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Fiscal resilience: Tools to manage state budgets in an age of uncertainty

When the next economic downturn comes, states will need to be more deliberate about how they manage expenditures and revenues than ever before.

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An emerging theme across US states—and many regional governments in developed economies—is persistent fiscal uncertainty. Demographic change, spiraling healthcare inflation, and underfunded liabilities have placed states under unyielding fiscal pressures. A more complex and dynamic economy only serves to exacerbate these challenges. Global trade patterns, increased labor and capital mobility, and new technologies are making it harder for states to plan for the long term. In the past ten years, there has been no shortage of budget office paralysis and legislative gridlock owing to these uncertainties.

Unfortunately, paralysis and gridlock are events that few states can afford, as business cycles are notoriously difficult to predict. Too often we see these kinds of challenges taking priority over "no regrets" moves that every state could take right now to boost their resilience. Despite the fact that higher-than-expected revenues led to a generally positive fiscal 2018—and at least 30 states put money away to cover future liabilities—most states are woefully unprepared for the next economic downturn.[1] Nearly half, for example, have less money saved in rainy day funds than they did prior to the Great Recession.[2]

It is therefore prudent to routinely and actively prepare for recession, whenever it may come. In making those preparations, the lessons of recent history are a useful reference point. At the peak of the most recent recession, US state tax revenues fell 17 percent below their level one year earlier, and personal income taxes were 27 percent lower. While increases in federal transfers helped soften the blow, states accumulated $500 billion in budget shortfalls from 2009 to 2012—more than double the amount in the previous recession.[3] In response, some 40 states enacted tax or fee hikes between 2008–09 and 2010–11.[4] Among the hardest hit expenditure areas were K–12 and higher education. The impact included cancelled school breakfast programs, cuts to universal pre-K, and reductions in adult-literacy programs.[5] Healthcare, employee benefits, and social programs also took a hit in most states.

In this article, we explore a range of tools states can use to assess their readiness for—and then prepare for—fiscal uncertainty. These include opportunities to elicit more value from each dollar spent, optimize revenues, and control for volatility (Exhibit 1). Across these goals, we focus on three tools in particular: activity-based budgeting to increase transparency, digitalized services and processes, and advanced analytics to inform better decisions. Together, these tools offer the chance to significantly boost employee productivity, offsetting the impact of job cuts made over recent years. No doubt, implementation is a complex task given the number and diversity of stakeholders involved. However, the alternative risks more disruptive interventions when fiscal imbalances worsen.

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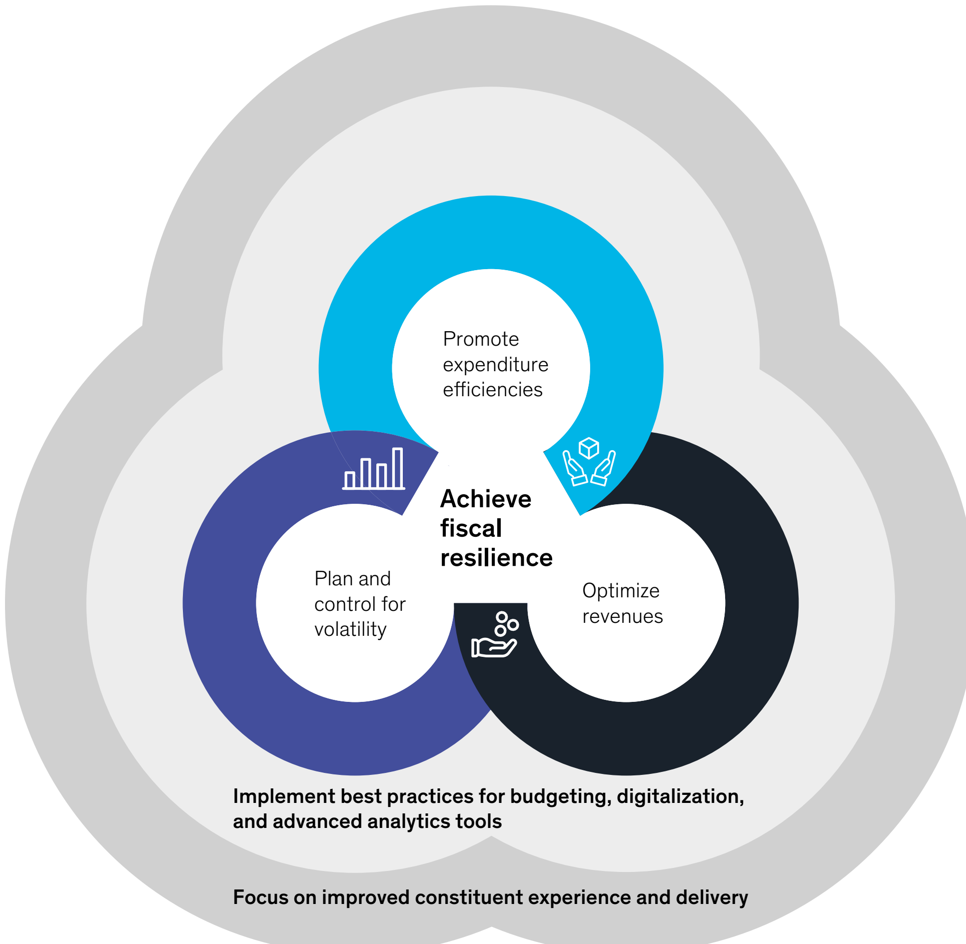
1 *The fiscal survey of states*, National Association of State Budget Officers, Fall 2018, nasbo.org.
2 Barb Rosewicz, Jonathan Moody, Daniel Newman, "States make more progress rebuilding rainy day funds," Pew, August 29, 2018, pewtrusts.org.
3 Tracy Gordon, "State and local budgets and the Great Recession," Brookings Institution, December 31, 2012, brookings.edu.
4 Gordon, "State and local budgets and the Great Recession," December 31, 2012.
5 Nicholas Johnson, Jeremy Koulish, and Phil Oliff, "Most states are cutting education," Center on Budget and Policy Priorities, February 10, 2009, cbpp.org.

Exhibit 1

States can use a multipronged approach to build fiscal resilience.



Building resilience through expenditure reductions

For the past several years, three categories of spend—primary and secondary education, Medicaid, and higher education—have contributed nearly two-thirds of state general fund expenditures.[6] The importance of these expenditures, in terms of impact on both budget and everyday life, means many service transformations have focused on these three areas. However, there are many "no regrets" efficiency initiatives where states have made significant progress (Exhibit 2). Many of these are enabled through recent innovations in technology and management techniques, allowing states to provide better citizen outcomes at lower costs.

Optimizing revenue collection

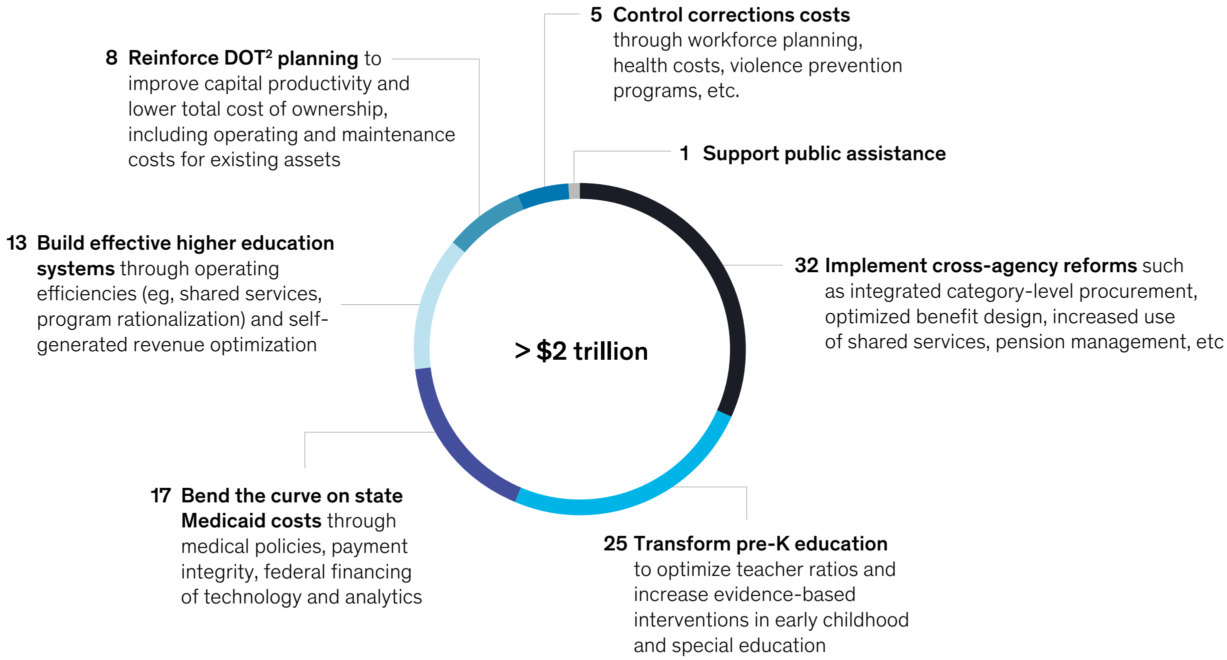
The formal state budgeting process tends to be dominated by debates over spending and tax policy priorities. As a result, many states overlook administrative actions that could optimize revenues (despite the fact that tax authorities often propose to close sources of revenue leakage). Admittedly, action is less urgent when economic factors lead to a strong revenue performance. In 2018, following steep declines in oil and gas prices, revenue

[6] *The fiscal survey of the states,* Spring 2017; Fall 2017; Spring 2018; Fall 2018; Spring 2019.

Exhibit 2

States can boost budget resilience through expenditure reductions.

2018 projected share of state expenditures, %[1]



[1] Figures may not sum to 100 because of rounding.
[2] Department of Transportation.

Source: NASBO 2018 Projections

gains were driven by unusually high income-tax payments, a positive stock market performance, and a modest recovery in most energy-producing states. However, secular demographic trends (a shrinking working-age population) and escalating healthcare costs suggest that pressure to increase revenues will continue to rise.

As policy makers debate broader tax policy reforms, every state government can take four courses of action in the short term *without* major policy overhauls. These should focus on compliance; expenditures; auxiliary revenues; and licenses, fines, and fees (Exhibit 3).

Improving value for every dollar spent on citizen service delivery

While individual situations vary, the most resilient and efficient states employ three common performance enablers. The first is to bring transparency to the cost and value of funds spent on delivering citizen services. This can be achieved through activity-based budgeting, which can help tie the cost of service delivery to outcomes. Second, investing in digitalized service delivery can not only improve the citizen experience but also realize operational efficiencies. Finally, implementing advanced analytics helps to drive insight and sharpen decision-making.

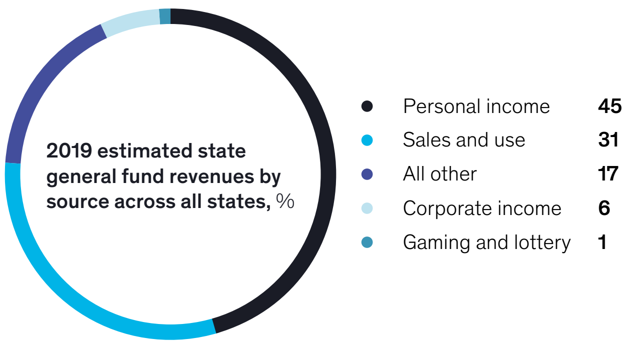
Bringing transparency to value for money

All states struggle to generate granular views of activity-level finances and to calculate the real cost of service delivery. Most agency accounting systems lack the capability to convert unit-, functional-, and fund-level financial statements to activity- and delivery-based views. Nonetheless, transparency in these areas is critical to identifying efficiency opportunities and tying the cost of delivery to performance outcomes.

Exhibit 3

States can employ four levers to optimize revenues without major tax policy overhauls.

State fiscal budgets rely on several sources of revenue…



…which can be enhanced by employing four key levers.

Tax compliance. Use advanced analytics to target high-ROI cases, expand correspondence audit capacity, and ramp-up past due collections efforts

Tax expenditures. Rationalize use of incentives to ensure ROI

Auxiliary revenues. Optimize revenue collected from assets, including real estate sale-leaseback arrangements, monetizing rights of way, maximizing concessions

Licenses, fines, and fees. Ensure state is achieving market rates for services ranging from background checks to inspection fees; ensure timely collection of past-due police fines and other charges

Note: Figures might not sum to 100 because of rounding.
Source: NASBO 2018 projections

Leading states have shown how focusing on transparency can produce spectacular results. One state identified an opportunity to save $800 million in procurement and capital spending in transportation without affecting the quality of its service. It did so by bringing transparency to the total cost of ownership. It moved to centralized sourcing and ran a segmentation and diagnostic exercise to identify other potential savings. It was also able to reduce procurement turnaround time by around 60 percent, allowing for more flexible deployment of resources.

A vital tool for transparency is activity-based budgeting. This requires aligning roles and responsibilities over specific areas of the budget and ensuring clearer lines of communication between policy makers, budget leads, and agency representatives—all of whom should share accountability for execution. A relentless focus on outcomes can foster internal discipline in attributing costs to the appropriate missions. The process invariably reveals costs that do not support high-priority outcomes, sometimes because of mismanagement but more frequently because of programs that used to be priorities. Agencies in these cases often lack processes to redirect funds.

The requisite shift is of both mind-set and capability. Successful states often start small—focusing on a program or agency for which the cost is relatively high compared with the quality of service delivered. This approach has also been shown to work around the world.[7] An Australian state government, for instance, responded to rising crime rates through a metric-driven budgeting process that forced departments to prioritize spending on activities proven to reduce violent activity and adopt new practices for reducing burdens (for example, paperwork and court appearances) that took police off the streets. As a result, the state freed up nearly 10 percent of its annual budget and was able to reinvest in high-value preventative activities such as cybersecurity and predictive analytics.

Implementing digitalization and automation

Properly implemented digitalization can transform how services are delivered and support sharper, more efficient operational capabilities. Innovations

[7] Rima Assi, Jonathan Dimson, Andrew Goodman, and Jens Riis Andersen, "Spending reviews: A more powerful approach to ensuring value in public finances," March 2019, McKinsey.com.

Case study

A Medicaid transformation led to significant savings

A state governor set out to expand value-based care to as many as nine in ten residents. The state's Medicaid agency was one of the largest in the US—the agency had an annual budget of more than $20 billion and costs were rising by a daunting 8.9 percent a year, so the task was significant. A key element of the process was to coalesce multiple stakeholders around three waves of episodes of care. The team designed a Patient-Centered Medical Home model (eventually launched by 111 practices) and analytics suite. It also launched a new behavioral healthcare model and health IT strategy. The transformation required more than 100 stakeholder meetings and involved 11 payers and providers. The eventual impact was significant. The state was able to lock in $250 million of annual savings, with 40 episodes launched across managed care plans and 800,000 people seeing improvements in their experience.

such as unified authentication platforms, fully digital registration, and online transaction tracking make it easier for citizens to learn about and access services, leading to higher levels of satisfaction.

Governments that embrace reforms reduce the risk of poor delivery and improve employee engagement, particularly when employees are involved in redesigning how services are delivered. Digitalization has been shown to reduce stigma toward citizens receiving social benefits and helps ensure beneficiaries are best matched with programs that suit their needs.

When it comes to implementation, perhaps the most important pitfall to avoid is poor prioritization: failure to understand the citizen or civil-servant need, map the service delivery journey, or focus on the right pain points. Equally, states must put in place robust technology delivery and governance—establishing metrics and methodologies to continuously align activities with target outcomes.[8]

Applying advanced analytics

Data and analytics are powerful tools that can help governments make better decisions about how to serve their citizens. The large volumes of data sitting on state records mean that states are also well-equipped to highlight leakages; motivate compliance; increase participation in the formal sector; and flag waste, overcharging and fraud.

A useful tool is a nudge program, which can be aimed at individuals and businesses at risk of underreporting income. In addition, states may wish to consider building centers of excellence, which can act as focal points for developing new analytics use cases.

Analytics can also serve social purposes.[9] One Midwestern state faced a growing incarceration rate, persistent violence in corrections facilities, and high recidivism. It built an algorithm-based risk model that helped correction facilities better segment offender populations, predict violent behavior, and develop preemptive interventions. The results were drastically reduced rates of violent crime, increased facility capacity, and much improved employee satisfaction.

Getting started—a three-phase approach

The first step of any transformation carries the most jeopardy because it sets the direction of travel. It is therefore critical that relevant stakeholders

[8] Jens Riis Andersen, Matthias Daub, Andrew Goodman, and David Taylor, "How governments can harness the power of automation at scale," February 2019, McKinsey.com.
[9] Anusha Dhasarathy, Sahil Jain, and Naufal Khan, "When governments turn to AI: Algorithms, trade-offs, and trust," February 2019, McKinsey.com.

(budget officers, agency leads, and cross-agency administrators) are involved from the start. We find that full- or half-day offsite brainstorming sessions are an excellent way to define priorities and bring stakeholders together under a structured approach. These can be designed around three key phases: assessment, planning, and implementation.

Phase 1: Assess baseline risk and performance
Transformation must be predicated on a granular view of the current state of play. As with any fiduciary body, states should conduct regular stress tests to understand readiness for economic downturn or other potential shocks to revenues and expenditures. Benchmarking against peers is helpful to quantify risk, being conscious that few states are currently well-equipped for severe disruptions.

At the highest level, some of the metrics we rely on most to help states prioritize risks to fiscal stability include the following:

— *Overall economic health.* Trends in overall output, wage growth, and house prices can be helpful indicators in understanding a state's macroeconomic health. Equally important are regional and socio-economic distributions to understand how downturns could affect more vulnerable segments of the population disproportionately.

— *Revenue volatility.* History often repeats itself. Looking back at tax and fee receipt volatility since the Great Recession can provide insights into potential stress on future income. Changes in taxpayer concentration and tax policies should also be included in projecting future downturn revenue scenarios.

— *Credit and market access.* Volatility in a state's credit rating not only affects its cost of borrowing and ability to raise capital; it also suggests potential weaknesses in its underlying fiscal safety net (for example, debt ratios).

— *Liability management.* Many states have survived mounting budget shortfalls by underfunding liabilities, namely pensions and retiree healthcare. Changes in Governmental Accounting Standards Board accounting standards and more conservative projection models have made funding gaps more acute for many, further limiting the option to divert long-term expenditure toward operations in periods of fiscal stress.

— *Discretionary funding and budget flexibility.* Each year, states have seen higher proportions of annual expenditures tied up in fixed costs, such as debt service, and nondiscretionary obligations. Increased restrictions on general fund revenues mean states have less space to make strategic pivots in spending in response to revenue volatility.

— *Liquidity and forecasting capability.* Much has been written in recent years about the slow pace at which states have rebuilt their cash reserves, or rainy day funds, since the most recent recession. In 2008–10, the ability to use

History often repeats itself. Looking back at tax and fee receipt volatility since the Great Recession can provide insights into potential stress on future income.

Case study

One state budget office identified $1.3 billion in savings in only ten weeks

A state facing financial pressure made a decision to transform its fiscal situation through bold cost and revenue initiatives. The state worked to identify, quantify, and implement opportunities to shave $1 billion off its budget over two years.

The ten-week project started with a series of interviews and workshops across agencies, which led to a number of proposals. They then analyzed potential cost and revenue benefits and worked with senior leaders to prioritize actions, taking into account the full range of relevant political and financial factors. Once a path forward was agreed upon, the state developed an implementation plan and communication strategy. At least 15 agencies participated.

cash reserves was a major differentiator among states able to weather the storm versus those that required major tax increases or spending cuts. Another fiscal health factor worth focusing on is agency-level forecasting and project capabilities. Even in years of strong revenues, many states have required midyear budget adjustments because of cost overruns or failures to manage cash flows appropriately across fiscal year cycles.

— *Service delivery performance.* In addition to forecasting capabilities, benchmarking major categories of expenditure (for example, education, health, transport) vis-à-vis both peers and outcomes (for example, academic achievement, rates of reincarceration, and on-time completion of capital projects) can enable speedy assessment of opportunities to control spend across major categories. While top-down benchmarks rarely unlock policy directives, they can help define the "burning platform" for prioritizing efforts to achieve fiscal resiliency.

A clear sense of where vulnerabilities are most likely to emerge would allow policy makers to develop early hypotheses and prioritize initiatives across revenues, expenditure, and cross-cutting management practices. Leaders can also use this time to get clear on scope, targets and timing of change programs.

Quick wins can help build momentum for larger programs. One area worth looking at may be existing contracts and lease agreements. In any event, leaders should prioritize initiatives that may achieve demonstrable benefits in six to nine months. In all cases, individual agencies should be a key part of the process.

Phase 2: Refine, plan, and pilot

Armed with a clearer set of aspirations, budget leaders can refine the budget and move to small-scale pilots. The process at this stage becomes one of prioritization and targeting, based on initiative size, timing, and feasibility in terms of political will and capabilities. State agencies often begin with standardized driver trees that allow them to identify overlaps with common pockets of opportunity in peer states.

In one example, a major US city used a "spend cube" to group cross-agency procurements by expense category and vendor. The city could then identify significant growth in its fleet expenditure that could be curbed through enforcement of uniform employee use policies, consolidation of fuel purchasing, and vehicle renewal.

Another state benchmarked performance of its HR, IT, and internal finance functions against that of peers to build an investment case for a statewide business support center that would serve as a cornerstone initiative in the annual budget. The center integrated 4,100 employees across 65 agencies to promote $100 million in annual savings while reducing backlog service requests by nearly 60 percent.

Phase 3: Roll out, scale, and measure impact

The final step is to test and refine before implementing successful pilots at scale. Our research has found that successful transformation efforts are defined first by performance improvement, rather than savings or resilience.[10] Leaders should draft a road map for change with this lesson in mind, taking into account impacts across functions, IT frameworks, and geographies. A dedicated change-management office is a sensible investment and can save operational stress down the line. At this stage the challenge moves from strategic to operational. Again, however, it's important to work efficiently across, and with the cooperation of, relevant agencies.

Once initiatives have gone live, the work should not end. Agencies should monitor progress and feedback to budget holders with a view to developing strategies and improving outcomes.

Amid budget pressure, technological change, and rising uncertainty, governments need to find new ways to manage their budgets. Doing so will undoubtedly involve initiatives to boost revenues and cut costs. A vital first step, however, is to reassess budget-setting processes and, more fundamentally, embrace new ways of thinking about fiscal planning. Digital tools and automation are necessary ingredients that, in turn, require a strategic approach and new capabilities that many states have only just begun exploring. Once in place, however, they offer increased resilience across economic cycles and the potential for radical transformation of the citizen experience.

[10] Tera Allas, Roland Dillon, and Vasudha Gupta, "A smarter approach to cost reduction in the public sector," June 2018, McKinsey.com.

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Further reading

Susan Cunningham, Jonathan Davis, and Thomas Dohrmann, "The trillion-dollar prize: Plugging government revenue leaks with advanced analytics," January 2018, McKinsey.com.

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