38	47	43	20	38	38	44	27	44	28
Louisiana	36.6	49	26	32	44	35	27	34	47	12	46	38	47	47	45
Maine	29.92	37	43	29	28	24	29	41	34	33	18	27	20	31	34
Maryland	31.24	38	34	38	36	40	25	11	42	37	23	45	44	1	29
Massachusetts	25.08	23	28	43	41	49	28	2	37	15	11	22	23	4	21
Michigan	26.68	29	12	24	27	18	21	36	28	28	35	43	10	33	37
Minnesota	26.92	30	40	21	26	31	41	13	49	41	13	20	21	12	17
Mississippi	35.88	48	19	28	43	37	45	50	22	40	45	37	12	49	43
Missouri	27.6	33	22	13	34	13	44	37	39	34	14	33	11	36	30
Montana	23.84	21	38	17	37	4	20	44	23	26	26	9	9	37	16
Nebraska	23.36	19	33	1	7	1	34	16	44	42	6	49	28	21	20
Nevada	12.84	2	4	11	11	15	11	30	1	6	40	3	2	26	1
New Hampshire	16.48	7	16	20	19	21	5	17	24	19	1	31	16	6	22
New Jersey	34.52	44	46	50	47	47	33	9	31	32	35	40	42	2	35
New Mexico	31.72	39	30	42	9	29	4	42	25	27	47	36	40	46	39

*(X% = weighting)

Appendix B—State Rankings by Credit Indicator*

State	Raw score	Rank	Laffer 8%	Economic Debt/PI 8%	GF Balance/GF Expenditures 8%	Debt/capita 8%	Tax Revenue Growth 8%	State GDP/capita 8%	Employment Growth 8%	GDP Growth 8%	Unemployment Rate 8%	Personal Income Growth 8%	One Year Home Price Change 8%	median household income	Population Growth 4%
New York	28.32	35	50	37	17	46	42	1	26	17	30	13	38	14	46
North Carolina	22.08	17	6	30	20	14	32	32	17	22	30	12	18	38	10
North Dakota	15.04	5	3	8	10	3	2	8	41	20	1	15	50	18	18
Ohio	33.44	43	24	31	30	28	50	25	35	31	44	41	26	35	36
Oklahoma	22.56	18	13	2	38	7	6	38	30	5	17	21	46	43	32
Oregon	21.4	14	44	22	4	39	9	26	15	9	42	10	22	20	11
Pennsylvania	32.72	41	37	27	50	30	43	19	33	25	35	35	32	24	38
Rhode Island	35.84	47	42	39	39	42	24	23	50	45	30	48	31	15	40
South Carolina	24.68	22	29	34	13	12	10	45	16	36	14	34	19	42	9
South Dakota	21.16	13	9	3	25	19	40	22	10	46	7	23	25	29	13
Tennessee	20.04	11	7	5	32	8	36	33	11	24	14	19	13	41	15
Texas	15.36	6	15	35	5	9	8	20	7	3	26	7	30	23	8
Utah	10.76	1	1	7	18	20	23	29	2	4	11	2	3	13	3
Vermont	34.76	45	49	41	35	26	26	35	43	44	1	47	45	27	31
Virginia	25.48	24	14	16	45	32	39	18	32	30	7	32	35	9	19
Washington	19.68	10	39	23	12	44	49	5	9	1	43	1	7	10	6
West Virginia	29.36	36	35	40	3	27	12	48	5	14	49	11	48	50	50
Wisconsin	25.68	25	20	10	41	36	37	24	45	29	7	29	8	22	26
Wyoming	16.96	8	11	9	1	2	35	10	14	2	30	18	39	19	44

Prepared by Conning, Inc. Sources: © 2019 Conning, Inc. and publicly available information. *(X% = weighting)