The Council of State Governments

COVID-19: Fiscal Impact to States and Strategies for Recovery

A Report by The Council of State Governments

July 2020

About The Council of State Governments (CSG)

CSG serves all three branches of government providing nonpartisan regional based forums to foster the exchange of insights and best practices to assist government officials collaborate and facilitate solutions.

KPMG LLP's Limited Role

This whitepaper was researched for CSG by KPMG LLP (KPMG), and is provided as a holistic work to be read and interpreted only in its entirety. KPMG's limited role included providing CSG with objective research and analysis to help facilitate the writing of this whitepaper, including researching and collecting publicly-available information, performing quantitative analysis of gathered information and summarizing key insights related to the financial impact of COVID-19 and considerations for state decision-makers. KPMG also assisted CSG with the drafting of sections of this whitepaper related to analyses performed. Ultimate decision on all analyses in this whitepaper was made by CSG. In its work on this paper, KPMG has had no contact with legislative officials or employees at any level of government for any reason, has undertaken no role and expresses no view that could be considered public policy advocacy or lobbying, or otherwise be perceived as impairing KPMG's objectivity.

The views and opinions expressed herein are those of the survey respondents and authors and do not necessarily represent the views and opinions of KPMG.

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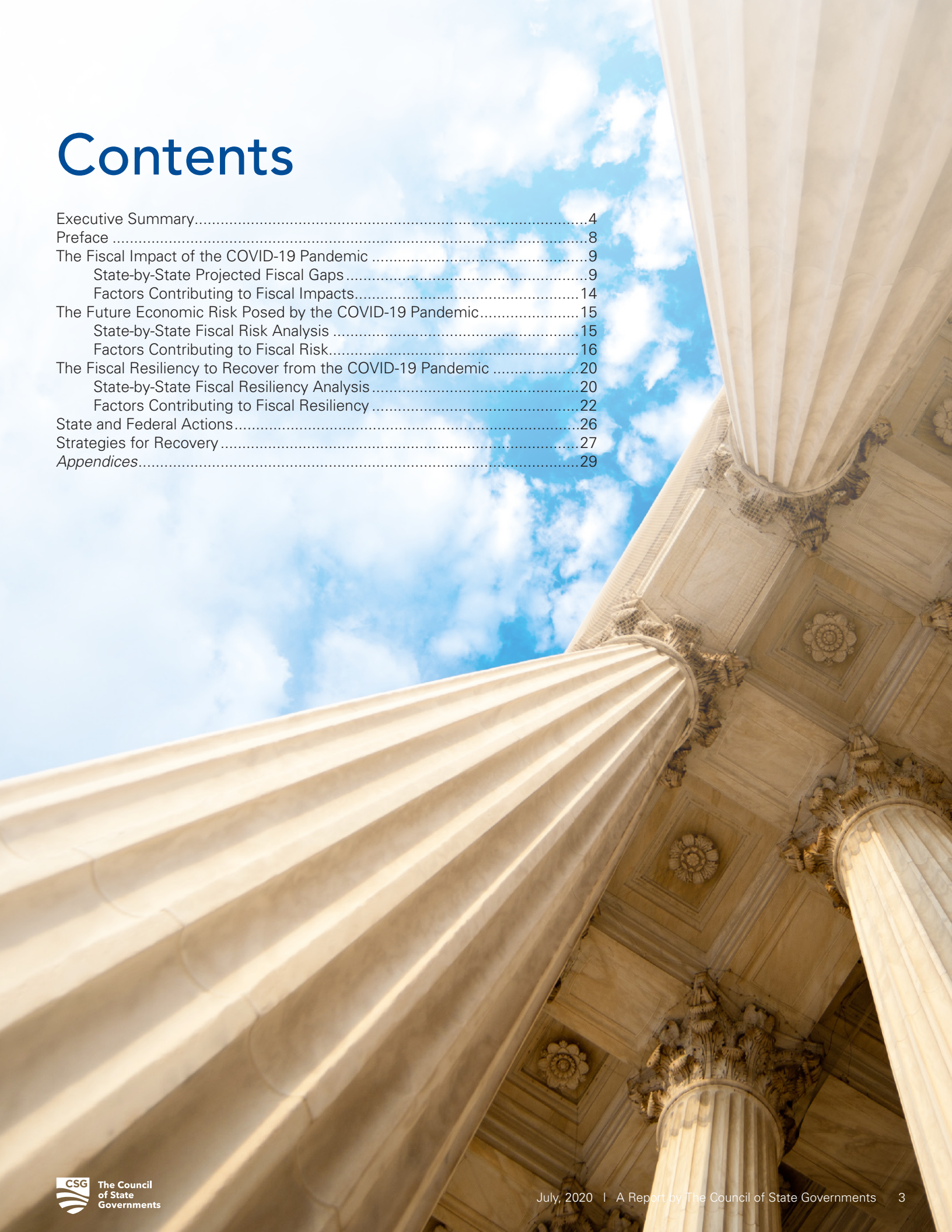


Executive Summary

On January 20, 2020, the first confirmed case of novel coronavirus (COVID-19) in the United States was reported in the state of Washington and spread rapidly with cases in every state. Months later we can measure the degree of devastation on public health, economy, and state finances felt by individual states in a variety of ways. Disease infection rates, measures taken to control the spread of the disease, overall fiscal viability, unemployment, and the industrial sectors driving the state economies all help determine the fiscal impact to individual states. As of June 20, 2020, the nearly 2.4 million Americans infected and 119,000 lives lost tell of the most immediate and significant impact.[1]

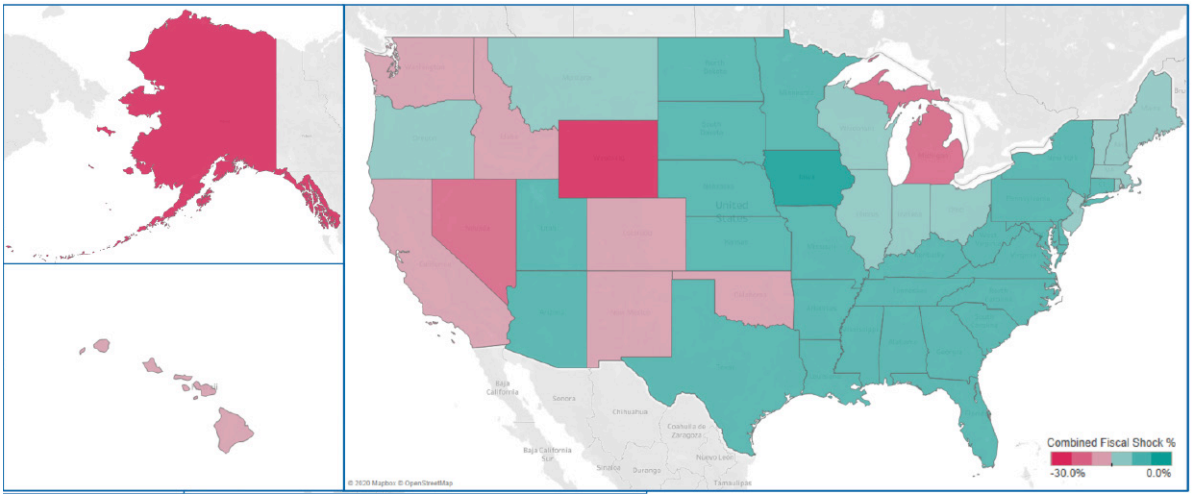
In response to state fiscal chair feedback and the ongoing financial impacts caused by the spread of COVID-19, CSG commissioned KPMG LLP (KPMG) to research and analyze COVID-19's fiscal impact to states.[2]

This whitepaper examines the near-term budget impacts, the economic risk of ongoing pandemic effects and shut-downs, the resiliency of states to respond and strategies for fiscal recovery from COVID-19.

The Fiscal Shock of the Pandemic

While unanticipated events are considered in the development of state budgets, nothing could have prepared states for the magnitude of shock that COVID-19 would have on their revenue and expenditures in such a short period of time. State leaders were faced with the difficult decision to shut down key economic sectors to slow the spread of COVID-19 infections. As a result, sharp declines in sales tax revenue from closed stores and reduced consumption combined with falling income tax revenue devastated most states' primary revenue streams. **Based on the latest state-by-state estimates, states now face an estimated $169–253 billion shortfall in declining general fund revenue receipts[3] and increased Medicaid expenditures for the combined fiscal years ending (FYE) in 2020 and 2021, as a result of COVID-19.**

Exhibit 1: Estimated FYE2020 and FYE2021 Combined Fiscal Shock as Percentage of Pre-COVID-19 General Fund Revenue Forecasts



States may have a failsafe for a natural disaster or moderate decline in revenue but for most economic drivers to come to a complete and abrupt halt is unprecedented in recent memory. The recession of 2007 through 2009 (Great Recession) may have prepared states for an unforeseen, abrupt change, and in fact some states were more prepared as a result of the previous hardships, leading states to consider crafting more stable sources of revenue and increasing rainy-day fund (RDF) balances.[4]

Yet before COVID-19 was even on the horizon, Moody's highlighted that most states and the federal government had less ability to respond to the next recession with available resources without endangering their current financial stability.[5] Along those lines, the most frequently-reported funding need for states, according to a CSG survey of legislative fiscal chairs conducted in April 2020, was additional flexibility in the use of federal funds, including the ability to use CARES Act funds to replace lost revenue.[6]

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[1]Center for Systems Science and Engineering (CSSE) at John Hopkins, COVID-19 Dashboard. https://www.arcgis.com/apps/opsdashboard/index.html#/bda7594740fd40299423467b48e9ecf6

[2]This whitepaper's analysis include the 50 U.S. states and the District of Columbia. The U.S. Territories, U.S. Virgin Islands and Puerto Rico, are not included in this report's analysis due to limited data availability,

[3]Based on revised state general fund revenue forecasts released as of June 2, 2020 compared to the last revenue forecast prior to the COVID-19 outbreak, +/- 20 percent. For the states that had not released revised revenue forecasts, the revenue impact was estimated based on the percentage of revenue decline for the region.

[4]National Association of State Budget Officers, "State Budgeting Lessons Learned from the Economic Downturn." Summer 2013.

[5]Moody's Analytics, "Stress-Testing States 2019." October 2019.

[6]The Council of State Governments, "State Legislative Fiscal Chairs Report Challenges and Financial Impacts of COVID-19." April 2020.

Executive Summary

Prior to the pandemic, the concern was a possible economic downturn that states were preparing to feel in the next few years. Now, the instant magnitude of COVID-19 shock only amplifies existing budget problems, such as insufficient funding for core programs, and creates new challenges. Through the analysis contained in this white paper, we aim to:

- Help states understand the **continuing economic risk** associated with managing the COVID-19 pandemic through the examination of fiscal shortfalls, unemployment payments, and increased expenditures
- Analyze **resiliency factors** that can help states better prepare to weather this and future shocks
- Explore **strategies to recover** and manage the unique challenges from this pandemic.

Understanding Fiscal Risk and Resiliency

Initial estimates by KPMG's Chief Economist, Constance Hunter, state that U.S. growth may take until after 2024 to reach 2019 levels.[7] Understanding fiscal strengths to help a state recover from the COVID-19 pandemic and the economic vulnerabilities that may be compounded through ongoing pandemic impacts can provide options for states to develop strategies toward recovery and improved resiliency. Through a variety of scoring factors further detailed in this white paper, we summarize each state's fiscal strengths and economic vulnerabilities in the Fiscal Risk versus Fiscal Resiliency analysis shown below.

Exhibit 2: State-by-State Analysis of Fiscal Risk versus Fiscal Resiliency

[7]KPMG LLP Economics, "V-U-L-nerability: How will we emerge from the Great Lockdown?" June 3, 2020. https://www.kpmg.us/content/dam/global/pdfs/2020/CoronaVirus_MiniChartBook_update.pdf

The four-quadrant Risk versus Resiliency matrix (clockwise from top right) represents high risk/high resiliency, low risk/high resiliency, low risk/low resiliency, and high risk/low resiliency. Each state's positioning is determined from the combined analysis of a(n)[8]:

- **Fiscal Risk Score** – Stemming from the COVID-19 pandemic, factors include expected near-term general fund revenue decline and Medicaid expense increases through the end of the fiscal year ended in 2021, weeks of unemployment benefits funding remaining as of the start of the current recession, sector-specific economic risks, and target investment returns on state pension trusts.[9]
- **Fiscal Resiliency Score** – Factors include RDF reserves, ability to fund debt, unemployment and pension obligations, average state Medicaid expenses per enrollee, and change in inflation-adjusted primary and secondary education (K-12) spending levels per student relative to the previous recession.

The relationship shown between resiliency and the economic risk from the effects of the coronavirus pandemic brings to light the wide array of which states were in a better state of preparedness and how certain factors provided insulation or exposure to fiscal stability. While most of the states are clustered around the center of the chart, indicating a balance between preparedness and risk associated with the impact of the coronavirus, it is helpful to evaluate the outliers.

For example, Colorado and Illinois stand out as two primary high-risk outliers, driven by different factors. Colorado faces elevated risks across all five risk categories assessed in this paper, making it the state subject to the highest fiscal risk nationally based on our criteria. Despite an RDF balance of 9.1 percent of general fund revenues as of FYE2019, Colorado has low scores for other key resiliency areas, including coverage of debt interest expense and K-12 education expenditures per student relative to the Great Recession. Illinois, on the other hand, faces the 15th highest expected decline in general fund revenues through the end of FYE2021, but falls short of adequate preparedness standpoint across all six resiliency categories evaluated herein. This includes an FYE2019 RDF balance of 0.0 percent of general fund revenues and employee and state pension funding contributions that covered less than 40 percent of total pension liabilities.

[8]In addition to the Risk and Resiliency Scores, a ranking was calculated of each state within the various individual Risk and Resiliency categories. In addition to the aggregate Risk and Resiliency Scores, states were ordered according to their average ranking across each of the individual scoring categories.

[9]A high benchmark, or targeted, pension investment rate of return indicates that a state relies on a high investment return from their pension trust in order to prevent unfunded pension liabilities from growing. In other words, funding from state employees and employers does not cover total pension liabilities, and a high rate of return on pension trust investments is needed to make up the difference.

Overall, the states in the high risk and low resiliency category are confronted with challenges in place ranging from closing significant fiscal gaps, high debt leverage, high unemployment claims, and rapidly increasing Medicaid expenditures. In addition to Illinois, there were a number of states that showed up repeatedly among the lowest rankings across multiple resiliency categories, including New Jersey (47th in RDF balance, 49th in pension liability funding), Kentucky (46th in RDF balance, 49th in debt service coverage, and 50th in pension liability funding), and Pennsylvania (48th in RDF balance, 46th in debt service coverage, and 49th in average Medicaid expense per enrollee), as well as the East region in general.[10] This demonstrates how risk/resiliency areas can be quantified across a few different, albeit related, metrics and how broader regional trends can emerge.

For states in the high risk and high resiliency category, it is important to analyze how much risk can be mitigated by a state's resiliency/fiscal preparedness. For example, Oregon has a relatively high pension benchmark rate of return of 4.2 percent, while at the same time, the state's pension plan is over 80 percent funded, and RDF coverage of FYE2020 general fund revenue is about 13 percent (both ranking in the top 10). A better understanding of each state's relative areas of strength in terms of preparedness could provide states with the flexibility to address expected risk areas to help weather the adverse near-term impacts of COVID-19, while not damaging their long-term budgetary outlook.

What Is Next for States?

It is important for state leaders to understand the economic risk and fiscal resiliency as one framework to help gauge state challenges and fiscal positions requiring careful consideration as states combat the COVID-19 pandemic. If we can know anything for certain about the COVID-19 pandemic, it is that the pandemic's impacts are far-reaching, ever-evolving, and the full understanding of each state's ability to recover may only be known in hindsight. As such, it is also important to note that the economic risk factors and scoring described herein are based on information available as of the publication of this white paper and are, therefore, subject to change going forward, especially given the rapidly evolving and uncertain nature of the pandemic. As the long-term impacts of COVID-19 continue to come into focus, individual states may experience more or less severe economic challenges compared to current expectations. Nevertheless, an assessment of individual states' risk and resiliency profiles is an important first step for understanding the unique challenges and tools available for state decision makers to keep in mind as they move forward.

As states ease quarantine policies and slowly reopen their economies, COVID-19 infections may surge in the future and the threat of natural and other disasters is ever-present. To prepare for future emergencies, states must deploy a wide range of strategies to address the complex impacts of the pandemic. According to the KPMG Chief Economist, Constance Hunter, "the ability to recover and return to previous growth levels is highly dependent on health, economic, and public policymaking; countries with strong healthcare systems and a willingness to transcend policy differences have so far seen better economic outcomes."[11]

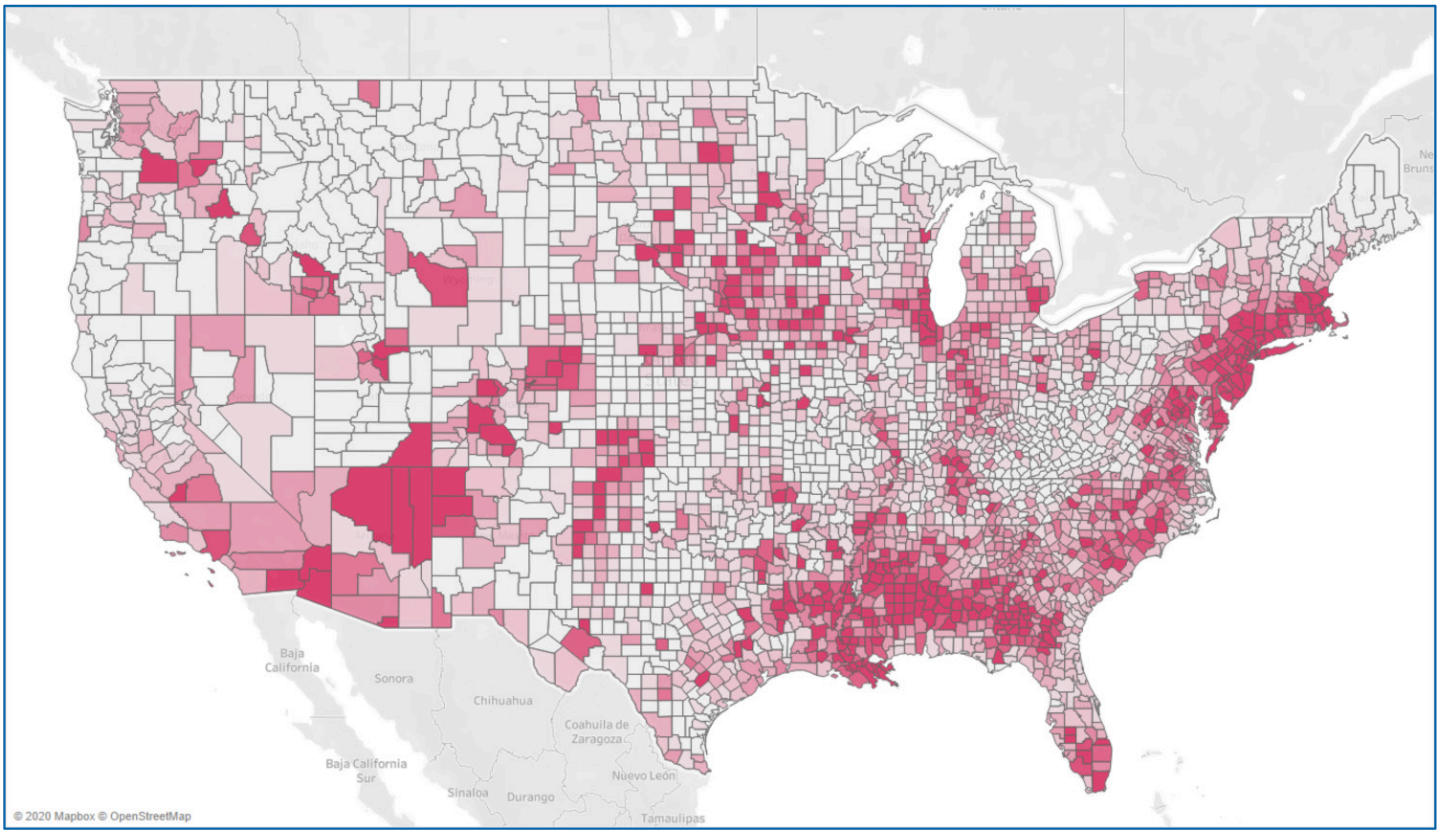
[10]Please refer to the Appendices for tables providing a detailed breakdown of each state's measure for individual Fiscal Risk and Fiscal Resiliency categories, as well as the calculation of scores.

[11]KPMG LLP Economics, "V-U-L-nerability: How will we emerge from the Great Lockdown?" June 3, 2020. https://www.kpmg.us/content/dam/global/pdfs/2020/CoronaVirus_MiniChartBook_update.pdf

Preface

In April 2020, for the first time in U.S. history, all 50 U.S. states were simultaneously operating under disaster declarations. The effects of the COVID-19 pandemic are wide-reaching and have left no state untouched. As shown below, high levels of COVID-19 infections have reached communities across the entire U.S.

Exhibit 3: Confirmed COVID-19 Cases per 100,000 Population (as of June 20, 2020)



As previously mentioned, in April 2020 CSG conducted a survey of state fiscal committee chairs to gauge concerns over fiscal matters and the impact of COVID-19 on their states.[12] The following list provides the top 10 responses received:

- Uncertainty of revenue (91 percent of legislators surveyed)
- Economic shutdown and loss of commerce associated with the coronavirus (88 percent of legislators surveyed)
- High unemployment and underemployment (67 percent of legislators surveyed)
- Strain on unemployment insurance systems (45 percent of legislators surveyed)
- Struggling small businesses (36 percent of legislators surveyed)
- Impact on vulnerable populations (18 percent of legislators surveyed)
- Impact of school closures (12 percent of legislators surveyed)
- Shortage of education funding (12 percent of legislators surveyed)
- Revenue shortfalls for municipalities (9 percent of legislators surveyed)
- Mental health impact of this crisis (9 percent of legislators surveyed)

The most frequently reported funding need for the states was flexibility in the use of federal funds, including the ability to use Coronavirus Aid, Relief, and Economic Security (CARES) Act (PL 116-136) funds to replace lost revenue. Legislators also described the need for funding related to unemployment insurance, small business support, Medicare/Medicaid, and infrastructure.

[12]The Council of State Governments, "State Legislative Fiscal Chairs Report Challenges and Financial Impacts of COVID-19." April 2020.

The Fiscal Impact of the COVID-19 Pandemic

Health policy recommendations to slow the spread of COVID-19 created unique circumstances for states as stay-at-home orders were issued, businesses were shuttered, and schools were closed. Domestic and international travel restrictions were implemented to stop the spread of the virus across borders, including trade and economic activity. All sectors of the economy were affected by the acute disruption to work models and while some sectors were able to quickly pivot in response, many sectors face devastating losses that ripple through the economy. From the peak of global gross domestic product (GDP) in Q4 2019 to the trough, likely in Q2 2020, the U.S. economy will have contracted by just over 12 percent, significantly more than during the global financial crisis where GDP declined 3.9 percent peak to trough.[13] State governments are no exception to the significant fiscal impact of the COVID-19 pandemic. Amid leading public health responses to combat the spread of COVID-19, state leaders must also reckon with high unemployment rates and deep budget cuts.

State-by-State Projected Fiscal Gaps

This report estimates that state general funds will experience a combined $211.2 billion (-11.2 percent) fiscal shortfall from general fund revenue decreases and increasing Medicaid expenses as states experience rising COVID-19 infections and aim to slow the spread of the disease through stay-at-home orders and slowed economic reopening. The estimated shortfall is based on released revenue forecast revisions in 34 states for FYE2020, and 29 states for FYE2021, available as of June 2, 2020. For states where revised forecasts had not yet been released, we assumed an equal percentage decline based on the state's geographic region.

With increased spending to combat the virus on top of sharp declines in revenue, some states find themselves on a dangerous precipice. The data tables below identify the projected budget gaps by region and by state.

Exhibit 4: Estimated Combined Fiscal Shock as a Percentage of Pre-COVID-19 Revenue Estimates by Region (USD millions)

REGION	PRE-COVID-19 REVENUE FORECAST (FYE2020 AND 2021)	ESTIMATED REVENUE DECLINE BY FYE2021	ESTIMATED MEDICAID SPENDING INCREASE BY FYE2021	COMBINED FISCAL SHOCK PERCENTAGE OF PRIOR REVENUE FORECAST
East	$493,013	-$43,615	$6,820	-10.2%
Midwest	$380,767	-$34,852	$6,790	-10.9%
South	$512,423	-$36,044	$8,078	-8.6%
West	$492,617	-$67,461	$7,586	-15.2%
U.S.	**$1,878,819**	**-$181,972**	**$29,273**	**-11.2%**

On a regional basis, the West region is expected to face the steepest fiscal shock due to COVID-19 (-15.2 percent), while the South region is expected to face the smallest decline (-8.6 percent).

[13]KPMG LLP Economics, "V-U-L-nerability: How will we emerge from the Great Lockdown?", June 3, 2020. https://www.kpmg.us/content/dam/global/pdfs/2020/CoronaVirus_MiniChartBook_update.pdf.

Exhibit 5: Estimated Combined Fiscal Shock as a Percentage of Pre-COVID-19 Revenue Estimates by State (USD millions)

STATE	REGION	PRE-COVID-19 REVENUE FORECAST (FYE2020 AND 2021)	ESTIMATED REVENUE DECLINE BY FYE2021	ESTIMATED MEDICAID SPENDING INCREASE BY FYE2021	COMBINED FISCAL SHOCK PERCENTAGE OF PRIOR REVENUE FORECAST
Connecticut	East	$39,745	-$3,171	$315	-8.8%
Delaware	East	$9,464	-$525	$76	-6.3%
District of Columbia	East	$17,142	-$1,495	$0	-8.7%
Maine	East	$7,808	-$693	$117	-10.4%
Maryland	East	$37,894	-$3,340	$417	-9.9%
Massachusetts	East	$49,935	-$4,750	$955	-11.4%
New Hampshire	East	$2,628	-$194	$101	-11.2%
New Jersey	East	$80,626	-$10,103	$749	-13.5%
New York	East	$163,406	-$13,257	$2,403	-9.6%
Pennsylvania	East	$72,814	-$4,970	$1,486	-8.9%
Rhode Island	East	$8,360	-$804	$134	-11.2%
Vermont	East	$3,191	-$313	$67	-11.9%
Illinois	Midwest	$75,400	-$7,300	$1,133	-11.2%
Indiana	Midwest	$33,848	-$3,014	$552	-10.5%
Iowa	Midwest	$16,252	-$433	$221	-4.0%
Kansas	Midwest	$15,328	-$1,272	$141	-9.2%
Michigan	Midwest	$22,117	-$3,810	$928	-21.4%
Minnesota	Midwest	$97,504	-$8,310	$624	-9.2%
Nebraska	Midwest	$9,858	-$878	$86	-9.8%
North Dakota	Midwest	$4,124	-$367	$40	-9.9%
Ohio	Midwest	$68,326	-$6,084	$2,368	-12.4%
South Dakota	Midwest	$3,402	-$303	$25	-9.6%
Wisconsin	Midwest	$34,608	-$3,082	$672	-10.8%
Alabama	South	$18,518	-$1,371	$348	-9.3%
Arkansas	South	$11,630	-$559	$124	-5.9%
Florida	South	$66,252	-$4,542	$1,847	-9.6%
Georgia	South	$52,286	-$3,585	$484	-7.8%
Kentucky	South	$23,220	-$1,253	$251	-6.5%
Louisiana	South	$19,787	-$1,055	$211	-6.4%
Mississippi	South	$9,240	-$458	$97	-6.0%
Missouri	South	$19,644	-$1,347	$574	-9.8%
North Carolina	South	$51,103	-$4,210	$758	-9.7%
Oklahoma	South	$13,484	-$1,813	$266	-15.4%
South Carolina	South	$20,152	-$1,209	$315	-7.6%
Tennessee	South	$31,072	-$2,130	$627	-8.9%
Texas	South	$121,556	-$8,777	$1,393	-8.4%
Virginia	South	$45,058	-$3,089	$682	-8.4%
West Virginia	South	$9,420	-$646	$101	-7.9%

Exhibit 5: Estimated Combined Fiscal Shock as a Percentage of Pre-COVID-19 Revenue Estimates by State (USD millions)

STATE	REGION	PRE-COVID-19 REVENUE FORECAST (FYE2020 AND 2021)	ESTIMATED REVENUE DECLINE BY FYE2021	ESTIMATED MEDICAID SPENDING INCREASE BY FYE2021	COMBINED FISCAL SHOCK PERCENTAGE OF PRIOR REVENUE FORECAST
Alaska	West	$4,131	-$1,342	$25	-33.1%
Arizona	West	$23,185	-$1,100	$369	-6.3%
California	West	$298,121	-$41,857	$5,097	-15.8%
Colorado	West	$25,299	-$3,293	$541	-15.2%
Hawaii	West	$16,637	-$2,680	$98	-16.7%
Idaho	West	$8,050	-$1,242	$132	-17.1%
Montana	West	$4,062	-$489	$34	-12.9%
Nevada	West	$8,907	-$1,652	$148	-20.2%
New Mexico	West	$15,659	-$2,511	$85	-16.6%
Oregon	West	$21,204	-$1,930	$357	-10.8%
Utah	West	$16,246	-$1,205	$138	-8.3%
Washington	West	$48,632	-$7,501	$529	-16.5%
Wyoming	West	$2,484	-$660	$33	-27.9%
U.S.		**$1,878,819**	**-$181,972**	**$29,273**	**-11.2%**

Notes:

1) *Revenue figures refer to forecasted general fund revenues. Table includes actual revised forecasts for states reporting revisions as of June 2, 2020.*
2) *Estimated increase in Medicaid spending assumes the average of Moody's Baseline and S3 Severe recession scenarios in their "Stress Testing States" analysis.*
3) *Due to New York's FYE2020 ending on March 31, 2020, the revenue impact of COVID-19 for FYE2020 is assumed to be zero; however, we note that New York has forecasted a combined $61 billion decline in revenues for FYE2021 through FYE2024.*

Alaska, Wyoming, Michigan, Nevada, Idaho, Hawaii, and New Mexico are facing the most severe expected shortfalls as a percentage of prior revenue forecasts. States that rely heavily on amusement and severance (i.e., energy) tax revenues, such as Alaska (51 percent of state tax revenue), Wyoming (32 percent), New Mexico (21 percent), and Nevada (12 percent)[14] are experiencing the greatest general fund revenue declines in percentage terms as oil prices plummeted—dropping below $0 per barrel for the first time ever on April 18, 2020—and travel restrictions have taken their toll. Michigan also faces a significant expected increase in Medicaid expenditures as residents lose jobs and employer-based healthcare coverage.

Meanwhile, Iowa, Arkansas, Mississippi, Arizona, and Delaware are the states reporting the lowest overall percentage decline. This can be attributed to either industry-specific mitigation factors, as in the case of Iowa and Delaware, with relatively high concentration of state GDP in the finance and insurance sector and a low concentration in the leisure and hospitality sector. In others, the early release of revised revenue forecasts, as was the case with Arkansas (April 2) and Arizona (April 9) may have underestimated the far-reaching and devastating economic impacts of COVID-19.

Another important factor for states to consider is the magnitude of the pending fiscal shock due to the COVID-19 pandemic as it compares to their RDF balance, as well as in the context of their overall general fund spending budgets. This provides the necessary detail to understand what resources state budget offices must work with, as well as the relative severity of any potential budget cuts.

[14]KPMG LLP Economics, "V-U-L-nerability: How will we emerge from the Great Lockdown?", June 3, 2020. https://www.kpmg.us/content/dam/global/pdfs/2020/CoronaVirus_MiniChartBook_update.pdf.

Exhibit 6: Estimated Budget Shortfall to RDF Balance Comparison
Amounts shown on a per-person basis (Census Bureau population estimates as of July 1, 2019)

REGION	GF EXPENDITURES (2X FYE2019)	FISCAL SHOCK PERCENTAGE OF GF EXPENDITURES	RDF PERCENTAGE OF GF EXPENDITURES	ADDITIONAL PERCENTAGE EXPENDITURE GAP
East	$7,128	11.1%	2.2%	9.0%
Midwest	$5,092	13.2%	3.3%	9.9%
South	$3,874	9.2%	4.6%	4.6%
West	$6,088	15.7%	6.9%	8.8%
U.S.	**$5,266**	**12.2%**	**4.3%**	**7.9%**

The exhibit above illustrates that RDF balances alone will not be sufficient to cover the expected pending budget shortfalls due to COVID-19. In addition, while we present the full RDF balance in percentage terms of general fund expenditures, we also acknowledge that many states have restrictions on use and are unable or unwilling to use their full RDF balance to address their budget shortfalls, as states don't want to carry a zero RDF balance into future years, and funds are also needed for other expenditures, such as direct COVID-19 response expenses, natural disasters, small business assistance, election preparedness, and funds for education.

Although the South region is facing the lowest expected fiscal shock on a per-person basis and only faces an additional shortfall of 4.6 percent beyond RDF balance, they also have the lowest per-person general fund expenditures by far, spending over $1,200 less per person than the next closest region. On the other hand, the East region has the highest level of per-person spending through the general fund but has a relatively lower balance of RDF available relative to the size of its general fund budget. The West region has the strongest position in terms of available RDF balance, but the negative fiscal shock of COVID-19 is expected to be most severe there. Finally, based on the above, the Midwest region may be facing the highest total percentage of budget cuts to cover their fiscal shortfalls, if further economic aid is not provided. This shows that the COVID-19 pandemic has created significant challenges across the entire U.S. and understanding each state's specific hurdles and available resources will be key to addressing and overcoming the tremendous economic and budgetary hardships going forward.

Lingering Budget Impacts and Lessons Learned from the Last Great Recession

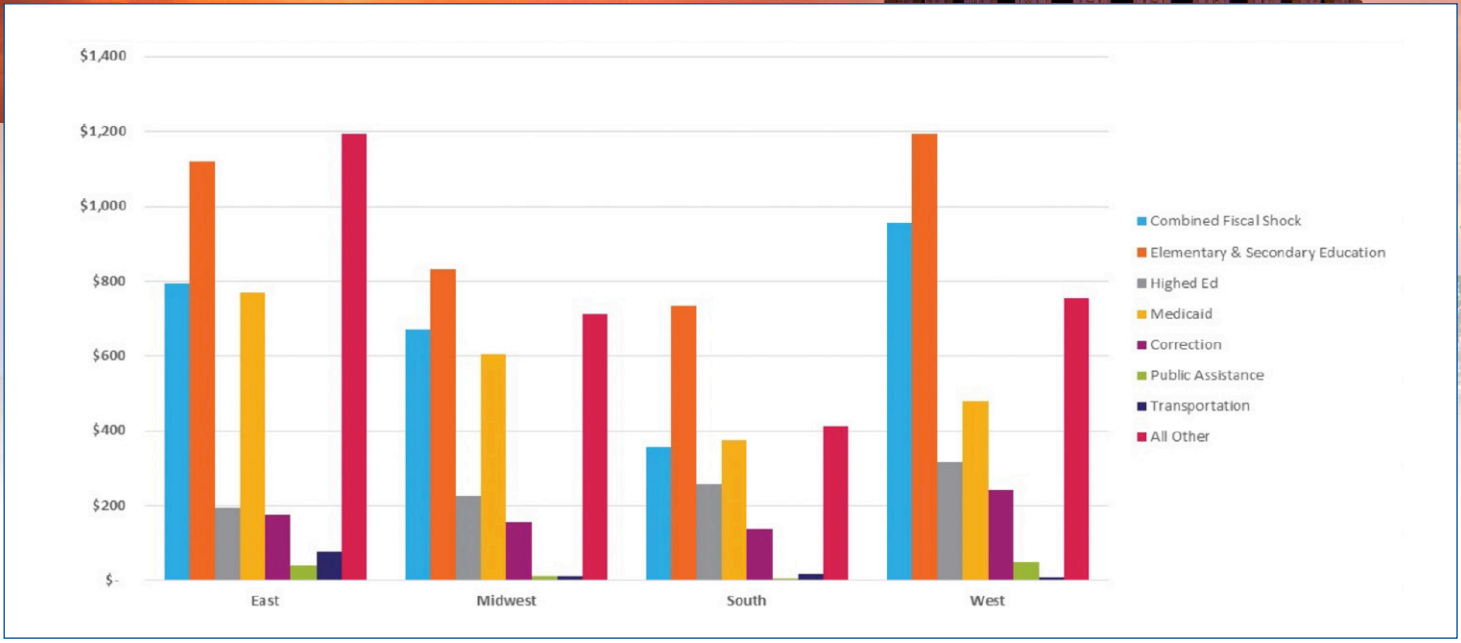
As the COVID-19 pandemic contributes to a 2020 economic recession, many states were still grappling with the lingering effects of the Great Recession, depending on each state's primary industry sector, workforce, and economic growth. For example, as of the FYE2018, 23 states were still spending less in terms of general fund expenditures compared to FYE2008, after adjusting for inflation.[15] Even after spending increases were approved for FYE2019, an estimated 17 states still had lower general fund expenditures compared to before the Great Recession.

Through the lengthy financial recovery from the Great Recession, many state governments have strained opportunities to achieve cost-saving through efficiency measures. As the impacts of the COVID-19 pandemic necessitate even greater provisions of state government services, large budget cuts to address declining revenues will likely result in detrimental cuts to core government programs.

The majority of a state's budget is dedicated to mandatory or statutory expenditures like education, justice and public safety, and health services—often leaving limited funding for discretionary programs even under normal budgetary times. As an employer, state governments have control of payroll costs but layoffs or furloughs often compound the problem of revenue loss. States often must pay out benefits related to those reduced positions, further shrinking the opportunity for real savings. Reductions in workforce and discretionary programming are simply not enough to address the fiscal gaps created by the COVID-19 pandemic, likely resulting in severe cuts to more essential services.

[15]Pew Trust, "'Lost Decade' Casts a Post-Recession Shadow on State Finances." June 4, 2019. https://www.pewtrusts.org/en/research-and-analysis/issue-briefs/2019/06/lost-decade-casts-a-post-recession-shadow-on-state-finances

Exhibit 7: FYE2019 General Fund Expenditures by Category versus Estimated Combined Fiscal Shock
State spending shown on a per-person basis
(Census Bureau population estimates as of July 1, 2019)



Note: Examples of All Other general fund expenditures include a state's expenditures for the Children's Health Insurance Program (CHIP) and debt services expenditures.

In FYE2019, state general fund dollars were allocated to the major spending areas of primary and secondary education, corrections, Medicaid, and postsecondary education. Those four areas alone compose over 70 percent of the entire budget. As illustrated, the combined fiscal shock due to revenue shortfalls and increasing Medicaid expenditures is expected to rival or exceed many of the single general fund expenditure categories across regions. As a result of such a significant fiscal shock, budget cuts will be required across all programs, in order to avoid completely decimating any single program. In addition, in program areas such as Medicaid, decisions for budget cuts must also be balanced with the risk of losing federal matching dollars, which would further amplify the effect of budget cuts. The stark nature of the actions that could be necessary to fill in the revenue shortfall illustrates the size of the fiscal challenges and highlights the need for additional assistance and innovative budget solutions.

Unemployment Comparisons among Recessions

The economic shutdowns in response to the COVID-19 pandemic also resulted in abrupt and widespread unemployment. This created unprecedented scenarios for states to manage unemployment processes and costs in comparison to historical recessions that drive economic slowdown over time. At the height of the Great Recession, unemployment peaked at 10.6 percent. In April 2020, the unemployment rate peaked at 14.4 percent for the month. As shown in the table below, unemployment claims during the April 2020 peak are significantly higher than claims during the peak of the Great Recession, with the highest number of April 2020 unemployment claims in the South region.

Exhibit 8: Recent Initial Unemployment Claim Average Compared to Great Recession Average

REGION	GREAT RECESSION TOTAL AVERAGE WEEKLY CLAIMS	WEEKS ENDED APRIL 25–MAY 16, 2020 TOTAL AVERAGE WEEKLY CLAIMS	MULTIPLE OF GREAT RECESSION AVERAGE
East	91,931	539,262	5.9
Midwest	539,262	5.9	3.7
South	131,447	1,201,909	9.1
West	105,174	588,358	5.6

For many states, payments toward the high volume of unemployment claims will become unsustainable without borrowing additional funds or other interventions. The states with the fewest weeks of unemployment benefit funds remaining as of the onset of the COVID-19 recession are Texas, New York, California, Kentucky, and West Virginia. These states entered 2020 with Unemployment Insurance (UI) Trust solvency rates below 0.6, where a solvency rate of 1.0 or higher is typically deemed appropriate for addressing historical recession unemployment rates.[16] Because initial unemployment claims surged to levels up to nine times higher than their previous peak during the Great Recession, states risk rapidly running out of unemployment benefits without further assistance.

Additionally, as shown in the exhibit above, states and regions have varying levels of unemployment claims and varying risk for continued high volumes of claims. This is due primarily to industry concentration by state and the unique impacts of the COVID-19 pandemic by industry. For example, Nevada, Hawaii, and Florida face severe economic risk because of a heavy concentration of state-level GDP in the tourism-related leisure and hospitality or retail trade sectors. These sectors have demonstrated the highest negative employment change in response to coronavirus measures. The leisure and hospitality sector, which includes arts, entertainment, and recreation, and accommodations and food service, experienced a -48.3 percent change in the number of employees from February to April 2020, and a -41.8 percent three-month percent change from February to May 2020.[17] Other industries experiencing significant employment decreases at a national level are mining and logging and other private services, which comprises repair and maintenance, personal and laundry services, and membership associations and organizations.

Conversely, business continues in the finance and insurance sector through telework, with the COVID-19 pandemic contributing to a modest -0.6 percent change in employment from February to May 2020. The government sector also experienced relatively less severe employment loss over this time period; however, the government sector experienced the highest net job losses from April to May in response to anticipated revenue shortfalls. Negative employment effects were observed to be larger at the state and local government level, particularly in the education-related fields, as compared to the federal government level.

Factors Contributing to Fiscal Impacts

The most significant factor driving state fiscal gaps is the sharp decline in tax revenues as measures taken to minimize the spread of the coronavirus included the complete shutdown of businesses for varying lengths of time. As the local economies ground to a halt, some industries were able to transition their workforces to telework to comply with stay-at-home orders while others faced massive layoffs. With travel restricted, states that rely on the tourism and service industries have also experienced a devastating loss of income that previously had been insulated from downturns.

The state fiscal gaps initially projected for FYE2020 and 2021 will continue to be informed by emerging outcomes of the COVID-19 pandemic and increasing awareness of its full economic impact. As discussed in the next section of this white paper, states face varying levels of economic risk related to continued impacts from the global pandemic.

[16]Unemployment insurance solvency examines the average high cost of claims a state paid over a historical time period, determining a baseline amount of benefits paid out during a recession, using the Great Recession as a historical precedent. A solvency rating of 1.0 is generally considered adequate solvency, which would allow a state to pay unemployment benefits for one year at the prior worst-case recession scenario.

[17]U.S. Bureau of Labor Statistics, May 2020 employment by industry news release.

The Future Fiscal Risk Posed by the COVID-19 Pandemic

A few months into the COVID-19 pandemic, many unknown variables and outcomes remain that provide increased risk and instability moving forward for states. The spread of the coronavirus continues to infiltrate the country moving in and out of communities causing devastating loss to human life. States grapple with how to address the exponential spread of the virus and keep the economy from grinding to a halt without generating unintended consequences.

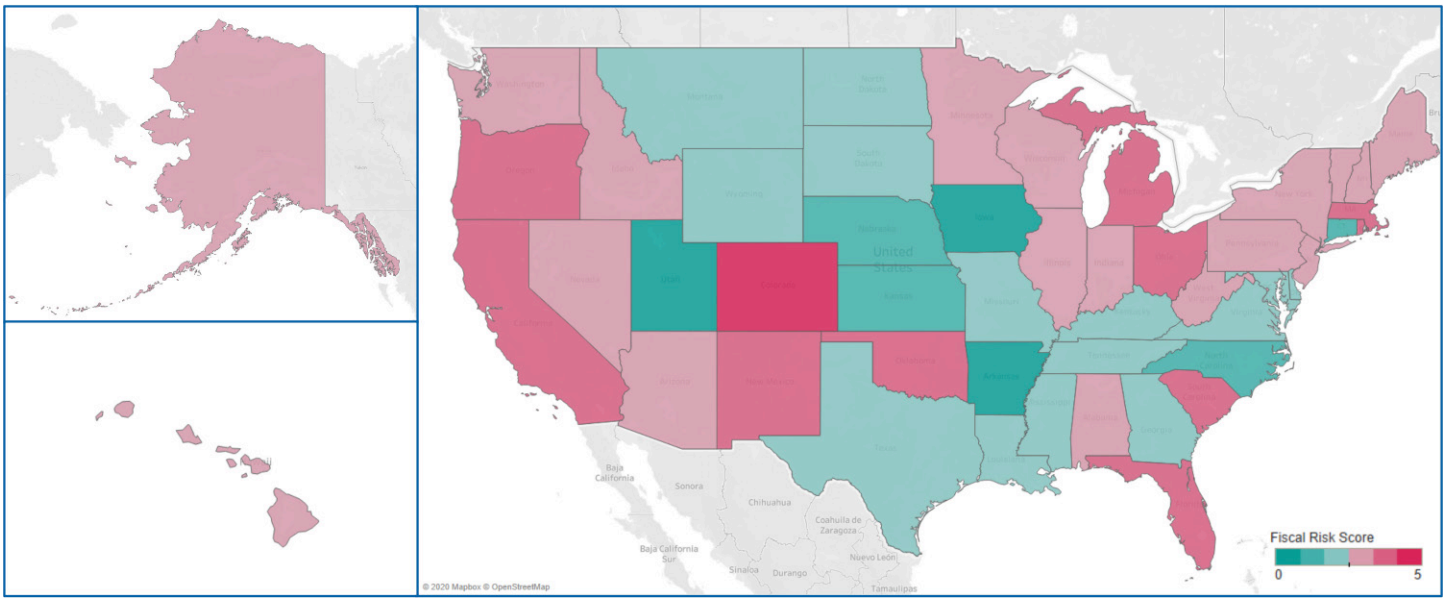
The pandemic uniquely affects state economic risk when compared to the prior Great Recession or other historical recessions. Whereas the Great Recession hit the financial industry workforce especially hard, the ability for employees to continue working remotely during the pandemic allowed many financial industry employees to continue business with relatively less interruption. However, employees in the tourism, entertainment, and food service industries faced severe disruption by travel restrictions and quarantine guidelines.

State-by-State Fiscal Risk Analysis

To gauge which states may be the most fiscally impacted by COVID-19, we examined five fiscal risk categories, inclusive of data measuring direct COVID-19 economic impacts. The categories examined include projected revenue shortfall, estimated increase in Medicaid spending, weeks of unemployment benefit funding remaining, economic risk by distribution of state GDP across industry sectors, and pension benchmark rate of return. A score of 1 (high risk) or 0 (low risk) is included based on determined risk threshold for each category and those are aggregated to develop a risk score for a state. The effect from the coronavirus pandemic presents unique challenges from an ordinary economic downturn, and examination of states that are most at risk can provide insight into strategies for recovery and future risk mitigation strategies.

The following map illustrates the calculated fiscal risk score by state.

Exhibit 9: Fiscal Risk Scores by State



We examined certain risk factors to evaluate the potential fiscal impact of the COVID-19 pandemic across factors including expected general revenue decline, Medicaid, unemployment benefits and pension investment risks, and sector-based GDP risk. The culmination of the factors helps to see where states fall in terms of level of exposure to the adverse economic impacts of COVID-19. While we believe we have selected a representative subset of the variety of fiscal risks facing state decision makers, there are additional factors not specifically covered in our assessment. Furthermore, we note that these risk factors are subject to change as the negative economic impacts of the COVID-19 pandemic continue.

Exhibit 10: Fiscal Risk Scores – Detail for Lowest Five Scoring States (Lowest Risk)

STATE	REVENUE SHORTFALL SCORE (< -8%)	MEDICAID INCREASE SCORE (>1.5%)	UI BENEFIT WEEKS SCORE (<12)	ECONOMIC RISK SCORE (>1.07)	PENSION BM RETURN SCORE (>3%)	RISK SCORE
Utah	0	0	0	0	0	0
Iowa	0	0	0	0	0	0
Arkansas	0	0	0	0	0	0
Nebraska	1	0	0	0	0	1
Kansas	1	0	0	0	0	1

Exhibit 11: Fiscal Risk Scores – Detail for Highest Five Scoring States (Highest Risk)

STATE	REVENUE SHORTFALL SCORE (< -8%)	MEDICAID INCREASE SCORE (>1.5%)	UI BENEFIT WEEKS SCORE (<12)	ECONOMIC RISK SCORE (>1.07)	PENSION BM RETURN SCORE (>3%)	RISK SCORE
Colorado	1	1	1	1	1	5
Florida	0	1	1	1	1	4
California	1	1	1	1	0	4
Oklahoma	1	1	1	1	0	4
Michigan	1	1	0	1	1	4

Note: States with the same risk score are sorted based on average ranking across all categories.

Factors Contributing to Fiscal Risk

Fiscal Risk Factor 1: Revenue Loss Projections

Due to the abrupt shutdown of their economies, states were left with a sudden shock to their revenue streams as withholding tax from employers was not collected, sales tax revenue fell as spending decreased, and other taxes and receipts were flat or negative in growth. As of June 2, 2020, 34 states have released revised revenue estimates for FYE2020, and 29 of those states also released revised revenue estimates for FYE2021. For the remaining states that have not published an adjusted revenue forecast, revenue loss projections are calculated based on average revenue decline by applicable region, with adjustments made for fiscal year-end differences.

We calculated revenue shortfall risk as the estimated revenue shortfall according to state-by-state reported revisions, as a percentage of the pre-COVID-19 general fund FYE2020 and FYE2021 revenue estimates. A risk score of 1 was assigned to each state with an estimated revenue shortfall of -8 percent or greater in magnitude.

State forecast revisions ranged from the catastrophic, with revenue declines of 32.5 percent and 26.6 percent, respectively, estimated for natural-resource-dependent Alaska and Wyoming, to the merely challenging, with expected declines of less than 5 percent reported in Iowa, Arizona, and Arkansas. California alone is reporting an expected $42 billion loss in general fund revenue, representing 23 percent of the overall $182 billion in expected general fund revenue loss, followed by New York ($13 billion), New Jersey ($10 billion), and Texas ($9 billion) in terms of overall magnitude.

Fiscal Risk Factor 2: State Medicaid Spending Increases

To capture some of the increased cost borne by states to contend with the coronavirus, as well as to provide health insurance coverage to people losing their job, we examined the average Medicaid spending increase, including benefits and administrative expenses, net of federal match. States anticipate a significant increase in Medicaid as larger numbers of people lose employer-based health insurance from layoffs or closures from the recession and become eligible for Medicaid enrollment.

We calculated the Medicaid expenditure increase risk as the average state Medicaid expenditure increase over combined FYE2020 and FYE2021 under the baseline and severe scenarios outlined in Moody's post-COVID-19 "Stress Testing States" analysis, divided by FYE2020 and FYE2021 combined pre-COVID-19 general fund revenue forecast. A risk score of 1 was assigned to each state with an average expected increase greater than 1.5 percent.

States that are expected to incur the highest percentage increase in Medicaid expenditures include Michigan (4.2 percent increase), New Hampshire (3.8 percent increase), and Ohio (3.5 percent increase). Florida is also expected to experience a relatively large Medicaid expenditure increase at 2.8 percent, potentially linked to increased risk of COVID-19 health complications due to the state's relatively high proportion of elderly residents. At the other end of the spectrum, New Mexico (0.5 percent), Hawaii (0.6 percent), and Alaska (0.6 percent) have the lowest estimated average increase in Medicaid expenses, potentially due to lower population density and relative geographic isolation from the worst health effects of the COVID-19 pandemic.

Fiscal Risk Factor 3: Sustainability of Unemployment Benefits

During periods of recession, states face increased fiscal risk associated with an increased volume of UI claims, and the associated increase in unemployment benefits expenditures. States have varying levels of UI trust funding available to meet the anticipated claims for unemployment benefits during a recession. Therefore, in order to assess the overall risk from additional unemployment benefit claims, we must consider the additional unemployment claim filing volume, as well as the solvency for each state's unemployment trust.

We calculated the unemployment benefits risk by first converting each state's unemployment trust fund solvency as of March 31, 2020 into weeks (i.e., solvency of 1.0 equals 52 weeks).[18] Then, we divided the number of weeks by the ratio of average weekly initial unemployment claims during the four-week period for the weeks ended April 25 through May 16, 2020, compared to the average weekly initial unemployment claims rate for each state during the Great Recession. This produced an estimate of the number of weeks of unemployment benefits funding available from the start of the COVID-19 recession, assuming unemployment claims were to continue at a similar level. A risk score of 1 was assigned to each state with less than 12 weeks remaining.

Exhibit 12: Regional Unemployment Trust Solvency and Benefit Weeks Remaining from Start of Recession

REGION	GREAT RECESSION AVG. CLAIMS PER STATE	LAST FOUR-WEEK AVG. CLAIMS PER STATE	MULTIPLE OF GREAT RECESSION AVG.	UI TRUST SOLVENCY	WEEKS REMAINING (RECESSION AVG.)
East	91,931	539,262	5.9	0.9	8.3
Midwest	102,270	377,960	3.7	1.1	15.5
South	131,447	1,201,909	9.1	1.1	6.2
West	105,174	588,358	5.6	1.4	13.1

Regionally, using the average initial unemployment claims for the four-week period ending May 16, the unemployment claims have been highest in the South and lowest in the Midwest, as a multiple of average initial unemployment claims during the Great Recession. Similarly, we find the South region in the riskiest position, with only 6.2 weeks remaining on average, followed by the East region. Despite facing relatively high fiscal risks, the West region is somewhat better funded from an unemployment benefits standpoint, at 13.1 weeks remaining on average, while the Midwest is in the strongest position with an estimated 15.5 weeks of benefits funding remaining.

Based on this risk metric, Texas, New York, and California are the three states with the lowest number of weeks funding remaining, at 1.8, 2.1, and 2.3 weeks, respectively. This is especially concerning, as these are also the three states with the highest numbers of covered employees, indicating that the impact of low unemployment benefits funding will be particularly severe. Beyond weeks of unemployment benefits funding remaining, Oklahoma, the District of Columbia, Georgia, and Florida are the locations with the highest rise in initial unemployment claims compared to the Great Recession, with multiples all exceeding 14.5 times the Great Recession average.

[18] U.S. Department of Labor, "Q1 2020 Trust Fund Solvency Report."

Although by this measure, no state has a full year remaining of unemployment benefits funding, Vermont, Idaho, and Oregon appear to be in the best position to weather the increase in unemployment claims, with 37.9, 31.5, and 31.4 estimated weeks of funding remaining, respectively.

Fiscal Risk Factor 4: Economic Sector-Based Risk

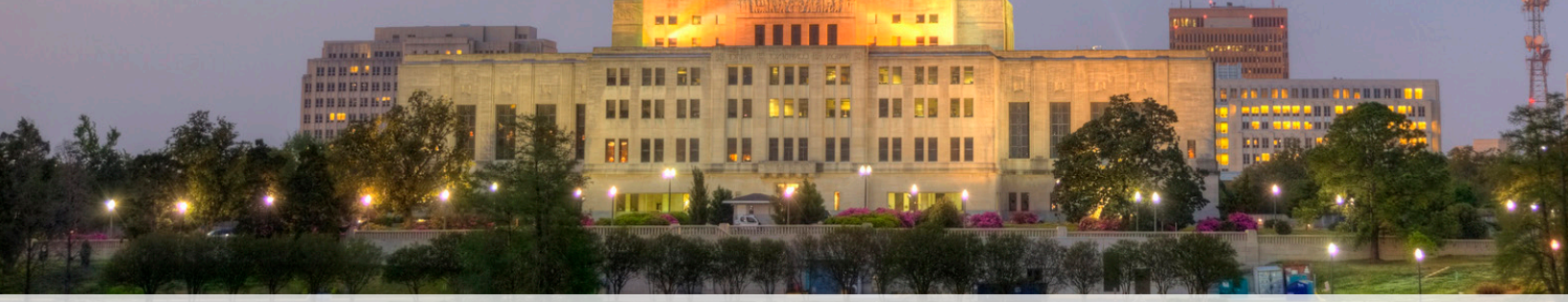
An assessment of economic risk should address the varying degree of risk for different states, depending on the composition of a state's GDP by industry sector. One of the earliest macroeconomic indicators we can observe during a recession are changes to employment, which are also tracked by industry sector. In addition, we can measure states' reliance on various industries using the allocation of GDP across industry sectors. The benefit of evaluating employment changes by sector is that this allows one to account for more accurate state-by-state economic detail, beyond just each state's largest economic sector. This also captures some of the correlation between sectors, such as how states with a large real estate sector and leisure and hospitality sector (e.g., Hawaii) differ from a state with a large real estate sector but high concentration in less-impacted industries (e.g., Connecticut).

We measured the industry sector-based risk factor by state by first weighting the February to May 2020 percentage change in employment for each industry sector compared to the median percentage change in employment at the national level. Then, we calculated the sum of each state's share of GDP by sector multiplied by the sector employment risk factor to calculate an employment-based sector-based risk index, with a higher value equating to higher risk. A risk score of 1 was assigned to each state with a sector-based economic risk score greater than 1.07. We note that the economic risk score is subject to future change, as the effects of COVID-19 penetrate deeper into various other industry sectors, or as hard-hit sectors, e.g., leisure and hospitality, show signs of job recovery.

Regionally, there is significantly higher economic risk in the West region, with an average risk index of 1.14. Conversely, the Midwest and East had lower risk scores of 1.03 and 1.05, respectively. The high risk score of the West region is partially driven by Nevada and Hawaii, the two states with the highest sector-based economic risk due to a heavy concentration of GDP in the leisure and hospitality sector. On the flip side, the significance of the finance and insurance and government sectors in the East region, and manufacturing sector in the Midwest, keeps the risk score relatively low in these regions.

Exhibit 13: Sector-Based Economic Risk by Region

REGION	AVG. RISK SCORE
West	1.14
South	1.08
East	1.05
Midwest	1.03
U.S.	**1.07**



Fiscal Risk Factor 5: Pension Reliance on Financial Market Returns

State contributions for pensions have become a larger ticket item over the past few years, in fact exceeding the value of states' other debt outstanding at a national level, as many states play catch-up or have been severely impacted by market returns as a revenue stream. To capture the risk position of various states as it pertains to pension trust investments, we can compare states' benchmark rate of return on their pension trust, i.e., the rate of investment return needed to keep the gap between employee and employer contributions and pension obligations from growing.

We calculated pension investment return risk by dividing each state's operating cash flow for pensions (defined as the difference between employer and employee contributions and benefit payments) by the overall value of each state's plan assets (i.e., value of the state pension trust), using the latest available data from 2017.[19] This measure, known as the benchmark, or breakeven, rate of return, provides an assessment of market volatility for state pension trusts, as the asset value of the pension trust is highly dependent on investment performance. A risk score of 1 was assigned to each state with a benchmark rate of return greater than 3.0 percent.

The state of New Jersey faces the most difficult position with respect to pension funding and growing liabilities, with a targeted rate of return of 6.6 percent, by far the highest in the nation, and a benchmark rate of return that New Jersey will likely fall well short of. Contributing to this risk is the fact that New Jersey had only covered 35.8 percent of its total pension liabilities through its plan net position (i.e., pension assets) in 2017,[20] the 49th lowest rate in the U.S. Elsewhere, Colorado and Rhode Island have a risky pension target rate of return position with rates above 5.0 percent, and Ohio, Pennsylvania, Alaska, Oregon, and Alabama also have benchmark rates of return above 4.0 percent.

Conversely, Kansas has the lowest benchmark rate of return at 0.0 percent, as its 2017 employer and employee contributions exceeded 2017 pension expenditures. In addition, North Dakota, Indiana, New Hampshire, Nebraska, Nevada, and Washington all had benchmark rates of return below 1.5 percent during 2017, which exposes them to less market-based pension funding risk.

Fiscal Risk Concluding Considerations

Overall, although all states will experience some economic downturn, different states are exposed to varying levels of fiscal risk across a variety of important categories, such as meeting budgetary needs, funding Medicaid, unemployment and pension benefits, and feeling the negative impact of COVID-19 across various economic sectors. It is important for state-level decision makers to understand these risk factors and which are most pressing situations for their own state in order to act accordingly. Although many states are facing an unprecedented level of fiscal risk due to the widespread effects of the coronavirus pandemic, there are steps that have been taken by states in the past to better prepare for recessions and economic uncertainty, which can also inform next steps as state decision makers lay out plans to be better prepared and more resilient in the future.

Exhibit 14: Average Fiscal Risk Score by Region

REGION	AVERAGE RISK SCORE
West	3.0
South	2.3
Midwest	2.4
East	2.8
U.S.	**2.6**

[19]Pew Research, "The State Pension Funding Gap: 2017," June 27, 2019.

[20]The Pew Charitable Trusts, "The Pension Funding Gap: 2017," https://www.pewtrusts.org/en/research-and-analysis/issue-briefs/2019/06/the-state-pension-funding-gap-2017.

From a regional perspective, the East has the highest risk with an average risk score of 2.8 whereas the South has the lowest risk with an average risk score of 2.1. On a state-by-state basis, Colorado and Rhode Island have the highest risk with a full score of 5. Arkansas, Utah, and Iowa have the lowest risk with a score of 0. Most states fall into the medium risk category with a score of 2 or 3.

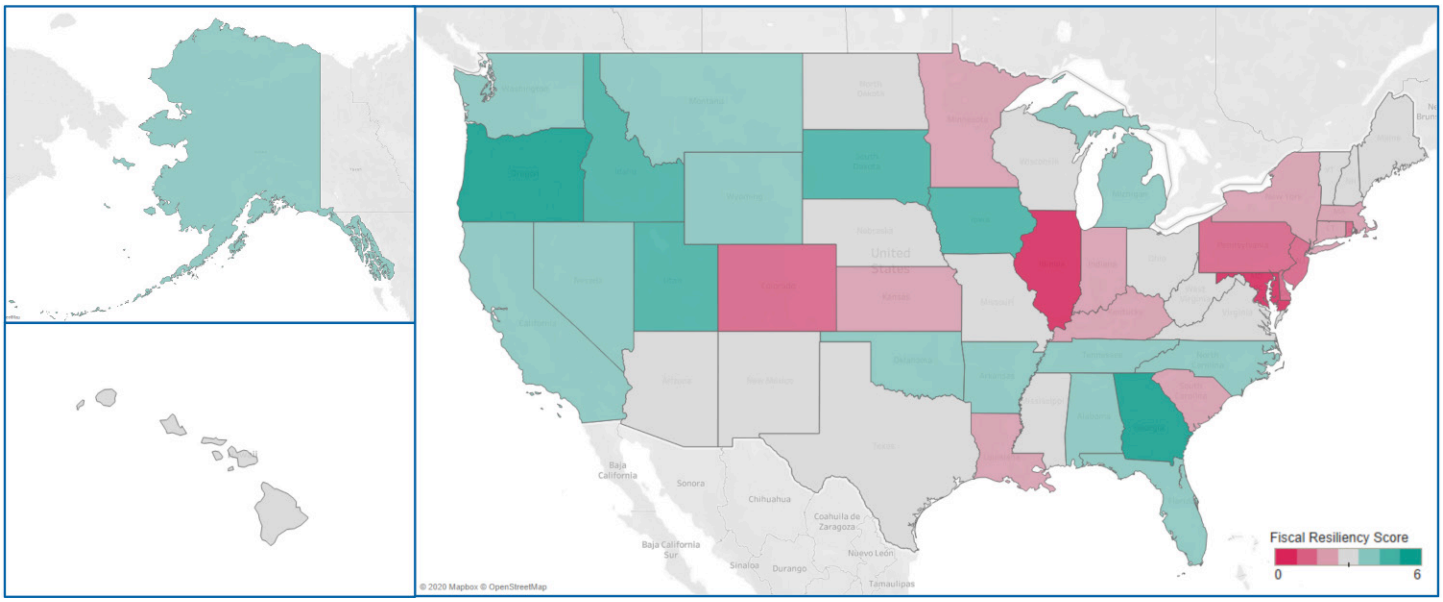
The Fiscal Resiliency to Recover from the COVID-19 Pandemic

All states are facing the same global pandemic, but certain states may be facing more severe fiscal impacts going forward. In addition, each state and region has unique characteristics affecting how they respond to and demonstrate their resiliency from the shock of COVID-19 to their economy. These include whether a state has savings, steady or diverse streams of revenue, and control of debt and spending. However, the coronavirus created obstacles that are distinct from a regular economic downturn with record high unemployment; never-before-seen levels of impact on certain economic sectors, such as food service, retail, and accommodations; mitigation and social distancing strategies for the virus causing shutdowns of economy; and overall infection or fatality rates that have caused permanent disruptions to our communities.

State-by-State Fiscal Resiliency Analysis

To gauge each state's ability to begin recovering from the COVID-19 pandemic, we examined six key components influencing fiscal resiliency. Our calculated resiliency score is a rating scale of 0 to 6 (0 being least resilient and 6 being most resilient), comprising six components. Resiliency measures include RDF balance, state debt servicing and pension funding coverage, UI solvency, Medicaid costliness, and levels of education spending per student. A state is assigned a score of 1 (more resilient) or 0 (less resilient), depending on the threshold under each resiliency component. The component scores are then summed to form the resiliency score for a given state. The map below illustrates resiliency scores by state.

Exhibit 15: Fiscal Resiliency Scores by State



We examined the resiliency factors to evaluate states' preparation for uncertain economic conditions, and the ability of states to react to the impacts of any downturn. We then put those resiliency measures into context with the challenges brought forth by the policies implemented to slow the spread of the coronavirus. The culmination of the factors helps to see where states fall in terms of level of preparedness and which states are in a better place to address the decline in revenue and increased expenditures related to COVID-19. Although states overall were more well-prepared for an economic downturn, compared to and owing to lessons learned from the Great Recession, several states were still ill-prepared for a recession, especially one of this magnitude. Unfortunately, the size and severity of the current pandemic and associated recession will only further amplify the fiscal hurdles the states must overcome.

Exhibit 16: Fiscal Resiliency Scores – Detail for Top Five Scoring States

STATE	RDF REVENUE COVERAGE SCORE (>=8.3%)	DEBT SERVICE COVERAGE SCORE (>=6)	PENSION LIABILITY FUNDING SCORE (>=70%)	UI TRUST SOLVENCY SCORE (>=1)	STATE MEDICAID EXPENSE SCORE (<=$3,000)	EDUCATION SPENDING GROWTH SCORE (>=0%)	RESILIENCY SCORE
Oregon	1	1	1	1	1	1	6
Georgia	1	1	1	1	1	1	6
Idaho	1	1	1	1	1	0	5
South Dakota	1	1	1	1	0	1	5
Iowa	1	1	1	1	0	1	5

Exhibit 17: Fiscal Resiliency Scores – Detail for Bottom Five Scoring States

STATE	RDF REVENUE COVERAGE SCORE (>=8.3%)	DEBT SERVICE COVERAGE SCORE (>=6)	PENSION LIABILITY FUNDING SCORE (>=70%)	UI TRUST SOLVENCY SCORE (>=1)	STATE MEDICAID EXPENSE SCORE (<=$3,000)	EDUCATION SPENDING GROWTH SCORE (>=0%)	RESILIENCY SCORE
Illinois	0	0	0	0	0	0	0
Maryland	0	0	0	0	0	0	0
Pennsylvania	0	0	0	0	0	1	1
New Jersey	0	0	0	0	0	1	1
Colorado	1	0	0	0	0	0	1

Note: States with the same resiliency score are sorted by average ranking across all categories.

Factors Contributing to Fiscal Resiliency

Fiscal Resiliency Factor 1: Rainy-Day Revenue Coverage

By the end of FYE2018, more than half of the states in the U.S. had grown their RDF to cover a higher percentage of their budget compared to before the Great Recession. In addition, 46 states have an automatic deposit mechanism and many states have increased their RDF caps. While this is a positive trend, only six states had RDF balances above the Government Finance Officers Association's recommended 16 percent of general fund expenditures. Budgets supplemented with robust RDF can navigate disasters and emergencies with fewer program cuts. During the pandemic, RDF have been used for many things including offsetting general fund revenue reductions, election preparedness, and small business support.

We calculated RDF balance resiliency by dividing states' remaining RDF balance as of the end of FYE2019 by their FYE2020 (pre-COVID-19) estimated general fund revenues. A resiliency score of 1 was assigned to each state with an RDF balance greater than or equal to 8.3 percent of pre-COVID-19 FYE2020 estimated revenue, representing roughly one month of revenue coverage.

As previously mentioned, several states increased the caps on RDF balance since the Great Recession. This approach of an increased reserve has paid off for some states in the wake of the COVID-19-related recession, especially for Wyoming and Alaska, covering 110.6 percent and 38.5 percent of general fund revenues, respectively. Strong RDF reserves may help these states offset the severe economic impact of declining energy tax revenues.

Notably, New Jersey, Pennsylvania, and Illinois face challenges associated with a minimal RDF balance of 1.0 percent of general fund revenues or less, in addition to a strong fiscal shock from infection rates from the coronavirus. At the other end of the spectrum, in addition to Wyoming and Alaska mentioned above, North Dakota, New Mexico, Texas, West Virginia, and California have the most robust RDF balances as a percentage of general fund revenues, all above 14.0 percent. North Dakota, as well as New Mexico, Texas, and West Virginia, all of which have natural-resource-dependent economies, benefit from a robust RDF balance compared to decline in revenues. In addition, although California is one of the states facing the most severe expected negative economic impacts due to COVID-19, its preparation through a strong RDF balance could help mitigate some of the pending challenges.

Fiscal Resiliency Factors 2 and 3: Debt Service Coverage Ratio and Pension Liability Funding

States make decisions on how much to finance large purchases for capital or long-term projects using debt in the form of municipal bonds. To determine whether states are maintaining a reasonable amount of debt, it is useful to compare annual state operating income to annual debt interest expense, known as debt service coverage.

We measure states' resiliency with respect to financing and coverage interest expenses by dividing a state's overall net operating income (excluding debt interest expense) by the state's annual debt interest expense. A resiliency score of 1 was assigned to states with annual net operating income greater than or equal to six times annual debt interest expenses, representing the ability to cover at least six years of interest expense based on current income.

Comparing the debt service coverage ratio across the regions, we found that the East region is in the riskiest position with respect to financing, whereas the South and West regions have relatively strong debt service coverage.

Examination of the capacity of the individual states to service their debt expenditures reveals a spectrum of strong and weak financial situations. Nevada, Iowa, Hawaii, Nebraska, and Wyoming have income coverage of at least 20 times their debt interest expense, as well as corresponding strong S&P ratings of at least AA+. On the other end of the spectrum, Alaska, Kentucky, Delaware, Vermont, and Pennsylvania have negative net operating income. In addition, many of the same states also have a more vulnerable debt to asset ratio indicating a more vulnerable financial position. A look of how states entered the pandemic is beneficial as we measure the impact COVID-19 will have on the states. The severe economic impact across various industries will lower the states' source revenues and hurt their ability to continue to fund the operation of state programs, make capital outlays, and meet debt obligations.

Pension obligations are another liability for consideration in the states' overall fiscal health. States fund their pension obligations through a combination of employee contributions, state contributions, and investment trust returns. Certain states may rely more heavily on investment returns to fund their obligations, which are tied to market risk and rates of return and are examined in the previous section on fiscal risk. In addition to investment returns for pensions, another important consideration with respect to pensions is the ratio of pension trust assets to total pension liabilities, or the pension funded percentage. This is an important measure of fiscal resiliency, as states with a higher pension funded percentage are in a much better position to cover their outstanding pension benefits obligations and can better withstand market fluctuations.

We measure pension funding resiliency by dividing each state's plan net position, or pension fund assets, by the total pension liabilities as of 2017. This captures the amount of outstanding pension liability that is funded by the current balance of the total pension assets. A resiliency score of 1 is assigned to states with a pension funded percentage greater than or equal to 70 percent.

Exhibit 18: Average Pension Funding Coverage by Region (Fiscal Year 2017) USD millions

REGION	LIABILITY (TOTAL PENSION LIABILITY)	ASSETS (PLAN NET POSITION)	PENSION DEBT (NET PENSION LIABILITY)	FUNDED PERCENTAGE
East	864,353	533,188	331,165	61.7%
Midwest	868,456	587,240	281,216	67.6%
South	1,211,802	905,951	305,851	74.8%
West	1,188,021	830,585	357,435	69.9%
U.S.	**4,132,631**	**2,856,964**	**1,275,667**	**69.1%**

To account for the impact of COVID-19, states would be hurt in two ways. First, the negative impact on state revenues (to varying degrees by state) would reduce the states' ability to generate operating income to pay debt obligations and other expenditures. At the same time, states may have to take on additional debt to respond to the challenge. This is particularly challenging for states that are already in a difficult financing position, such as Illinois and Kentucky, as they could face higher debt rates due to their low credit ratings, and they are already highly leveraged as it is. Overall, from a regional standpoint, we find that states in the West and South regions are the most resilient in term of funding of pension liabilities, while the East region is significantly below the national average.

Fiscal Resiliency Factor 4: Solvency of Unemployment Trust Funds

During any economic downturn, the loss of employment is expected to rise and filing of unemployment claims increases. Unemployment benefits are a federal-state partnership to provide benefits to covered workers unemployed involuntarily, and the payments are financed from a blend of resources from employer contributions, payroll taxes, and federal funds during extended periods of high unemployment rates.

Unemployment benefits for the employee vary across the states and vary by amount per week and duration of benefits. The unemployment benefit cost is mainly driven by the duration of benefit payouts and less by the weekly benefit. To intervene in the spread of the coronavirus, limitation of interactions of person-to-person contact has been the only known way to decrease the transmission. To reduce the intrinsic need for individuals to be in the workplace and spread the virus, unemployment was expanded to noninsured employees and restrictions lifted to provide augmented benefits to a larger portion of the workforce.

We measure resiliency with respect to UI using states' unemployment trust solvency value as of March 31, 2020. Unemployment trust solvency is calculated by the U.S. Department of Labor and is a measure of states' trust fund balance as a percentage of total annual wages (reserve ratio) compared to the average of the three highest rates of annual benefits paid as a percentage of annual wages (benefits cost rate) in the last 20 years. Under this approach, a solvency of 1.0 or higher indicates the ability to pay out unemployment benefits for one full year under average Great Recession conditions. A resiliency score of 1 is assigned to states with an unemployment trust solvency value greater than or equal to 1.0.

At the individual state level, Vermont, Oregon, Wyoming, Mississippi, and South Dakota are the top five states in terms of UI trust solvency as of the first quarter of 2020. At the other end of the list, California, Texas, New York, Illinois, Massachusetts, and Ohio are in the weakest position, with solvency rates below 0.5, indicating less than a half year of unemployment benefits funding, even during a more moderate recession.

Fiscal Resiliency Factor 5: State Medicaid Cost per Enrollee

As illustrated previously in this white paper, states' education and Medicaid spending make up a large portion of total general fund expenditures and have historically been the targets of budget cuts during periods of recession. During the COVID-19 pandemic, demands placed on state Medicaid programs have increased significantly, and these programs will be an important source of security for out-of-work Americans impacted by the current pandemic, particularly as COVID-19 also represents a significant public health crisis.

Studies have shown that recessions have significant adverse health impacts, particularly for people of color.[21] Lack of access to preventive health services and medical care can also make it challenging for people to resume working or successfully reenter the workforce, in the event of a medical condition or emergency. Programs such as Medicaid and the Children's Health Insurance Program (CHIP) can help mitigate these impacts and will be increasingly important in the wake of COVID-19 and employment challenges. As people lose their jobs due to the COVID-19-related recessions and lose job-based coverage, an increase in enrollment in Medicaid is anticipated. We measure Medicaid resiliency for states by calculating total state Medicaid payment per enrollee, adjusted by each state's healthcare-specific cost of living index. This measure captures both state-level efficiencies with respect to administrative expenses relative to benefits expenses (i.e., lower state admin costs lead to lower per-enrollee expenses), as well as the federal matching rate (i.e., FMAP), which keeps states' own Medicaid costs down. As more people enroll in Medicaid following a recession, this measure reflects average anticipated cost to states per enrollee. We calculated this metric as the state's spending on Medicaid benefits and administrative expenses for FYE2018 (net of federal matching), divided by the average number of Medicaid enrollees in 2017 and 2018 and adjusted by average annual cost index of healthcare in the state. A resiliency score of 1 is assigned to states with an average adjusted Medicaid expense per enrollee cost less than or equal to $3,000.

At the regional level, the South and West regions are in the best position to weather a substantial increase in Medicaid enrollment, with average state-funded costs below $3,000 per enrollee. The East region is in the least resilient position, with per-enrollee costs above $4,000, even after adjusting for the region's relatively high cost index.

Exhibit 19: Medicaid Enrollees and Spending by Region

REGION	AVG. MEDICAID ENROLLEES IN 2017–18	FYE2018 SPENDING PER ENROLLEE
East	15,046,550	$ 4,282
Midwest	11,447,300	$ 3,730
South	22,298,650	$ 2,465
West	17,779,150	$ 2,657
U.S.	**66,571,650**	**$ 3,293**

Managing the increase in costs for Medicaid is necessary but it is equally important to ensure that eligible people who need coverage can enroll, and that the process is efficient in administration. The Medicaid accessibility scoring shows which states are best positioned to provide comprehensive, accessible benefits under Medicaid, freeing up citizens from medical burdens or additional financial challenges as they attempt to stabilize their economic activity. The five states with the highest levels of Medicaid accessibility are Illinois, New Mexico, North Dakota, Oregon, and Washington, offering Medicaid expansion, mobile, online, and automated renewals, and not including a work or premium/cost-sharing requirement.

Fiscal Resiliency Factor 6: K-12 Education Budget Growth since Great Recession

During periods of recession, as states are faced with the difficult task of determining budget cuts, general fund education expenditures are often one of the main targets. As states were generally less prepared going into the Great Recession, including due to inadequate RDF balances, many states were forced to make significant spending cuts, including in K-12 education expenditures. We also know that the length of the recovery period differed across states. We can compare how well education funding levels have recovered across individual states as a measure of fiscal resiliency. The implication is that for states where education is already deeply unfunded, further budget cuts on education due to the pandemic would put the public education system into further fiscal distress, and therefore, be a less viable avenue for budget cuts. Therefore, going into the current COVID-19-related recession, states whose education expenditures have not returned to pre-2008 levels will not have the same levers available for making budget cuts this time around.

[21] Margerison-Zilko, Claire et. al., "Health Impacts of the Great Recession: A Critical Review." March 1, 2017. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4880023/pdf/nihms762681.pdf

We measure K-12 education spending resiliency by comparing per-student general fund expenditures on K-12 education in the most recent fiscal year, FYE2019, to inflation-adjusted per-student K-12 education expenditures prior to the Great Recession, in FYE2008. A resiliency score of 1 was assigned to states with per-student general fund K-12 education expenditures greater than or equal to inflation-adjusted per-student expenditure levels (i.e., per-student spending growth rate greater than or equal to 0.0 percent). From a regional perspective, the East and Midwest have both seen per-student K-12 general fund education expenditures grow by nearly 8 percent since FYE2008. In particular, the East region leads the list with an average spend of $6,800 per student. On the other hand, the South region not only saw a close to 6.0 percent decline in per-student K-12 education expenditures since the Great Recession, but it also has the lowest level of per-student spending by far at just around $5,000 per student.

Exhibit 20: Spending per Student by Region

REGION	FYE2008 K-12 ENROLLMENT	FYE2019 K-12 ENROLLMENT	FYE2008 SPENDING PER STUDENT	FYE2019 SPENDING PER STUDENT	PERCENT CHANGE
East	9,090,296	8,951,400	$ 6,311	$ 6,794	7.7%
Midwest	9,853,022	9,575,000	$ 5,429	$ 5,852	7.8%
South	18,293,265	19,639,100	$ 5,372	$ 5,064	-5.7%
West	11,975,554	12,397,100	$ 6,524	$ 6,569	0.7%
U.S.	**49,212,137**	**50,562,600**	**$ 5,891**	**$ 6,009**	**2.0%**

Fiscal Resiliency Concluding Considerations

Evaluation of how the states fared when measured by the six factors described above provides interesting insights into how prepared they were as the pandemic began and reveals areas of concern as the effects of COVID-19 continue into the long term. Regionally, the West is facing the largest revenue shortfall, as reported previously in the white paper, but still has the higher resiliency score of 4.5. The higher resiliency of the West can be linked to the reserves built up by those states. If the states utilize the full RDF balance to address the revenue shortfall, the fiscal gap is reduced to 8.5 percent, which is closer aligned to the East and Midwest regions.

Exhibit 21: Average Fiscal Resiliency Score by Region

REGION	AVERAGE RESILIENCY SCORE
West	3.8
South	3.4
Midwest	2.9
East	1.7
U.S.	**3.0**

Regionally, the West is facing the largest revenue shortfall, as reported previously in the whitepaper, but still has the higher resiliency score of 4.5. The higher resiliency of the West can be linked to the reserves built up by those states. If the states utilize the full RDF balance to address the revenue shortfall, the fiscal gap is reduced to 8.5%, which is closer aligned to the East and Midwest regions.

State and Federal Actions

States took a multitude of steps to support every industry sector negatively impacted by the pandemic. While all three branches of state government acted, including the judicial branch, which played an important role in adjusting court-ordered corrections mandates to potentially mitigate the spread of COVID-19 in corrections facilities, as well as assessing any COVID-19 impacts to children in foster care, In particular, the legislative and executive branches were most active, as exemplified by the volume of bills and executive orders produced to address issues brought about by the pandemic. Elections were rescheduled or restructured to be primarily mail-in; licensing requirements for healthcare jobs were loosened or made temporary; tax collection and deadlines were suspended or waived; barriers to unemployment benefits were lifted; telemedicine and telehealth services surged; and extra consumer protections helped ensure citizens did not lose access to housing or essential utilities as the virus threatened the financial security of citizens across the nation.

States also took quick action to mitigate risks of virus spread. Forty-two states issued a stay-at-home order at some point during the pandemic while the remaining eight states still placed, at a minimum, limitations on business and restaurant capacity. Lockdowns across the country lasted from 1-2 months as states encouraged citizens to follow the guidelines issued by the Centers for Disease Control and Prevention to prevent the spread of the virus. These phases are meant to test different industry sectors of the economy as they not only test the effectiveness of precautionary measures to slow the spread of the virus (such as requirements to wear masks, check temperatures, or provide barriers and six feet of space between customers), but they also test the resiliency and adaptability of businesses, many of which must still operate at reduced capacity until much later in the reopening period.

While the pandemic created an unprecedented situation, many rules of basic economics still apply and measures to prevent a multiplied contraction of the economy were addressed by Federal legislation. To date, Congress has enacted four appropriation actions to address COVID-19 but the third piece, the CARES Act has the greatest direct fiscal implications for the states. Among its many provisions, the legislation allowed states to increase the operational capacities of their unemployment offices, support telehealth policies and commit $1.25 billion or more from a Coronavirus Relief Fund (CRF) to assist their responses to the virus.

While the CRF did provide financial assistance to states to be used for expenditures related to the COVID-19 pandemic, states are not allowed to use these funds to address revenue shortfalls. States hopeful for flexibility in the requirements for the CARES Act direct allocation have found little relief in the current guidance from the US Treasury. For example, Alaska has had relatively low cases of coronavirus per capita and limited direct coronavirus expenditures, but Governor Dunleavy attributes low infection rates to the quick action taken to close the economy. The consequences of the economic shutdown are now demonstrated as record unemployment rates and decreased revenues are felt by the state and ineligible to use the CRF to address the fiscal gap.

To comply with the restriction for the CRF, states are examining how best to align and capture expenditures as related to the pandemic. **There is an active debate in Washington about a next tranche of emergency appropriations this summer, and which could include additional relief to states.**

Strategies for Recovery

States must always be prepared to protect their residents from disasters and emergencies of all kinds, and to react quickly and effectively when they occur. A state's ability to operate amidst an emergency with few program interruptions is essential to minimizing the loss of life during an emergency. As states continue efforts to reorganize and keep their residents safe, many are planning for a postpandemic, but not post-COVID-19, world. While all 50 states have started reopening in varying degrees, many state governments are developing contingency plans in case COVID-19 cases surge for a second time.

State leaders must effectively deploy short- and long-term strategies to recover from the fiscal impacts of the COVID-19 pandemic and prepare for future yet known disasters. The following strategies, compiled from historic and emerging state actions, provide key considerations for state leaders when developing a roadmap to recovery from assessing the current situation to designing next steps and implementing recovery plans.

Assessing the Situation

- State leaders could assess governance structures to identify any barriers preventing the state from timely and effective responses to evolving COVID-19 fiscal impacts. Key areas for assessment include reviewing budget policies and processes to allow for maximum flexibility and nimbleness to respond to evolving economic realities; assessing use and flexibility of rainy-day and disaster funds; and reviewing laws and precedents for emergency powers, such as sunset provisions, to ensure appropriate balances of flexibility, timeliness, and accountability.
- State leaders could evaluate forecasting processes to determine ability to develop and amend tax revenue forecasts and determine longer-term economic and workforce changes imposed by the pandemic.
- State leaders could assess the return on investment and impact for competing policies and priorities to help inform investment in recovery plans focused on public health and economic development, and reduce redundant regulations and agency reviews.
- State leaders could evaluate spend-to-date for pandemic response (i.e., establishing PPE inventory, hospital capacity, etc.) and begin assessing the investment cost for future preparedness for large-scale health crises.

Designing Next Steps

- State leaders could enhance local and regional collaboration for emergency response and economic recovery (i.e., the Western Pact governors announced they would identify indicators they would use to reopen their economies and the Midwestern Pact outlined their goals to develop a regional economic plan).
- State leaders could enable customized, local planning for industries most affected that boosts economic activity and investment through opportunities such as tax incentives, workforce training, regulatory adjustments, and industry diversification.
- State leaders could implement new, comprehensive revenue strategies that appropriately balance policies for tax changes, debt increases, federal funding and match requirements, and other revenue sources in anticipation of a multiyear recession economy.
- State leaders could examine laws and policies for in-person requirements and sunset or amend such requirements to minimize reliance on in-person activities and prioritize ongoing public health concerns. State actions to update regulations could be wide-ranging—from state governance (i.e., employee remote work capabilities, legislative activities) to eligibility determination for government services (i.e., unemployment benefits) and delivery of services eligible for government reimbursement (i.e., telehealth).
- State leaders could design options that improve accessibility to public health resources, such as the temporary examples found through executive orders released in response to COVID-19 (i.e., reform of medical licensure regulation, telehealth service availability, etc.).

Implementing Recovery Plans

- State leaders could extend and enhance COVID-19 Task Forces or other similar efforts to coordinate ongoing economic recovery and public health management initiatives. Examples of key Task Force activities may include establishing plans to create new revenue forecast projections using special sessions, forecasting groups, or other responsive forecasting means and monitoring data measures to inform recovery program effectiveness and further refine recovery strategies.
- State leaders could avoid risk-averse, incremental approaches to policy change and leverage opportunities to implement bold, data-driven strategies for economic recovery and provision of government programs.

Appendices

Risk Score Table

STATE	FYE2020 AND 2021 ESTIMATED REVENUE DECLINE	SCORE (<-8%)	AVG. MEDICAID SPEND INCREASE PERCENT	SCORE (>1.5%)	UI WEEKS FUNDING REMAINING	SCORE (<12)	ECONOMIC RISK SCORE	SCORE (>1.07)	PENSION BENCHMARK RATE OF RETURN	SCORE (>3%)	RISK SCORE	AVERAGE RANKING
Colorado	-13.0%	1	2.1%	1	5	1	1.12	1	5.2%	1	5	8.0
Florida	-6.9%	0	2.8%	1	4	1	1.15	1	3.9%	1	4	12.9
California	-14.0%	1	1.7%	1	2	1	1.10	1	1.5%	0	4	16.0
Oklahoma	-13.4%	1	2.0%	1	5	1	1.09	1	2.1%	0	4	16.4
Michigan	-17.2%	1	4.2%	1	20	0	1.07	1	3.5%	1	4	17.0
Ohio	-8.9%	1	3.5%	1	6	1	1.04	0	4.4%	1	4	17.4
Massachusetts	-9.5%	1	1.9%	1	4	1	1.05	0	3.0%	1	4	18.2
Rhode Island	-9.6%	1	1.6%	1	11	1	1.07	0	5.0%	1	4	19.4
Oregon	-9.1%	1	1.7%	1	31	0	1.09	1	4.2%	1	4	21.0
South Carolina	-6.0%	0	1.6%	1	10	1	1.10	1	3.7%	1	4	24.0
New Mexico	-16.0%	1	0.5%	0	8	1	1.09	1	3.3%	1	4	24.4
Nevada	-18.5%	1	1.7%	1	14	0	1.50	1	1.3%	0	3	20.2
New Jersey	-12.5%	1	0.9%	0	7	1	1.06	0	6.6%	1	3	20.6
Alaska	-32.5%	1	0.6%	0	17	0	1.09	1	4.2%	1	3	22.2
Washington	-15.4%	1	1.1%	0	6	1	1.10	1	1.3%	0	3	22.3
West Virginia	-6.9%	0	1.1%	0	3	1	1.09	1	3.4%	1	3	22.3
New Hampshire	-7.4%	0	3.8%	1	6	1	1.10	1	1.2%	0	3	22.8
Vermont	-9.8%	1	2.1%	1	38	0	1.16	1	1.7%	0	3	23.0
Illinois	-9.7%	1	1.5%	1	5	1	1.05	0	2.4%	0	3	23.2
Hawaii	-16.1%	1	0.6%	0	8	1	1.27	1	1.9%	0	3	23.6
New York	-8.1%	1	1.5%	0	2	1	0.98	0	3.9%	1	3	23.6
Pennsylvania	-6.8%	0	2.0%	1	11	1	1.06	0	4.4%	1	3	24.0
Alabama	-7.4%	0	1.9%	1	9	1	1.04	0	4.1%	1	3	24.2
Maine	-8.9%	1	1.5%	1	18	0	1.12	1	2.7%	0	3	24.4

Idaho	-15.4%	1	1.6%	1	32	0	1.09	1	1.8%	0	3	26.9
Wisconsin	-8.9%	1	1.9%	1	20	0	1.03	0	3.3%	1	3	27.4
Indiana	-8.9%	1	1.6%	1	7	1	1.06	0	1.1%	0	3	28.0
Arizona	-4.7%	0	1.6%	1	7	1	1.08	1	1.9%	0	3	30.0
Minnesota	-8.5%	1	0.6%	0	8	1	1.04	0	3.5%	1	3	31.4
District of Columbia	-8.7%	1	N/A	0	4	1	1.10	1	N/A	0	3	N/A
Wyoming	-26.6%	1	1.3%	0	23	0	1.14	1	3.0%	0	2	20.8
Tennessee	-6.9%	0	2.0%	1	12	0	1.14	1	2.4%	0	2	24.1
Kentucky	-5.4%	0	1.1%	0	3	1	1.06	0	3.6%	1	2	24.6
Texas	-7.2%	0	1.1%	0	2	1	1.08	1	2.0%	0	2	25.0
Missouri	-6.9%	0	2.9%	1	10	1	1.06	0	2.8%	0	2	26.7
Louisiana	-5.3%	0	1.1%	0	6	1	1.10	1	2.2%	0	2	27.8
Montana	-12.0%	1	0.8%	0	24	0	1.12	1	2.3%	0	2	28.8
Georgia	-6.9%	0	0.9%	0	4	1	1.04	0	3.3%	1	2	29.1
Maryland	-8.8%	1	1.1%	0	6	1	1.05	0	1.5%	0	2	29.4
Mississippi	-5.0%	0	1.0%	0	13	0	1.09	1	3.9%	1	2	30.0
Virginia	-6.9%	0	1.5%	1	7	1	1.05	0	1.9%	0	2	31.1
North Dakota	-8.9%	1	1.0%	0	10	1	1.06	0	1.0%	0	2	33.2
South Dakota	-8.9%	1	0.7%	0	9	1	0.99	0	2.6%	0	2	34.4
Delaware	-5.5%	0	0.8%	0	8	1	0.80	0	3.2%	1	2	36.6
Connecticut	-8.0%	0	0.8%	0	4	1	0.99	0	2.9%	0	1	31.6
North Carolina	-8.2%	1	1.5%	0	17	0	1.03	0	2.9%	0	1	31.8
Kansas	-8.3%	1	0.9%	0	19	0	1.05	0	0.0%	0	1	39.2
Nebraska	-8.9%	1	0.9%	0	22	0	1.00	0	1.2%	0	1	39.4
Arkansas	-4.8%	0	1.1%	0	25	0	1.06	0	2.8%	0	0	36.8
Iowa	-2.7%	0	1.4%	0	21	0	0.96	0	2.6%	0	0	39.8
Utah	-7.4%	0	0.9%	0	22	0	1.03	0	1.5%	0	0	41.0
U.S.		**31**		**24**		**33**		**25**		**21**	**2.6**	

Resiliency Score Table

STATE	RDF % OF REVENUE	SCORE (>= 8.3%)	DEBT SERVICE COVERAGE RATIO	SCORE (>=6)	PENSION LIABILITY FUNDED %	SCORE (>= 70%)	UI TRUST SOLVENCY	SCORE (>=1)	TOTAL STATE MEDICAID PAYMENT/ ENROLLEE	SCORE (<= $3,000)	EDUCATION GF EXP. GROWTH % FROM PRE-2008 LEVEL	SCORE (>= 0%)	RESILIENCY SCORE	AVG. RANK
Oregon	12.7%	1	18.4	1	83.1%	1	2.5	1	$2,410	1	8.3%	1	6	10.0
Georgia	10.7%	1	12.3	1	79.2%	1	1.3	1	$2,085	1	0.7%	1	6	15.5
Idaho	9.3%	1	15.4	1	91.3%	1	1.5	1	$2,095	1	-3.5%	0	5	13.5
South Dakota	10.0%	1	8.8	1	100.1%	1	1.8	1	$3,211	0	6.6%	1	5	14.5
Iowa	9.5%	1	31.5	1	82.3%	1	1.5	1	$3,020	0	2.0%	1	5	15.0
Utah	8.7%	1	6.0	1	90.3%	1	1.7	1	$2,490	1	-0.2%	0	5	17.7
Washington	6.9%	0	6.0	0	89.6%	1	1.2	1	$2,688	1	62.6%	1	4	18.3
Tennessee	5.6%	0	11.9	1	96.5%	1	1.0	0	$2,635	1	9.3%	1	4	19.0
North Carolina	5.0%	0	15.4	1	90.7%	1	1.4	1	$2,215	1	-6.5%	0	4	19.0
Nevada	7.5%	0	40.8	1	74.4%	1	1.5	1	$1,722	1	-19.7%	0	4	19.0
Michigan	10.4%	1	4.2	0	65.1%	0	1.1	1	$2,427	1	181.7%	1	4	19.3
Alaska	108.1%	1	-2.6	0	66.6%	0	1.7	1	$2,711	1	12.5%	1	4	20.3
Oklahoma	12.1%	1	4.8	0	77.9%	1	1.7	1	$2,893	1	-5.8%	0	4	20.3
Wyoming	135.0%	1	22.0	1	75.9%	1	2.3	1	$4,682	0	-100.0%	0	4	21.2
Arkansas	2.7%	0	19.9	1	76.9%	1	1.3	1	$2,251	1	-5.6%	0	4	22.5
Montana	3.0%	0	13.5	1	72.8%	1	1.5	1	$2,198	1	-8.6%	0	4	23.6
California	14.1%	1	7.1	1	68.9%	0	0.2	0	$2,973	1	12.7%	1	4	23.8
Florida	4.5%	0	17.3	1	79.3%	1	1.1	1	$2,460	1	-7.6%	0	4	23.8
Alabama	9.2%	1	2.9	0	70.9%	1	1.0	1	$1,938	1	-15.5%	0	4	26.6
Nebraska	6.8%	0	28.3	1	90.2%	1	1.8	1	$4,325	0	-5.8%	0	3	19.8
Maine	7.9%	0	10.6	1	81.9%	1	1.3	1	$3,590	0	-1.3%	0	3	21.7
West Virginia	16.0%	1	4.5	0	78.9%	1	0.5	0	$2,042	1	-2.9%	0	3	22.2
Vermont	14.0%	1	-0.3	0	64.3%	0	2.5	1	$4,650	0	165.8%	1	3	22.7
Arizona	6.2%	0	11.0	1	62.2%	0	0.9	0	$1,982	1	10.4%	1	3	22.7

Ohio	7.9%	0	8.8	1	80.1%	1	0.4	0	$3,093	0	10.5%	1	3	23.8
Mississippi	7.5%	0	8.8	1	61.6%	0	1.9	1	$2,165	1	-11.9%	0	3	24.0
New Mexico	24.0%	1	1.9	0	62.5%	0	1.1	1	$1,703	1	-8.8%	0	3	24.5
Wisconsin	3.8%	0	6.4	1	102.6%	1	1.0	0	$3,467	0	1.4%	1	3	25.2
North Dakota	32.0%	1	0.6	0	63.8%	0	1.2	1	$5,699	0	41.9%	1	3	26.5
Texas	16.6%	1	13.9	1	76.1%	1	0.4	0	$3,704	0	-16.2%	0	3	27.8
Missouri	6.6%	0	7.7	1	77.9%	1	0.9	0	$4,336	0	0.3%	1	3	28.7
Hawaii	4.6%	0	31.2	1	54.8%	0	1.3	1	$2,744	1	-30.4%	0	3	29.0
Virginia	3.5%	0	7.9	1	77.2%	1	1.1	1	$5,230	0	-7.6%	0	3	32.7
New Hampshire	8.8%	1	2.8	0	62.7%	0	1.0	1	$4,375	0	100.0%	1	3	27.9
Indiana	8.5%	1	3.5	0	65.0%	0	0.5	0	$3,262	0	42.8%	1	2	27.5
South Carolina	5.4%	0	3.3	0	54.3%	0	1.1	1	$2,023	1	-1.9%	0	2	28.7
Connecticut	12.9%	1	5.2	0	45.7%	0	0.5	0	$4,292	0	13.7%	1	2	29.0
Minnesota	5.1%	0	11.0	1	63.3%	0	0.9	0	$5,213	0	9.1%	1	2	30.2
Louisiana	4.2%	0	4.1	0	65.1%	0	1.3	1	$2,530	1	-13.9%	0	2	30.5
Kansas	0.0%	0	9.9	1	67.1%	0	1.5	1	$4,209	0	-10.8%	0	2	30.9
New York	2.6%	0	3.1	0	94.5%	1	0.4	0	$6,632	0	17.6%	1	2	31.9
Massachusetts	11.3%	1	1.5	0	59.9%	0	0.4	0	$4,418	0	6.0%	1	2	33.7
Kentucky	1.1%	0	-0.6	0	33.9%	0	0.6	0	$2,100	1	1.5%	1	2	36.3
Delaware	5.1%	0	-0.3	0	82.8%	1	0.7	0	$4,580	0	-1.1%	0	1	33.7
Rhode Island	5.0%	0	1.8	0	53.7%	0	0.9	0	$4,315	0	11.2%	1	1	34.2
Colorado	9.1%	1	0.5	0	47.1%	0	0.8	0	$3,418	0	-1.2%	0	1	34.2
New Jersey	1.0%	0	1.6	0	35.8%	0	0.7	0	$4,216	0	5.9%	1	1	38.7
Pennsylvania	0.1%	0	-0.2	0	55.3%	0	0.7	0	$5,481	0	13.9%	1	1	39.0
District of Columbia	N/A	N/A	N/A	N/A	N/A	N/A	1.2	1	$4,547	0	N/A	N/A	1	N/A
Maryland	4.7%	0	2.9	0	68.6%	0	0.9	0	$4,997	0	-9.7%	0	0	37.3
Illinois	0.0%	0	0.9	0	38.4%	0	0.4	0	$3,976	0	-10.5%	0	0	43.7
U.S.		**22**		**26**		**26**		**30**		**24**		**25**	**3.0**	

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