



MUNICIPAL BONDS: 2021 U.S. STATES OUTLOOK

STATE BUDGETS PLAGUED BY PANDEMIC UNCERTAINTY, BUT LONG-TERM RESILIENCY REMAINS INTACT

Fiscal year 2021 budgets carry little resemblance to prior years. With most state fiscal years beginning July 1, budgets have gone through multiple last minute revisions. While most states have adopted budgets, they are likely to make additional adjustments throughout the coming year with more transparency around the coronavirus pandemic, its impact on revenues, and amount and form of additional federal stimulus made available. We think states have flexibility to adjust finances accordingly and will continue to meet debt servicing obligations. States that entered the downturn with credit strength should be resilient while those that entered with material stress may see that stress compounded.

LOOKING BACK

Entering the pandemic, states held a record level 10% of revenues in reserves, at the median. Attention to building reserves following the 2008 recession has proven vital in supporting state spending since late March. Additional costs related to the coronavirus pandemic were largely supported by federal aid, while states used reserves to supplement lost revenue. Favorably, revenues were widely above budget as they moved into the pandemic. Ultimately, state revenue losses for the 2020 fiscal year ending June 30 ranged from as low as 2% to a high of 18%, annualized. Federal support in the CARES Act impacted states disproportionately, comprising anywhere from 5% of tax revenue to upwards of 70% for low population states.

LOOKING FORWARD

State budgets vary dramatically based on the nature of revenues, impact of the shutdown, reliance on tourism, timing and nature of latest budget projection, and the number of coronavirus cases. At the close of June, most states projected 2% to 25% revenue shortfalls in 2021. We expect they will manage these shortfalls utilizing reserves, internal borrowing, federal CARES Act funding, additional federal stimulus and expense cuts. For most, this can be done without the borrowing externally. Tourism dependent states (including New York, California, Hawaii, and Nevada) are experiencing greater revenue shortfalls, as the sector will be slower to regain momentum.

As such, reliance on another round of federal stimulus is more significant. Key revenue sources for states include:

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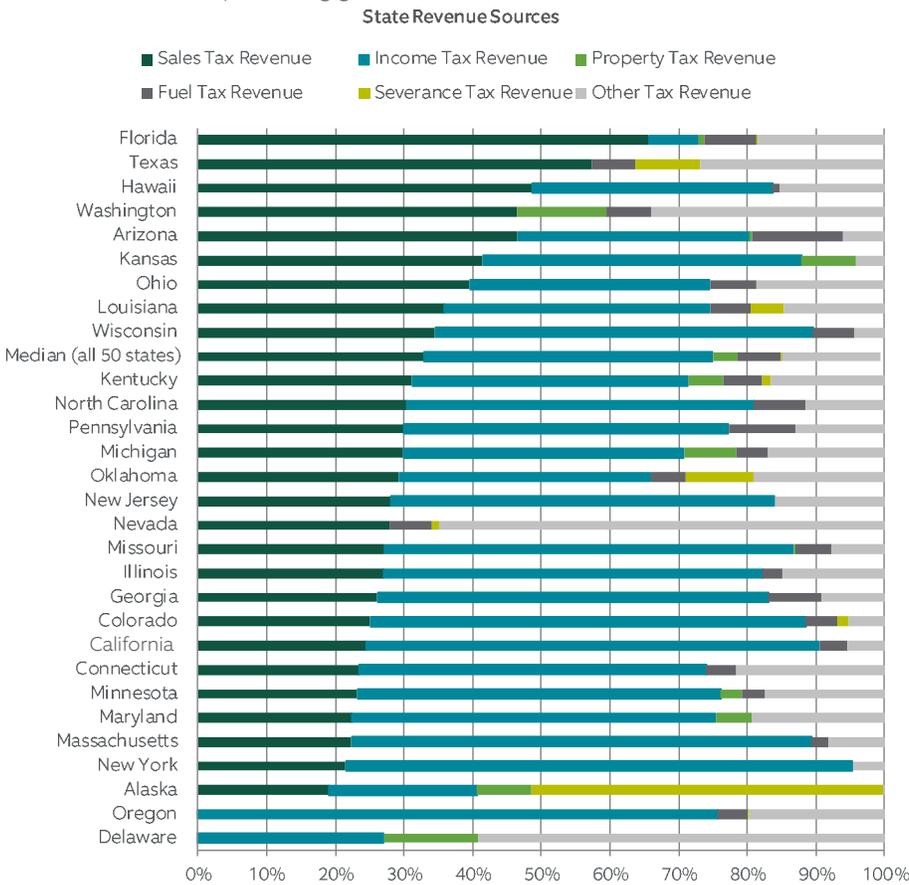
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- **Income taxes:** Unemployment in April and May was 9% to 23% across states. While the impact of reduced income tax collection will be significant, we note that unemployment benefits are taxed as ordinary income and serve to support state budgets as well as individuals. While states reported massive declines in April tax revenue, the majority of that is attributable to the delay in 2019 tax filings. Much of this April loss will be made up in July.
- **Sales taxes:** After a large drop in retail sales in April, sales soared a record 18% in May with additional growth expected in June. As of June, sales remain down 8% since February. Sales tax declines are greater in tourism dependent states.
- **Corporate taxes:** At between 0% and 20% of budgets, corporate taxes will also see a hit as profitability falls.

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EXHIBIT 1: STATE REVENUE BREAKDOWN: A WIDE RANGE

The outlook for states can be somewhat dependent on their sources of revenue. Tourism dependent states including New York, Hawaii, California, and Nevada rely on sales taxes and are experiencing greater revenue shortfalls.



Source: Merritt Research Services

State budgets are impacted by uncertainty around scale and timing of additional federal support as well as lack of transparency around the path of the pandemic. State approaches vary. New Jersey has extended the current 2020 fiscal year through September in hopes of gaining more clarity. Pennsylvania has adopted a shorter five-month fiscal year. Kentucky has implemented a single year budget as opposed to the normal two-year budget. Other states passed budgets that assume an additional degree of federal support, but include trigger cuts in the scenario no support is provided. Others have maintained existing outdated budgets, waiting for more clarity before implementing budget changes. Budget solutions include:

- **Second round of stimulus:** Federal support has always been a key component of recovery when entities are hit with force majeure events. Congressional agreement on a second round of municipal stimulus will be a game changer for state and local governments. We expect that next round stimulus will, at a minimum, mirror the \$150 billion included in the CARES Act passed in March. Absent stimulus, many budgets will require additional expense cuts, layoffs, furloughs and salary reductions. Though another round of support may not fill all budget gaps, it would support continuation of key programs and employment, supporting more rapid economic activity. The next stimulus package may be voted on in early August.
- **Use of reserves:** The strength of liquidity and reserves has allowed most states to avoid otherwise dramatic budget cuts or borrowing at somewhat punitive rates during the height of market turmoil. Many will tap reserves again, and they may deplete reserves absent federal stimulus by the close of 2021. Prudent budgeting is important in order to rebuild reserves in future years.
- **Expense cuts:** Most states have implemented expense cuts in the current and upcoming fiscal years, though not all. Georgia has asked all states agencies to plan on a 10% expense cut, while Illinois has ratified a budget that holds spending flat from the prior year budget.
- **Tax increases:** While not a direct result of the pandemic, both California and Illinois will include a referendum on the November ballot to raise taxes. Illinois proposes moving from a flat to a progressive tax system and raising rates for higher earners. California aims to open up Proposition 13, allowing large commercial and industrial properties to be reassessed each year at market value, potentially adding up to \$12 billion in local tax revenue. California also temporarily raised taxes on large businesses in the 2021 budget. Georgia and Massachusetts had planned to decrease the tax rates this year. One or both may be postponed.
- **Borrowing:** Intra-year liquidity borrowing is commonly utilized by states to smooth lumpy revenue streams against more consistent expense distribution. States' use of these liquidity support vehicles is not viewed negatively when used to stabilize day-to-day operations. However, borrowing long-term to fill short-term budget gaps, without balancing against other measures like use of reserves or expense cuts, is a sign of unsustainable governance and can create a disproportionate financial

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hang-over post crisis. At this time, Illinois is the only state to commence this borrowing for a period of longer than one year, and has tapped the bond market as well as the Federal Reserve’s Municipal Liquidity Facility. New Jersey is also seeking to balance the current budget with long-term borrowing.

States are adequately positioned to make required adjustments and continue to meet all debt servicing obligations

CONCLUSION: STATES WILL CONTINUE TO MEET DEBT SERVICE OBLIGATIONS

Until the pandemic is behind us, uncertainty remains. Continued budget adjustments will be required throughout the year. States are adequately positioned to make required adjustments and continue to meet all debt servicing obligations.

State	2021 Budget Outlook	Recession Resiliency
	Under prior year standards of budget balance, where same year revenues match expenses within 2%, almost no states are reporting a balanced budget. Below we outline the 2020 fiscal year and plans for the 2021 fiscal year .	Resiliency measures the state’s ability to manage the current economic downturn without extraordinary measures like excessive external borrowing, new taxes, pension holidays or punishing expense cuts. Additional federal support (at least equal to the amount received under the CARES Act) is assumed in the current resiliency score. Challenged resiliency does not indicate inability to pay debt service.
Alaska	Alaska closed the 18% budget gap of 2020 with a draw from the state’s ample reserves. The state will continue to spend down reserves in addition to cutting \$210 million from education and other services. The state does not plan to borrow to fill gaps at this time.	Healthy: After depleting budget reserves years prior, Alaska passed legislation to draw down its Permanent Fund (the state’s Oil Endowment which historically made distributions to residents) earnings reserve account to fill budget holes. Alaska maintains a balance in the Permanent Fund at over seven times the annual budget. Though short-term resiliency is very strong, continued dependence on reserves to plug budget gaps will pressure the rating in the longer-term.
Arizona	Arizona is projecting a budget gap of \$638 million for 2020 and a gap of \$462 million in 2021. With pressure on meeting teacher salary increases, the state is exploring options to close the gaps, including \$973 million in reserves, unused federal stimulus, additional federal aid, internal borrowing and spending cuts. The state is well positioned to achieve balance under current expectations	Moderate: Depletion of reserves is possible in the coming year. Longer term, the state maintains adequate funding of the pension, low fixed costs and moderate revenue volatility. It remains moderately positioned to manage through the pandemic.

Sources for introduction text and table: Northern Trust Asset Management, state budget and performance documents, CAFRs, Merritt Research Services, Moody’s Investors Service, Standard and Poor’s.

State	2021 Budget Outlook	Recession Resiliency
California	After a pullback in spending, total revenues were just over 5% below spending in 2020, requiring the state to utilize budget reserves, leaving June 30 projections at \$17 billion of reserves remaining. For the coming year, the legislature passed a budget increasing taxes on large businesses and implementing \$14 billion of trigger cuts to fill a \$19 billion (18%) budget gap. The trigger cuts are targeted at state workers and higher education, and will be deployed if federal stimulus isn't provided.	Challenged: California's fiscal stewardship post-recession led to strong financial recovery. The state is adequately positioned for a normal downturn but may face greater economic stress in this more severe downturn. Revenues are dependent on capital gains, high earners and an elevated level of tourism. While fixed costs are moderate compared to other states, pension funding is well below pre-2008 recession levels. The state needed to increase taxes to help fill the 2021 gap.
Colorado	Colorado expects revenues to fall 5% under budget in 2020, which it expects to close with expense cuts and reserves. The state anticipates a 10% revenue decline in 2021. Absent more federal aid, Colorado plans to close the gap with expense cuts, reserves, transfers into the general fund, and lower pension contributions below tread water. The 2021 budget shows a reduced but still adequate reserve of 5.4% at year end.	Moderate: Colorado's budget flexibility is limited due to state statues on taxation, and tourism weakness will have a material impact on revenues. However, fixed costs are moderate and historic revenue volatility is manageable. The state is well equipped with reserves to manage the current downturn.
Connecticut	Balanced: Connecticut is projecting deficits of 4.8% of expenses for 2020 and 11% for 2021. Personal income taxes and sales taxes represent the largest variance. The state will be forced to draw reserves, leaving a balance of \$1.9 billion. That is insufficient to cover the estimated 2021 deficit of \$2.2 billion. The state expects additional federal funds to make up the difference.	Challenged: We expect the state to deplete reserves in 2021 and additional budget cuts may be required. Connecticut is burdened by exceptionally high fixed costs (almost 50% of the budget, largely due to pension obligations), making additional cuts challenging and limiting resiliency. It has a volatile progressive income and sales tax base..
Delaware	Latest estimates are for a near 9% budget deficit for 2020. While the budget has yet to be enacted, the state projects a near 7% decline in revenues for 2021. The state expects to fill the gaps with federal aid and reserves.	Healthy: Delaware projects an 11% reserve level at the end of 2021. Moderate volatility, adequately funded pension, and manageable fixed costs at 13% support the state's resiliency rating.
District of Columbia	The district expects 2020 revenues for fiscal year ending September to be 7.4% under budget. The gap will be filled with reserves and expenditure cuts. While still early, the district is projecting revenues to fall 15% short in 2021, which will be addressed with reserves, federal stimulus and expense adjustments..	Healthy: The district is well positioned to handle the current downturn, as they entered with strong reserves at 38% of budget. Fixed costs are manageable and the pension is fully funded. Revenue volatility is moderate because of dependence on tourism.
Florida	The state is likely to face a 5-6% 2020 shortfall, which it expects to fill with CARES Act federal aid. The governor cut \$1 billion in costs by veto before signing Florida's \$34 billion 2021 general fund budget. Any 2021 potential shortfalls will be met with federal stimulus and the state's ample reserves of \$4 billion.	Moderate: The state doesn't have an income tax. The volatile sales tax funds approximately 75% of its budget with a 12% reserve to offset volatility. The state has reduced debt by more than 20% since 2015 has a well-funded pension (84% of liabilities). The state's fixed costs are among the lowest at just 5.9% of operating revenue. The budgeted pension payments are below the level needed to maintain the pension funded status. To maintain the current funded status, fixed costs would rise to 6.3%, still very manageable.

State	2021 Budget Outlook	Recession Resiliency
Georgia	Georgia's moderate 2020 budget gap will be filled with reserves and federal aid. The 2021 budget includes a 10% cut across state agencies, the largest since the 2008. We expect the state to use \$250 million in reserves. Of the \$2.2 billion in cuts, \$1 billion will come from education.	Healthy: Georgia derives resiliency from moderate revenue volatility and moderate fixed costs at 12%. Reserves at the beginning of fiscal year 2021 equate to \$2 billion, or 7% of the budget.
Hawaii	As a highly tourism-dependent economy, Hawaii is experiencing higher than average unemployment. Budget projections are not yet available, but the state is likely to have a 15% revenue shortfall in 2020 and 17% in 2021. Federal stimulus payments (10%) and reserves will help fill gaps in 2020, but expense cuts are likely required in 2021. Pension contributions are below what's needed to maintain the current funded status, weakening the already severely underfunded system.	Challenged: Hawaii's above average revenue volatility and very high fixed costs (at near 30% of expenses) reduces flexibility and make it more vulnerable in the current downturn. Reserves of 12.5% at the close of 2019 was above average, but provides only a moderate cushion to hedge elevated impact from economic downturn and loss of tourism.
Illinois	Entering the pandemic with existing budget holes and minimal reserves, the state's budget is far from balanced in 2021. The governor put forward a budget that holds spending flat. The 33% revenue gap will be met with borrowing through general obligation bonds and the Federal Reserve's municipal liquidity facility at somewhat punitive rates.	Very Weak: The effects of the pandemic and dependence on borrowing to fill budget gaps will compound the already unsustainable debt, pension and budget position facing the state. It will further limit fiscal flexibility to fund core government, education and public safety
Kansas	Kansas projects an 11% budget gap in 2020 which was filled with use of the budget balance, federal stimulus and minimal expense cuts. For 2021, the state expects a moderate 6% revenue shortfall and plans to use the remainder of reserves to fill the 2021 gaps.	Moderate: The state plans to fill gaps with, internal borrowing, reserves and federal stimulus. Absent more stimulus or expense reductions, reserves will likely be depleted by the close of 2021. The state does not anticipate a need to borrow externally at this time.
Kentucky	Kentucky's budget was revised down 3.5% for 2020. Usually operating on a two-year budget, Kentucky instituted a single-year budget for 2021. It plans for a 4% revenue shortfall, and now intends to use the \$1.6 billion from federal stimulus. Even prior to the current downturn, the state materially underfunded its pension system and did not grow a reserve.	Challenged: The state had a lagging economy, above average unemployment, lack of reserve cushion, unfunded liabilities and high fixed costs heading into the pandemic. Kentucky's ability to restore reserves and resiliency is very low relative to other states. Reversing existing poor pension funding levels has failed, despite solid efforts to reform by the legislature.
Louisiana	Louisiana projects a modest 1.4% 2020 budget shortfall, using federal stimulus to address higher costs. For 2021, the state expects a 9% revenue decline versus the prior year budget. The state expects to use reserves, remaining federal stimulus CARES Act funds, and expense cuts to address this gap	Challenged: Revenue volatility is moderate, but the state is susceptible to the energy industry. A reserve of 3% is below average, but it should be sufficient as long as budget estimates are accurate. Fixed costs of 11% are above average, but manageable

State	2021 Budget Outlook	Recession Resiliency
Maryland	Maryland reported one of the lower unemployment rates in April, at just below 10%. Budget estimates project a modest 4% gap in 2020, which the state will fill with reserves and federal stimulus. The state projects a 10% gap in 2021, which will likely be addressed with a mix of reserves, stimulus and expense cuts.	Moderate: Absent more federal aid, the reserves at the close of 2021 are slated to be less than 1%. Fixed costs are somewhat high at 17% of 2020 budget, which does limit flexibility but also reflects a conservative policy to amortize debt over 15 years. Historical revenue volatility is moderate and supports long-term resiliency.
Massachusetts	The state's 2020 budget gap is above average, projected up to 14%. Revenue losses in 2021 range from 6% to 25% depending on source. Massachusetts will use projected June 30 reserves of \$13.5%, and federal stimulus to address the deficit. The state continues to provide insufficient annual funds to the pension system, resulting in a 60% funded level.	Challenged: Massachusetts fixed costs are elevated at more than 20% of the budget. Costs would be higher but the state chose not to make sufficient pension payments to maintain funded status. Revenue volatility is higher than other states. Reserves were healthy entering the pandemic, but could be depleted quickly under the more aggressive revenue loss scenarios. A key resiliency weakness is the continual underfunding of the pension system, even in strong economic times.
Michigan	Michigan is experiencing one of the highest pandemic unemployment rates in the nation. The state projects a 13% deficit in 2020. For 2021, Michigan expects a gap of \$6.2 billion, greater than 25% of the budget. While reserves were strong at 19% of budget, they are insufficient to cover the revenue shortfall. Expense cuts will be required, absent stimulus. The state has made pension payments in excess of tread water in recent years, which allows some greater flexibility now.	Moderate: Michigan will have budget challenges from the current pandemic. Good reserves along with federal aid should be supportive of projected budget gaps. The state's moderate fixed cost burden, adequately funded pensions and budget flexibility supports longer-term health and resiliency.
Minnesota	Minnesota is projecting an aggregate 7.5% revenue decline for the two-year budget ending in 2021. The state's budget reserves and CARES Act federal stimulus are sufficient to cover the impact without excessive expense cuts. Absent additional stimulus, reserves are expected to be 10% of the budget at the close of 2021.	Moderate: Reserves of 10% provide a moderate financial cushion. Minnesota has elevated volatility, given their dependence on a progressive income tax rate. Fixed costs are low at 5% of budget, and will increase modestly due to increases in pension cost as a result of a recent pension reform.
Missouri	Missouri projects a \$1 billion (11%) budget gap in each of the 2020 and 2021 fiscal years. Reserves of \$2.7 billion are supportive of the gaps, even absent additional stimulus.	Healthy: The state has below-average fixed costs, pension liabilities and revenue volatility. Reserves of 16% provide a sound cushion to manage the current downturn
Nevada	Nevada's tourism and gaming concentration resulted in a 28% unemployment rate in April. The state is projecting an 18.4% budget gap in 2020. The state depleted its reserves and cut expenses by 4% to address what was not supported by federal stimulus. Nevada expects a similar result in 2021, with revenue underperformance at a staggering 25%. Even with assumed federal funds, large cuts are required.	Challenged: Fixed costs are moderate and reserves were adequate for a slowdown. Pension funding at 75% is about average. The pandemic's impact and Nevada's tourism dependence makes the state more vulnerable in the coming years. The state requires additional federal funds (above assumed stimulus) to avoid challenging budget cuts. For this reason, the state's resiliency moved from moderate to challenged for 2021.

State	2021 Budget Outlook	Recession Resiliency
New Jersey	Revenues are projected to fall 7% in 2020, resulting in a shortfall of \$1.2 billion (3% of budget). The revenue weakness will continue in 2021, contributing to a projected budget gap of 25%. The governor proposed expense cuts of \$1.3 billion, including deferring the already inadequate pension contribution. He requested to borrow \$5 billion in general obligation bonds and asked for approval to tap the \$9 billion it is eligible to borrow in the Federal Reserve's municipal liquidity facility. If not approved by the legislature, the governor estimates severe layoffs and increasing taxes, including revisiting the Millionaire's Tax that failed prior to the start of 2020.	Very Weak: The history of budget imbalance and the low reserve fund balance heading into the pandemic will require additional borrowing. The proposed borrowing and request to use the Fed's municipal liquidity facility will compound the existing high debt burden and severely underfunded pensions, now at less than 40%. New Jersey's resiliency remains very weak. Flexibility to manage through the pandemic is low, and revenue recovery to 2019 levels is likely to take several years.
New York	New York was the epicenter of the pandemic in the U.S. and was quick to shut down. The state has a phased reopening across regions starting early June. The fiscal 2020 year ended March 31, with revenues close to budget, so the pandemic effect will mostly affect the budget year ending March 2021. The 2021 budget was passed with revenues projected to be down 10%, a gap to be filled mostly with unspecified expense cuts. The potential for increased federal funding will lessen the need for cuts. The budget increased authority to allow for expense cuts throughout the year to adjust to falling revenues. The state is expects to maintain stable pension contributions.	Moderate: New York has a history of resiliency in periods of crisis and it will rely on strong governance to manage through the downturn. Reserves going into 2021 are 8% of the budget, not enough to fill the budget gap. The state will rely mostly on cuts to close the budget gap, as it plans to maintain reserves at the end of 2021 fiscal year at 6%. Revenue volatility is above average due to reliance on a progressive income tax and the financial services sector. Fixed costs are above average, but the pension liability is one of the lowest in the nation. The state issued \$4.5 billion in short-term notes due to the delay of the income tax deadline.
North Carolina	Now in the midst of a two-year budget to end next year, the governor may make revisions in July or August. At this time, projections are for a 6.6% revenue decline in 2020 and 10% in 2021. Reserves, at 27% of the budget, will allow the state significant flexibility to manage the revenue loss.	Healthy: Strong reserves provide a healthy cushion to support the current downturn. States also have access to other reserves that provide additional liquidity. Fixed costs are low and the state consistently funds its pension.
Ohio	For 2020, revenues are projected to fall 2.3%. The governor proactively established a hiring freeze and cut appropriations across Medicaid and K-12 education to balance the budget. These cost cutting actions leave the \$2.7 billion reserve intact to address the estimated \$2.4 billion shortfall for 2021.	Moderate: The state has a history of prudent financial management and healthy cushion of reserves heading into pandemic. The state's below average debt and pension liabilities allow for below average fixed costs of 6.8%. Ohio has financial flexibility and is adequately positioned for coronavirus downturn.
Oklahoma	Revenues for 2020 are tracking 6% below budget and the gap will be closed with reserves. The legislature passed a budget for 2021 with an estimated 17% drop in revenues. The budget gap is mostly filled by reserves, 4% expense cuts to most agencies and redirection of other funds. The state had been making additional pension payments to reduce its pension gap, but those extra payments will be reduced in 2021.	Moderate: Revenues for 2020 are tracking 6% below budget and the gap will be closed with reserves. The legislature passed a budget for 2021 with an estimated 17% drop in revenues. The budget gap is mostly filled by reserves, 4% expense cuts to most agencies and redirection of other funds. The state had been making additional pension payments to reduce its pension gap, but those extra payments will be reduced in 2021.

State	2021 Budget Outlook	Recession Resiliency
Oregon	Oregon started the current its two-year budget enacted in 2019 with a modest deficit. Now revenues are likely to be about 8% lower than estimates. The budget gap will be filled with expense controls and use of reserves, at near 15% of a single year expenses.	Healthy: Oregon’s fixed costs are a moderate 8% of the budget and pensions are funded above average. Strong reserves and internal liquidity will support Oregon through the downturn. Additional stimulus should allow the state to maintain reserves into 2022.
Pennsylvania	The state passed a five-month budget that will run through November 30. The estimated 2021 revenue shortfall is 12%. The governor plans to address any shortfall after more clarity on revenues and potential additional federal stimulus.	Challenged: Pennsylvania benefits from a well-diversified revenue stream. It maintains limited reserves, instead relying on intergovernmental borrowing from the Treasury. Fixed costs are high due to high debt and growing pension contributions. The lack of reserves and growing pension contributions make the state highly vulnerable to sudden economic shocks such as the pandemic.
Texas	Texas took longer to implement stay-at-home order and was quicker to reopen. Through February of this year, revenues were tracking 11% above budget. They are now are tracking 5% below budget and expected to remain so through year-end. The governor has asked agencies to cut expenses by 5%. Overall, the budget cap is projected to be closed with expense cuts, strong reserves projected at 15% of budget at the close of 2020, and federal aid.	Healthy: Generally conservative budget estimates, low revenue volatility and strong reserves position the state well. While the state is still dependent on the energy sector, the economy has become more diversified to reduce revenue volatility. Fixed costs are moderate at 8.2%, but low pension payments will likely increase the pension’s unfunded status.
Washington	Washington’s revenue is highly dependent on sales taxes. For the two-year budget ending in 2021, we expect revenue underperformance of 10% or more. The state is asking departments to cut budgets 15%. The state’s healthy reserve position, along with expense cuts, will support the state in the coming year.	Moderate: Healthy reserves of 14% provide a good cushion to support volatility in the sales taxes and revenue from its international export industry. Fixed costs are manageable at 10%, incorporating a high debt load and well-funded pensions. The state does not expect to borrow to fill gaps.
Wisconsin	The state has not yet amended its two-year budget ending in 2021. Revenues at 5% over budget through February will serve to buffer declines in the last quarter of 2020. In addition, the governor ordered a 5% spending cut, including hiring and pay freezes. Projections for revenue underperformance in 2021 are about 10%. While reserves are modest, the state expects to fill gaps with federal stimulus and expense controls	Moderate: The state is adequately positioned for a downturn with cash reserves of 8.4% entering into the downturn, low volatility, low fixed costs and strong pension funding.



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