Recession Readiness in the Public Sector

Budget Stress Testing and Action Plans for Fiscal Sustainability

Perspectives | **June 2019**

To the extent that past is prologue — after ten years of economic expansion nationally — the start of the next recession is now almost certainly closer than the end of the last one. Whenever that next downturn comes, what can state and local governments do today to better prepare for that impact ahead?

The Great Recession officially reached its trough nationally in June 2009.[1] On the tenth anniversary of that milestone, the U.S. economy in June 2019 tied its record for the longest expansion phase since business cycles began to be tracked in the 1850s — at 120 months it is already more than twice as long as the 58.4 month average across the last 11 cycles since the end of World War II.

Although periods of economic expansion do not die of old age alone, history strongly suggests that it is now critical for state and local governments to be actively preparing for the next inevitable downturn.

What are the right moves to make to be ready for the next recession? We address that challenge from two perspectives:

- First, we believe that good diagnosis is a prerequisite to maintaining good fiscal health. Our recommended first step for recession readiness is to stress test budget projections on a multi-year basis to better understand the scale and character of the exposure faced. This type of analysis can not only help public sector financial professionals to better target the key areas for focus with preparedness efforts, but it can also support the broader communications and stakeholder buy-in so often needed to make changes in advance of severe fiscal strain. To help develop a thoughtful stress test, we highlight a set of key considerations for evaluating revenues, expenditures, and beyond.
- Second, we move beyond diagnosis to outline a set of concrete action steps for periods of economic and revenue growth that may be helpful in positioning a state or local government for financial resiliency. In many cases, these prescriptions — ranging from rethinking tax policy to renegotiating compensation philosophy — will not apply to every government's particular circumstances. Further, even when a concept may be relevant, it will often be difficult to advance. Nonetheless, while not always *easy*, we believe that most of these approaches will be much *easier* to advance during a period of economic strength, and some would be nearly impossible to adopt in the teeth of a recession.

With the checklist of potential approaches we provide, our hope is to advance practical measures that state and local governments can undertake now for better readiness going forward.

1 National Bureau of Economic Research, Business Cycle Dating Committee.

Budget Stress Testing

In evaluating long-term creditworthiness, rating agencies already stress test governments' preparedness to manage through a recession. Fitch Ratings, for example, uses a scenario analysis methodology to evaluate how a government's financial position might change over an economic cycle to help inform its perspective on financial resilience as part of the ratings process,[2] and Moody's Analytics has published a series of special reports using a streamlined stress-test analysis focused on state budgets nationally.[3]

In Moody's most recent 2019 analysis, the good news is that the rating agency is generally seeing recession readiness improve, with 22 states in a "stronger" position to weather the next downturn. At the same time, however, Moody's found varying levels of preparedness based on review of a revenue volatility, coverage by reserves, financial flexibility and pension risk. Overall, 26 states were found to be in a "moderate" state of preparedness and two were in a "weaker" position.

Similarly, a January 2019 Fitch Ratings assessment of different levels of government across California found better levels of preparedness on average than prior to the Great Recession, but also found notable differences in resilience based both on sector-specific risks (such as the high revenue volatility with minimal local control for school districts generally) and locally specific concerns (such as reserve levels and expenditure flexibility).[4]

Given such variability, for any individual government, it is important to understand both the scale and sources of exposure to financial risk in a downturn, and the specific factors that impact readiness to manage effectively through the business cycle. As Moody's has noted *"This underlines the need for individual states and local governments to stress-test themselves internally based on the most readily available data. A one-size-fits-all, cookie-cutter approach is not possible."*[5]

The following five steps provide a multi-dimensional perspective on a government's readiness to weather the next recession.

Step 1	Step 2	Step 3	Step 4	Step 5
Establishing the Baseline	Identify Stress Test Scenarios	Stress Testing Revenues	Stress Testing Expenditures	Evaluation Beyond the "Run Rate"

Step One: Establishing the Baseline

The first step in identifying the potential risks of a downturn is to develop a baseline, long-range financial forecast — projecting a government's anticipated revenues and expenditures going forward under normal economic expectations, before any recession scenario is assumed. Typically developed to look out across the next five to 10 years on a simple "carry forward" basis, this baseline projection generally assumes no changes in programs, tax rates or service levels not already adopted into law.

Many state and local governments already produce multi-year budget projections, often within the context of a long-range financial plan that also includes new ideas and initiatives to sustain budget balance and address service goals. In turn, such long-range plans are a recognized best practice toward achieving financial

2 Fitch Ratings, U.S. Public Finance Tax-Supported Rating Criteria (April 3, 2018). Fitch's scenario analysis uses the Fitch Analytical Sensitivity Tool — States & Locals (FAST).

3 Moody's Analytics, "Stress Testing States 2018" (September 2018). Accessed electronically at https://www.economy.com/home/products/samples/2018-09-15-Stress-Testing-States.pdf; "Moody's Investor's Service, "Most states have the financial flexibility and reserves to manage a recession" (May 20, 2019).

4 Fitch Ratings, "How Prepared Are California Credits for the Next Recession?" (January 18, 2019).

5 Moody's Analytics, "Stress Testing States 2018" (September 2018). Accessed electronically at https://www.economy.com/home/products/samples/2018-09-15-Stress-Testing-States.pdf.

sustainability. As noted by the Government Finance Officers Association (GFOA) *"Many governments have a comprehensive long-term financial planning process because it stimulates discussion and engenders a long-range perspective for decision makers. It can be used as a tool to prevent financial challenges; it stimulates long-term and strategic thinking; it can give consensus on long-term financial direction; and it is useful for communications with internal and external stakeholders."*[6]

As a starting point, a baseline long-range forecast can help to frame the following questions:

- In which direction are recurring revenues and recurring expenditures trending?
- Is the current operating budget fundamentally in balance, or is there already a structural deficit?
- Are there known challenges or opportunities on the horizon, such as anticipated ratchets in debt service or pension funding requirements?
- Even without the effects of a recession, are strategies to bend revenue or spending curves needed to close budgetary gaps and to address longer-term needs and liabilities?

Even during periods of fiscal strength and economic health, many governments face underlying structural budget challenges. In periodic studies of the state and local government sector as a whole, for example, the U.S. Government Accountability Office (GAO) has consistently found that — prior to any corrective action — cost growth is expected to outpace revenue gains across at least the next 50 years. This is because key cost centers for state and local governments, notably Medicaid for states and active and retired employee benefits at all levels of government, are subject to healthcare inflation and other pressures projected to grow faster than the economy as a whole. In many communities, public employer pension contributions are also continuing to rise as a result of the ongoing phase-in of revised actuarial assumptions and/or strengthened funding practices. At the same time, however, most government taxes and other revenue sources, at best, tend to track the economy. Looking line item by line item, the GAO has calculated that state and local governments face a structural fiscal gap in the aggregate, requiring the equivalent of a 14.7% reduction in recurring spending every year.[7]

Of course, the pressures facing any individual government will vary by both source and degree — and almost every government will undertake actions to prevent such pressures from sparking a crisis. With a sound baseline forecast, however, a government will be better positioned both to understand the challenges ahead and to manage through times good and bad.

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Step Two: Identify Stress Test Scenarios

While a baseline forecast provides an important perspective on what may lie ahead, most long-range financial plans focus only on those anticipated future results — without evaluating the alternative scenarios that could materially change that trajectory. In practice, however, economic conditions can be volatile, and actual results can be very different from what we initially expect.

6 GFOA Best Practice, adopted February 2008, https://www.gfoa.org/long-term-financial-planning-0.
7 U.S. GAO, "State and Local Governments' Fiscal Outlook" (2018 Update). Accessed electronically at https://www.gao.gov/assets/700/696016.pdf.

Under a stress testing approach, the goal is to recalibrate multi-year budget projections under an alternative set of assumptions consistent with one or more recession scenarios. This might include:

- A moderate or "typical" recession, similar to the tech bubble collapse in the early 2000s.
- A more severe recession, similar to the Great Recession of 2007-2009.

For each scenario, this step involves developing a set of specific economic assumptions — both regarding the degree of economic change (e.g., the level of employment decline, any change in home values and real estate sales activity, impact on interest rates and consumer price growth, etc.) and the timing of when different economic factors will shift and eventually recover relative to the baseline expectations. In turn, these assumptions will be used to guide the development of the stress test scenario revenue and expenditure forecasts that follow.

Forecasting multiple scenarios can be particularly valuable not only to help assess where a government stands today in terms of preparedness for a range of potential conditions, but also to help stakeholders understand that the actual experience to come will almost inevitably vary from any specific scenario evaluated. Full readiness inherently involves consideration of the many different pressures that can affect a state or local government's finances.

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Step Three: Stress Testing Revenues

Different revenue sources will behave differently through the business cycle — both with regard to the degree of sensitivity and the timing of any reaction. Among the key revenue streams to watch:

- Sales taxes often fall first, as consumer and business spending can slow quickly when the early signs of a downturn appear.[8]
- Income taxes, inclusive of capital gains, will typically fall soon afterward and often fall hard, as unemployment rises, wage growth slows and sources of unearned income for high-income taxpayers, such as investments, can see weakening. The timing lag for filing taxes and the ability of high income taxpayers to manage their tax liabilities, however, can result in some delays and smoothing of results relative to when underlying economic performance first starts to decline.
- Business taxes can also be highly volatile — but, again, somewhat subject to the timing effects of payment due dates and tax management strategies.
- Property taxes will generally respond much more slowly, if at all, during most recessions. The timing of reassessments (regular in some regions of the country, but very infrequent in others), along with the potential buffering effects of tax credits, often results in much less volatility for this major, local government revenue source — although the linkage of the Great Recession to housing costs did drive some declines during that severe period, particularly in regions hit hard by foreclosures.
- Real estate transfer taxes, however, will often respond more rapidly and significantly, as commercial and household investment tends to slow in tandem with price moderation.

8 Tracy Gordon, "State and Local Budgets and the Great Recession," The Brookings Institution (December 31, 2012) https://www.brookings.edu/articles/state-and-local-budgets-and-the-great-recession/. See also City Fiscal Conditions 2018, National League of Cities https://www.nlc.org/sites/default/files/2018-09/City%20Fiscal%20Conditions%202018_WEB.pdf.

- Similarly, development-related impact and permit fees will typically fall sharply when there are not as many cranes on the skyline and fewer shovels in the ground.
- A government's own investment returns may also moderate somewhat as a result of the lower interest rate environment that tends to accompany a downturn, and then continue to fall if interest-bearing rainy day funds and reserves are drawn down to help weather the storm.
- Intergovernmental revenues can also see declines, if the other level of government providing such funding faces economic sensitivities and pressures of its own (most do), and if there is a discretionary component to the relevant programs.
  - Of particular note for state governments and those who rely on them for intergovernmental funding, $274.7 billion in federal grants, contracts, and loans were provided under the 2009 American Recovery and Reinvestment Act (ARRA) stimulus program to address the effects of the Great Recession.[9] This included substantial increases in funding for Medicaid and education transfer costs, as well as for infrastructure. As with any discretionary appropriations, it is uncertain whether similar federal assistance would be available during the next recession. In turn, such federal decision-making could greatly impact both state financial pressures and state capacity to maintain status quo funding for local governments.

With the above and other revenue line items, however, no two state and local governments will have exactly the same experience. Each government will have its own mix of revenue categories (typically more sales tax and user fee exposure in California cities, for example, where property taxes have long been constrained under statewide ballot measures). Each jurisdiction also will have its own particular industry and household mix across its tax base (a community with a strong technology sector, for example, may generally see strong economic growth, but might have been hard hit in the 2001 tech bubble collapse). Further, differences in tax caps and other structures, assessment practices, and a broad range of other local factors will result in distinct experiences under different scenarios.

In this context, budget stress testing provides an approach for every government — state and local alike — to assess its own, potential impacts if a recession were to occur.[10]

9 For more detail regarding the 2009 ARRA program, see the Congressional Research Service report "Federal Grants to State and Local Governments: A Historical Perspective on Contemporary Issues" (Updated May 22, 2019).

10 Moody's Investors Service, "Reliance on top earners exposes states and downstream entities to revenue volatility" (March 20, 2019).

Technical Considerations When Crafting a Revenue Stress Test Scenario

- To what degree are economic forecasting models already used to project major revenue streams? Can new scenarios be run within these models consistent with the overall set of downturn assumptions?
- What can prior experience teach about how the budget reacts to economic downturns? How significantly have key revenue sources declined in past recessions? Are the early 2000s a good example of what to expect in a typical recession? Is 2007-2012 a good indicator of what a severe downturn would look like?
- Has the makeup of the tax base changed since these past recessions (e.g., development growth or profile of the population), and what impact would those changes have on the impact of a future downturn? Is the industry mix different based on changes in the local economy? For example, the weakening of local malls and main street retail in some communities has eroded sales tax receipts, but that may now mean less exposure to future local sales tax volatility in a downturn than was experienced nearly two decades ago in the 2001 recession.
- Similarly, has the tax or fee structure changed, and how might that lead to a different experience from past recessions?
  - In recent years, for example, some states have adopted more progressive income tax structures (such as "millionaires' taxes"). Merits of this policy aside, from a purely technical perspective, rating agencies have noted that the stronger reliance on high-income earners that comes with this tax policy will likely lead to greater revenue swings.[11]
  - Further, how much might newer revenue streams, such as excise taxes on cannabis, react in a downturn?
- Are there routine tax and/or rate adjustments that are generally approved each year to help keep pace with rising costs and inflation? Would these routine increases become less routine if taxpayers and/or ratepayers were in a difficult economic position? Should greater tax and/or fee resistance be anticipated as part of stress test modeling?
- How much is a particular revenue stream dependent on collection and payment issues?
  - Might there be a decline in collection rates for certain taxes and fees, if more of those obligated to pay that tax or fee are unemployed in a recession?
  - For sales tax, how might the *South Dakota v. Wayfair, Inc.* decision, which enables sales tax to be based on the location of internet sales activity, affect revenues relative to past recessions (when a physical location for the seller within the taxing jurisdiction was required)?

11 Moody's Investors Service, "Reliance on top earners exposes states and downstream entities to revenue volatility" (March 20, 2019).

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Step Four: Stress Testing Expenditures

When stress testing the expenditure side of the budget, a simple formula can be used to help identify the factors likely to drive change in the event of a recession:

Total Expenditures = Fixed Costs + [Level of Service * Cost Per Unit of Service]

Viewed in the most basic terms, spending requirements are a function of the fixed costs carried, the level of services provided and how much is spent to deliver each unit of that service. Considerations for each of these are as follows:

Fixed Costs

Fixed costs are those expenditures that are difficult, if not impossible, to avoid paying regardless of overall economic conditions — and that would generally remain as obligations even if a government were to stop all current operations. Commonly cited examples include employer pension contributions, debt service, and, at the local level in some states, mandated maintenance of effort payments for general governments that help to fund their local school systems. Just because these fixed costs involve limited discretion, however, does not always mean that the level of such expenditures is entirely unchanging or unchangeable.

- Employer pension contributions, for example, generally increase following an economic downturn, although the timing of such an impact is also typically delayed and then can linger. Following the tech bubble collapse in 2001, the typical public pension system employer contribution of 6.7% of payroll rose to double digits by 2005, stabilizing at around 12.5% as of 2008. With the effects of the Great Recession these contribution requirements ratcheted upward again to 17.1% by just 2012, and continued to rise thereafter.[12]
    - A major driver of pension funding pressures after a recession is losses in the assets held by the pension system (or even just weakened returns). To the extent that asset growth does not meet the assumed investment return assumptions of a plan (commonly 7.0% to 7.5%), then additional amortization payments would be required in future years to make up for this shortfall — an added cost typically borne by the employer.
    - From a budget perspective, however, most plan contribution requirements are typically based on actuarial valuations from two fiscal years prior to the fiscal year in which the payments are made. This delay, resulting from both the time it takes to produce an actuarial valuation and the timing requirements of the budget process itself, means that any increased pension funding pressure will lag market losses.
    - Further, nearly every public pension plan uses an asset-smoothing methodology, under which the actuarial value of assets used in determining contributions is based on a rolling average (e.g., five years). As a result, a downturn in asset market value will have only a partial impact in the first year of a new valuation and will phase in gradually thereafter.

12 Center for Retirement Research at Boston College, "The Funding of State and Local Pensions: 2013-2017" (June 2014).

Given the wide variety of amortization methods and periods, smoothing approaches and other actuarial factors seen across different retirement systems — as well as differences across plans in investment allocations and risk exposure — consultation with an actuary is the best way to gain insight into the potential scale and timing of added employer pension costs after a market downturn. When such actuarial insight is not readily available and/or becomes cost-prohibitive for a stress test exercise, however, some directional perspective can be gained from evaluating the performance following prior recessions. It is important to note, however, that many pension plans have modified both benefit structures and actuarial assumptions since the last downturn such that future experience may be significantly different.

- With regard to debt service, absent refinancing, existing fixed payments would generally remain constant regardless of changes in the economy. Variable rate debt service costs might decline, however, if short-term interest rates are lower in a weakened economy. Similarly, any new debt issuance assumed to take place during the downturn might also be more affordable in such a lower interest rate environment. These factors — as well as opportunities for optimally managing these costs through the business cycle — are good topics for governments to review with their registered municipal advisors.

Level of Service

While some service pressures might increase with a recession, other operations may actually see less demand. The goal of a stress test is not to identify and aggregate the worst case scenario for each and every line item individually, but rather to develop an overall scenario that hangs together across line items based on consistent economic assumptions — recognizing that some expenditure pressures could actually decrease with a downturn.

- For example, decreases in new development activity during a downturn might result in fewer plan reviews and building permit inspections. In turn, this reduced demand and activity might result in lower overtime pressures or even enable staffing reduction via attrition in these operations.
- Similarly, some discretionary programs or services could reasonably be deferred or scaled back in the event of an economic downturn.
- On the other hand, some service demands typically do increase in a recession. For example, social services and safety net programs often see greater usage.

At the state level, Medicaid is generally a budget buster throughout the business cycle, and is projected to experience continued cost growth well above the forecast for overall growth in the economy for years to come due to factors such as healthcare inflation and an aging population.[13] When recessions occur, however, these pressures typically increase sharply as enrollment tends to spike.[14] In turn, as the Pew Charitable Trusts has noted, *"Higher Medicaid costs can limit what states have left to fund other priorities, such as schools, transportation, and public safety."*[15]

Cost per unit of Service

If a downturn leads to lower price inflation and less competition in the marketplace, some governmental expenditures may also see moderation in the cost per unit of service.

- Are there major contracted services (e.g., landfill tipping fees at the municipal level), for example, that will soon be up for bid? Are those services sensitive to changes in the economy? Are there pricing

13 National Association of State Budget Officers (NASBO), "State Expenditure Report, Fiscal Years 2016-2018" (2018).
14 Kaiser Family Foundation, "Medicaid Enrollment and Spending Growth, FY2017 & FY2018" (October 19, 2017).
15 Pew Charitable Trusts, "'Lost Decade' Casts a Post-Recession Shadow on State Finances" (June 4, 2019).

considerations that are part of the baseline forecast that should be taken into account when performing a stress test?

- How much flexibility is present — in legal and practical terms — to manage employee wage pressures? In a collective bargaining environment, when do contracts expire, what terms are already in place, and does the legislative body have the authority to revise those terms if deemed necessary due to economic conditions? If not in a collective bargaining environment, how much competitive recruitment and retention pressure is faced and how might that abate in an economic downturn?
- How significant an impact would a recession have on benefit costs? While the data tends to be a bit mixed regarding healthcare inflation costs during recessions, there is some evidence that workers' compensation can moderate in difficult economic times. In the event that a "first in, last out" approach is used to reduce the size of the workforce, the remaining, veteran employees tend to be more experienced, better trained and perhaps more loyal — sometimes resulting in a decline in workers' compensation costs, even though the average employee age may be somewhat higher.[16] It is notable, however, that significant fear of impending layoffs, if present, has been associated with increased workers' compensation claims in some organizations and could have a counter effect.

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Step Five: Stress Test Evaluation Beyond the Run Rate

The core of any stress test is to evaluate the potential impact of a recession on the trend in the operating budget "run rate" (i.e., annualized revenues and spending commitments based on the assumption that present conditions will continue). At the same time, however, a fully comprehensive stress test will also encompass an evaluation of key balance sheet concerns and general resource levels. As illustrated by the examples below, such factors can also strongly influence how well-positioned a government is to withstand a downturn:

- Are reserve levels and any rainy day fund at or above target levels?
- Are there shortfalls or risks in any internal services funds or special reserves that could become a General Fund obligation if not addressed? For example, are workers' compensation reserves actuarially funded? In a school district, is the food services fund in a self-sustaining position?
- How close to fully funded are pensions and other post-employment benefits (OPEB)? This assessment includes not only the headline funded ratios, but also how any unfunded liabilities relate to the underlying capacity to pay, tax base, and the long-term ability to address those needs (including a review of how much risk is embedded in the actuarial assumptions used by the plan, such as a high investment return assumption and/or an open amortization method that pays down liabilities more slowly than a closed amortization approach).[17]
- Are capital and related needs (e.g., infrastructure, facilities, equipment) well-addressed or is catch up still needed from the Great Recession? For example, is a fleet lifecycle replacement plan in place and on track? The more that a fleet is within lifecycle, the lower future parts and maintenance costs (and downtime) will be.

16 A study by the National Council on Compensation Insurance, for example, found the frequency of claims per payroll declined by 16% during the Great Recession across industries, employer sizes, and injury types. National Council on Compensation Insurance, "Workers Compensation Claim Frequency" (August 2011). Accessed electronically at https://www.ncci.com/Articles/Pages/II_2011_Claim_Freq_Research.pdf.

17 The 80% Pension Standards Myth," American Academy of Actuaries, Issue Brief, July 2012.

- What do existing debt service obligations look like? Hopefully, a declining debt service schedule will provide capacity to continue new capital investment in the event of budget strain in a recession. Is pay-as-you-go funding being used as part of the capital program, and does this provide flexibility to adjust the mix of financing approaches in the future?

Such areas of potential budget pressure are akin to the sand bars just below the water. When the tide is high, you can drift past them with minimal risk. But when the tide goes out, they can surface and pose a very real threat to smooth sailing.

Action Plans for Sustainability

If stress testing a budget and balance sheet is diagnosis, then the next key to sustainable fiscal health is prescription and treatment. Much as with personal health, basic practices can often be the most effective.

In this spirit, the fundamental approaches of establishing prudent spending parameters and adequately funding reserves are the first of five categories of strategic approaches summarized in the table below addressed as key action plan opportunities.[18]

Fundamentals: Spending Parameters and Risk Based Reserves	Revenue Positioning	Expenditure Management: Workforce Costs	Expenditure Management: Non-Personnel Costs	Liabilities Beyond the Operating Budget

Fundamentals

Spending Parameters

First and foremost, do no harm. Establish spending parameters that avoid (or, at least, minimize) reliance on and exposure to volatile revenue streams for addressing pent up demands — with any "excess" revenues in the near-term used for investment, liability reduction and other strategies to shore up fiscal positioning.

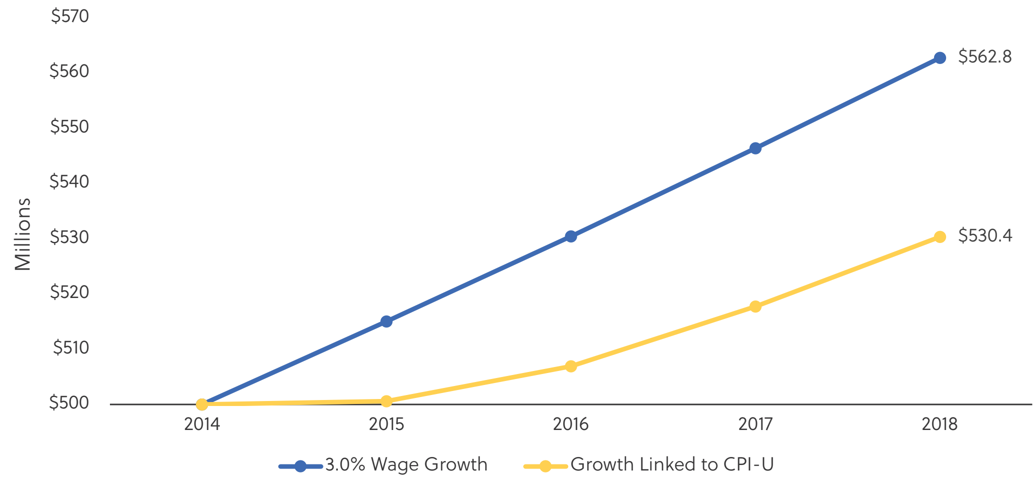
Of course, this is easier said than done. Stakeholders in the public domain will inevitably want more during periods of economic and fiscal health. Advocates from the public, elected officials, and operational managers will frequently identify legitimate, unmet or under-addressed needs for service expansion and enhancement. Public employees and their representatives will understandably seek compensation gains. These demands will often be valid and compelling, and managing these otherwise worthy goals and expectations — in the face of less visible long-term risks and underlying structural budget pressures — is among the most significant challenges for finance officers during periods of overall growth.

While these competing concerns can be challenging to manage, it is almost always less disruptive to contain (not reject) such new additions to the run rate than it is to cut back sharply on spending when times again get tough. The chart on the following page illustrates this concept by comparing the difference between the growth in a $500 million wage and salary budget from 2014 through 2018 if increased at 3.0% per year relative to the same cost base grown by the somewhat lower actual inflation experience across that same period.[19]

18 The action plan ideas outlined herein are generally intended for governments with investment grade finances and no severe budget deficits during the current expansion phase of the business cycle. While some of these concepts are also applicable for governments facing more severe fiscal distress, turnaround strategies may require different elements and even stronger actions.

19 Consumer Price Index (CPI) growth rates from the Bureau of Labor Statistics, CPI-All Urban current series, 2014 Annual to 2018 Annual, not seasonally adjusted.

Four-Year Wage Cost Growth from a $500 Million Base, 3% Annual Increases vs. Consumer Price Index (CPI)



Source: Consumer Price Index (CPI) growth rates from the Bureau of Labor Statistics, CPI-All Urban current series, 2014 Annual to 2018 Annual, not seasonally adjusted.

Without cuts, but by simply moderating headcount and pay raises, the difference quickly reaches more than $30 million in the run rate going forward.

To help achieve such moderation across the budget, effective stakeholder communication and buy-in is critical. In this regard, sharing the major results of a stress test analysis can be an important tool in support of moderation. Of course, this will not guarantee that every identified restraint will be exercised, but the process can nonetheless help ensure that stakeholders and decision-makers understand the budgetary pressures at hand — especially this far into the current expansion phase of the business cycle.

Risk-Based Reserves

Also of fundamental importance, a thoughtful budget stress test can be used to help calibrate and size reserve and rainy day fund targets.

Reserves and Risk Exposure

States: "In general, states with greater revenue volatility need to save relatively more than do those with less fluctuation."[20]

Local Governments: "The strength of a given level of fund balance varies depending on the particular local government and its respective operating environment. Larger balances may be warranted if budgeted revenues are economically sensitive and therefore not easily forecasted, or to offset risk associated with tax base concentration, unsettled labor contracts, atypical natural disaster risk, and pending litigation. Alternately, municipalities with substantial revenue-raising flexibility may carry smaller balances without detracting from their credit strength; this weakness is offset by their ability to generate additional resources when necessary."[21]

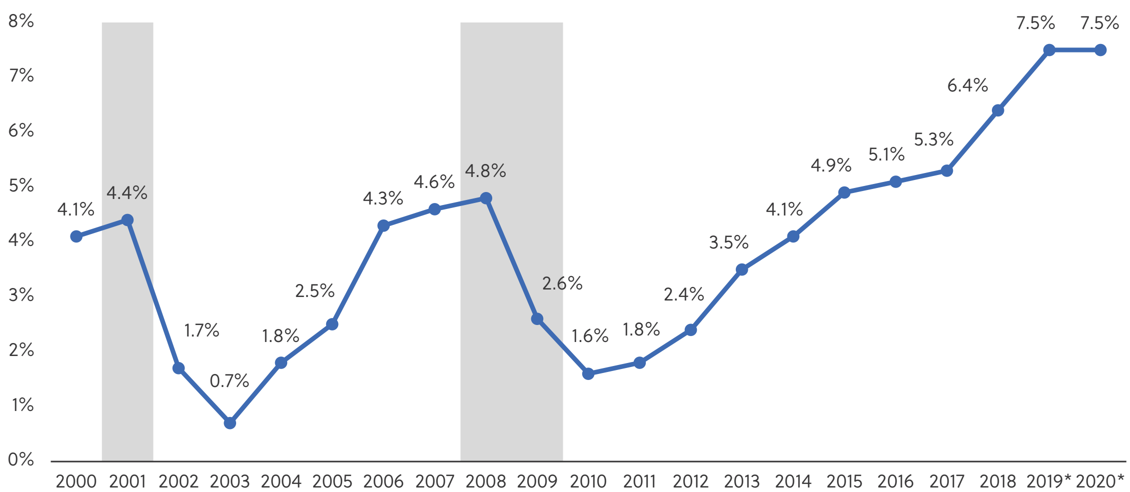
20 Mary Murphy and Steve Bailey, The Pew Charitable Trusts, "State Revenue Volatility and Optimal Reserve Size Are Directly Linked," November 14, 2018.
21 Moody's Investors Service, "Rating Methodology, US Local Government General Obligation Debt," December 16, 2016.

At a minimum, the GFOA recommends *"that general purpose governments, regardless of size, maintain unrestricted budgetary fund balance in their general fund of no less than two months of regular general fund operating revenues or regular general fund operating expenditures."*[22]

At the same time, there is no "one size fits all" formula for rainy day funds or reserves. In turn, budget stress testing enables governments to evaluate their own particular conditions, exposures, and constraints to develop a risk-based reserve target that aligns directly with its own policy goals and perspective — or as the GFOA notes, taking *"into account each government's own unique circumstances."*[20]

In one bit of good news, as shown in the chart below, most state governments have been rebuilding their rainy day funds since the end of the Great Recession – up from 1.6% of total spending in 2010 to a projected 7.5% in 2020. In fact, the median state government today is better positioned than just before that last downturn started to take hold (4.8% in 2008).[23] This level of preparation is positive not only for those states involved, but also for any schools and local governments that may count on state funding.

Median State Government Rainy Day Fund Balances Over Time



Source: NASBO Fall 2018 Fiscal Survey of the States. Shaded periods reflect recessions.
* Figures for 2019 are estimated and figures for 2020 are projected based on governors' recommended budgets. Figures for 2019 and 2020 exclude Georgia, Oklahoma and Wisconsin.

As Moody's writes *"For those states that performed poorly in this year's test, one takeaway is most clear. Every little bit helps. Although it may be too late to get reserves up to the level necessary to fully weather the effects of the next recession, every dollar that can be put away in the meantime is a dollar that will not have to be raised via taxes or spending cuts in a few years. What is more, the economic impact of putting that dollar aside today when the economy is red hot will be much less painful than trying to pull it out of the economy at the height of the next recession. It is never too late to provide your state at least some cushion from the difficult decisions set to take place during the next downturn."*[24]

In addition to the two fundamental approaches outlined above — managing the operating budget run rate and setting aside sufficient, risk-based reserves — the following sections of this white paper outline several additional concepts for enhancing recession readiness.

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22 GFOA Best Practice "Fund Balance Guidelines for the General Fund," adopted September 2015.
23 National Association of State Budget Officers (NASBO) Spring 2019 Fiscal Survey of the States.
24 Moody's Analytics, "Stress Testing States 2018" (September 2018). Accessed electronically at https://www.economy.com/home/products/samples/2018-09-15-Stress-Testing-States.pdf.

Fundamentals: Spending Parameters and Risk Based Reserves	Revenue Positioning	Expenditure Management: Workforce Costs	Expenditure Management: Non-Personnel Costs	Liabilities Beyond the Operating Budget

Revenue Positioning

Once a downturn begins, it is difficult to increase tax rates and fees because many residents and businesses have already begun to struggle at that point and higher rates can be felt as more of a burden, compounding the effects of a recession's headwinds on the local economy. Further, any tax policy change, even if related only to incentive programs or revenue-neutral tax diversification goals, may face greater resistance during a recession due to (understandably) heightened public concern.

At the same time, periodic review and adjustment of revenue structures can ultimately improve both economic performance and financial results. In addition, some state and local governments have also built innovative "safety valve" structures into their revenue structures, limiting overreliance on volatile sources.

As with other potential approaches discussed throughout this white paper, not every action outlined below will be a fit for every government, and some will be challenging to advance even in good times. For many governments, however, an expanding economy presents the best opportunity to evaluate and advance approaches that will work best for the long-term — and perhaps especially during difficult times.

Specific opportunities include:

- **Tax volatility "safety valve" mechanisms.** Rather than becoming overly dependent on the peak level of returns from particularly volatile revenue streams, some state and local governments have established "safety valve" mechanisms that divert any extraordinary returns from boom years toward reserves and/or non-recurring costs. For example, the Commonwealth of Massachusetts requires that capital gains tax revenue in excess of a pre-established threshold be transferred to the Commonwealth Stabilization Fund, effectively the rainy day fund.[25] In FY2018, the threshold was set at $1.17 billion, resulting in a transfer of $322.1 million.[26] In a parallel State of California provision, capital gains tax revenues above a specified threshold are used both to increase reserves and to pay down long-term liabilities such as those related to pensions and retiree healthcare.[27] Similarly, at the local level, the City of Oakland, California consolidated fiscal policy directs that unusually high receipts from the volatile real estate transfer tax will be dedicated toward a mix of reserves and addressing unfunded long-term liabilities.[28]
- **Overall tax policy and revenue diversification.** More generally, many governments may have outdated and/or highly concentrated tax structures. For example, one state's sales tax base may exclude many high-growth services of the new economy, while a county tax structure within that same state may have proportionately high exposure to a particularly volatile revenue source. In other cases, non-competitive tax rates may be a drag on economic growth, and targeted reductions might be considered to encourage more private investment. Some governments, such as the State of Hawaii, regularly review their tax policies for efficiency and equity, and others do so on an ad hoc basis.[29] Through such a review, even if pursued on a revenue neutral basis in the short-term, a government can potentially put into place more resilient and competitive tax policies that better meet community goals over the long-term.

25 Section 5G of Chapter 29 of the Massachusetts General Laws.
26 Commonwealth of Massachusetts Office of the Comptroller, "FY2018 Capital Gains Tax Revenue/Transfer to Stabilization Fund" (June 28, 2018).
27 State of California Legislative Analyst's Office, California Fiscal Outlook, Chapter 4 (November 2014).
28 City of Oakland, California, Consolidated Fiscal Policy, as amended and adopted by ordinance on May 15, 2018.
29 Every five years a blue ribbon State Tax Review Commission (TRC) conducts a systematic review of Hawaii's tax structure. See, for example, the State of Hawaii, Report of the 2015-2017 Tax Review Commission (February 18, 2018).

- **Non-tax revenue updates.** In many cases, fees and other user charges, such as plan reviews, building inspections, municipal golf course use, and a broad range of other programs, are intended to cover some or all of the cost of providing those services. As the underlying cost of service rises (due to factors such as inflation, and growth in the cost of wages and benefits for public employees), however, many of these non-tax revenue sources are not always routinely adjusted to keep pace. Where review and possible updates to such charges are warranted, from a practical perspective, it is likely to be much easier to gain public support for increases during a period of growth than during a recession when public sensitivity to rising costs is, understandably, heightened.
- **Tax incentives review.** Similarly, economic development incentives and abatement programs often develop and accrete over many years, and may no longer be achieving their original policy goals (if they ever did) and/or may not be well-aligned with changing goals and newer incentives adopted more recently. At both the state and local level, a comprehensive policy evaluation can help to ensure that such programs are well-designed for the current economy and still delivering a positive return on investment.[30] In turn, the sunset of underperforming incentives can improve net revenues in future years, as an outcome of sound policy review. In the State of Oklahoma, for example, an independent commission reviews all major tax incentive programs over a four-year evaluation period. In just one result from this process, a formal evaluation of Oklahoma's production tax credit for zero-emission facilities (wind, geothermal, solar and hydropower) determined, based on financial and economic impact modeling, that the credit's intended renewable energy goals had been met, such that the incentive was no longer critical. Based on recommendations provided as part of this review, Oklahoma accelerated the incentive's sunset date, providing a net benefit to the state of approximately $100 million per year going forward.[31]

Fundamentals: Spending Parameters and Risk Based Reserves	Revenue Positioning	Expenditure Management: Workforce Costs	Expenditure Management: Non-Personnel Costs	Liabilities Beyond the Operating Budget

Expenditure Management: Workforce Costs

On the expenditure side of the budget, personnel costs are typically a major cost driver, particularly for most local governments and school districts where the core services provided (public safety, public works, classroom instruction, etc.) tend to be labor-intensive.

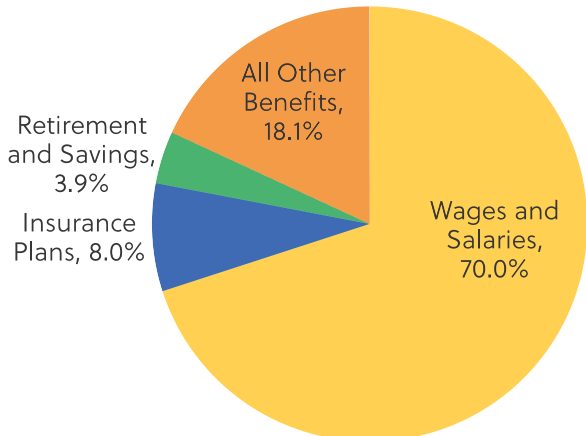
As a result, many governments cannot manage their overall finances effectively without a sound strategy for managing their workforce costs. At the same time, this is much more than just a math problem. Good workforce strategies must go beyond the budget to also address the competition to attract and retain quality talent, impacts on service quality, and a broad range of morale and employee relations considerations.

In this regard, one strategic approach to consider is the concept of "rebalancing the employee total compensation portfolio." This concept is based on several factors, broadly illustrated in the pie charts on the next page.

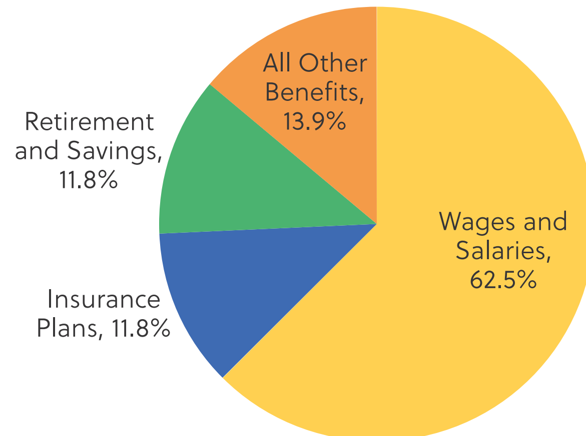
30 See, for example, The Pew Charitable Trusts report "How States Are Improving Tax Incentives for Jobs and Growth" (May 2017).
31 This material is based on factual information from an actual project that PFM Group Consulting LLC completed on behalf of the State of Oklahoma Incentive Evaluation Commission. It is for general information purposes only and is not intended to provide specific advice or a specific recommendation. The results of individual projects will vary. Past performance does not necessarily reflect and is not a guaranty of future results.

First, as shown in first two charts below, state and local governments have been spending a higher percentage of each compensation dollar on health insurance than private industry (11.8% versus 8.0%) and a much higher percentage on retirement benefits (11.8% versus 3.0%), according to federal labor market data from the end of 2018.[32]

Private Industry: Q4-2018



State and Local: Q4-2018



Source: Bureau of Labor Statistics, Employer Costs for Employee Compensation.

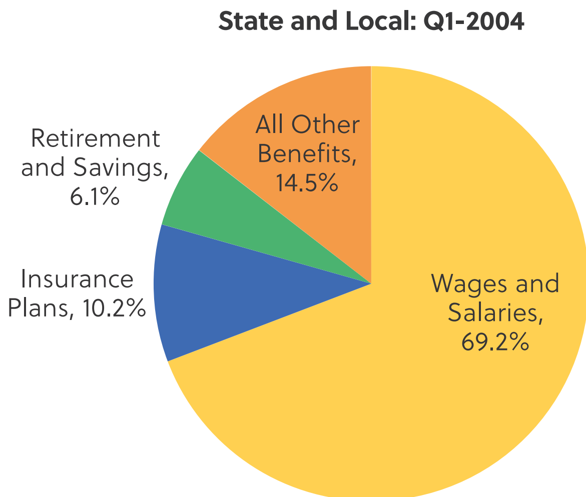
In turn, this means that private industry spent more on wages and salaries (70.0% versus 62.5%). Further, this pay comparison is somewhat understated, in that private industry also spends more on the "all other benefits" category that consists largely of vacation and other paid leave generally received as cash compensation (albeit this category also includes payroll taxes and various other fringes).

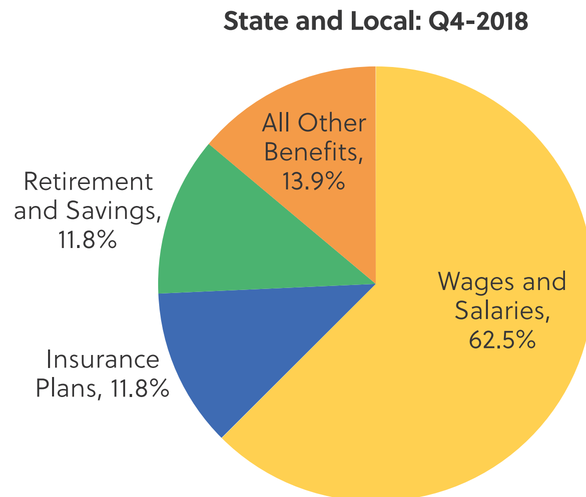
This difference in structure can be problematic for state and local governments from a budget perspective, as healthcare inflation has grown faster than general inflation (and wages) for many years, and pension/retirements costs have also been rising rapidly for many public employers. Further, it can often be easier to moderate prospective wage growth than it is to slow down pension cost growth or contain health care costs. With more of a typical public sector compensation "portfolio" exposed to these high growth categories, governments face greater budget pressure and risk.

At the same time, to the extent that some workers in the overall labor market will focus more on headline wages and salaries than on fringe benefits when making personal employment decisions, the current balance for state and local governments may also create a competitive disadvantage for recruitment and retention.

32 Bureau of Labor Statistics, Employer Costs for Employee Compensation.

As shown in the pie chart on the left below from 2004, the state and local government allocation of compensation types 10-15 years earlier looked more like the private sector today. As healthcare and retirement benefit costs have grown rapidly over the intervening years, however, wage capacity has been increasingly crowded out as reflected in the pie chart on the right below.





Source: Bureau of Labor Statistics, Employer Costs for Employee Compensation.

In light of these considerations, state and local governments may have an opportunity to explore using any current pay flexibility that may now be available based on revenue growth to negotiate (or, for non-represented employees, develop) a new package that rethinks the total compensation bargain. For example:

- More affordable health benefit programs and structures, where good coverage can be maintained at a lower cost (e.g., through reasonable medical plan design changes and/or enhanced health and vendor management).
- Adjustments to paid leave structures where cash out provisions and other features may, in effect, provide incremental pay beyond the levels of time off actually taken.
- Work rule flexibility, such as cross-training and schedule reforms that may allow for more streamlined operations and lower overtime.
- Retiree benefit redesign and cost sharing, to sustain retirement security for career employees.
- Reinvestment of any compensation dollars made available from the above toward improving wages and salaries. Not only might this include across-the-board enhancements, but a thoughtful approach could also incorporate targeted adjustments to address any pay compression concerns and to ensure competitiveness across a career.

With all of the above approaches, the goal is not to eliminate quality benefits or reduce employee compensation overall; rather, the concept is to strengthen wages and salaries by redeploying savings from benefit and other non-cash reforms where opportunities exist to do so. When achievable through good faith bargaining (and/or with good employee relations for non-union workers), the results could potentially include:

- Greater competitiveness for talent;
- Continued, high quality benefits on a more sustainable basis; and
- Less exposure to healthcare inflation and retiree benefit budget pressures — both structurally and in the event of a downturn.

Expenditure Management: Non-Personnel Costs

For other governmental cost centers, the expansion phase of the business cycle represents a good time both to "tee up" new efficiency initiatives and to invest in greater productivity.

In the event of fiscal pressure, across-the-board budget cuts should generally be the approach of last resort. Instead, more targeted initiatives can potentially achieve the same financial results with far less adverse impact on programs and services. The challenge with making surgical cuts instead of wielding the hatchet when fiscal crisis strikes, however, is that good initiatives often require thorough and thoughtful analysis, including staff time and sometimes external consulting support, to assess and craft. Accordingly, pre-recession is a great time to undertake those program and policy evaluations that hold the potential to become the best options for action if needed when a challenging fiscal period does arrive or even to head off budget pressures before a downturn occurs. For example:

- Evaluations of agency performance can potentially identify areas for rethinking and streamlining operations. Similarly, efficiency reviews, like a fleet size optimization study or a real estate consolidation analysis, can generate options for long-term savings.
- Study of certain policy concerns can also lead to better programmatic approaches that can actually be more cost-effective. For example, with criminal justice finance, alternatives to incarceration and bail reform can potentially be better public policy at a lower cost. Similarly, thoughtful strategies to reduce legal claims against police departments can both improve community relations and reduce exposure to judgments and settlements.
- Alternative service delivery models, such as intergovernmental agreements or public-private partnerships, can also achieve benefits in some cases. At the same time however, these approaches will have their risks and pitfalls. Further, effective implementation of changes in service delivery will almost always require a strong process to achieve good results. If evaluated without the overhang of immediate deficits, the pros and cons for such initiatives can be more fully vetted, and good ideas can be put into place without a "fire sale" dynamic.

Rather than just increasing the spending run rate, another good use of peak period (potentially unsustainable) revenues can be to make one-time investments in improving operations. Further, with many such investments, a government can potentially also have a favorable impact on cost pressures going forward. For example:

- Retrofits for improved energy efficiency can reduce utility costs and be positive for the environment.
- Bringing the fleet and other equipment onto a lifecycle replacement plan can improve operations and achieve savings from lower repair costs, increased fuel efficiency, and better auction proceeds for vehicles taken out of the fleet.
- Information technology updates and investment can also potentially improve operations, safeguard business continuity, and in some cases, from online permitting to automated utility meter readers, reduce future budget pressures.

Cutting across such opportunities, the growth phase of the business cycle can also provide the opportunity to capitalize an Innovation Fund or Productivity Bank. While different models exist for such programs, the general concept involves establishment of a resource to finance future investments in new ideas and initiatives to improve governmental efficiency. This can even be structured as a revolving loan fund with a portion of the savings generated or revenues enhanced "repaid" to help fund ongoing productivity investment.

Fundamentals: Spending Parameters and Risk Based Reserves	Revenue Positioning	Expenditure Management: Workforce Costs	Expenditure Management: Non-Personnel Costs	Liabilities Beyond the Operating Budget

Liabilities Beyond the Operating Budget

Along with positioning for a stronger and more sustainable run rate, an expansion period is also the right time to strengthen the balance sheet and address liabilities that may not show up as directly on the annual operating budget.

Retiree Benefits

To improve the sustainability of retiree benefits, options to consider may include:

- Prefunding OPEB, which is primarily retiree healthcare for most governments. Through a dedicated trust structure, a public employer can improve long-term retiree benefit and budgetary sustainability, ideally in conjunction with development of a broader OPEB funding policy that also incorporates and addresses goals around affordability and the level of benefits to be provided.
- Addressing pension risk. In recent years, many public pension plans have been reviewing and revising their actuarial assumptions to lower their level of risk that these assumptions may not be met.
    - Among the largest U.S. public pension plans, for example, the National Association of Retirement Administrators (NASRA) reports that the median investment return assumption has been lowered from 8.0% in FY2010 to 7.25% as of FY2019.[33]
    - Other actuarial concerns include amortization periods, amortization methods (e.g., level dollar versus level percent of pay), and mortality rates, among others. In practice, due to actuarial approaches that effectively "back load" payments to reduce liability, even among plans where the employer makes their full actuarial contribution, the funded ratio of the plan can remain flat or decline for many years.[34]

Over the long-term, modified actuarial assumptions may make sense for some plans to ensure sustainable funding. In the short-term, however, such changes typically require larger contributions.[35] Where warranted for long-term fiscal stewardship, such increased budgetary obligations are generally much easier to absorb during a period of economic growth.

33 National Association of State Retirement Administrators (NASRA) Issue Brief: Public Pension Plan Investment Return Assumptions (February 2019).

34 This phenomenon of declining funded status even when 100% of the actuarial contribution is met most commonly results from the level percent of pay amortization method, which plans for "back loaded" contributions based on an assumption that payrolls will be higher in future years, such that the same percentage of payroll would be expected to yield growing payment amounts over time. Even in the best case, this common approach can result in "negative amortization" (payments insufficient to sustain the funded ratio) in the near-term. Further, if payrolls do not grow as planned due to headcount reductions and/or stagnant wage growth, this dynamic can be heightened. For more on this topic, see Jean-Pierre Aubrey, Caroline V. Crawford, and Alicia H. Munnell, Center for Retirement Research at Boston College, "State and Local Pension Plan Funding Sputters in FY2016" (July 2017) and Lisa Schilling and Patrick Wiese, Society of Actuaries, "U.S. Public Pension Plan Contribution Indices,2006— 2014" (June 2017).

35 National Association of State Retirement Administrators (NASRA) Issue Brief: Public Pension Plan Investment Return Assumptions (February 2019). As a rule of thumb, for example, NASRA suggests that a 25 basis point reduction in an investment return assumption (e.g., from 7.5% to 7.25%) will increase the cost of a plan with a COLA by roughly 3% of pay and the cost of a plan without a COLA by approximately 2% of pay.

- Reviewing asset allocation in conjunction with a registered investment advisor. If a lower investment return target is adopted, a less volatile, lower risk investment strategy may then be available to meet a pension system's goals.
- Considering other strategies to address retiree benefit risk, such as buyout programs that provide one-time cash payments as an option for participants to forego certain accrued benefits. Although such approaches have a range of pros and cons that warrant thorough analysis specific to any system, there are a growing number of examples of public plans pursuing these ideas.[36] The Missouri State Employees Retirement System (MOSERS), for example, has offered voluntary buyouts to vested inactive members — those former employees who left state service prior to retirement age, often to continue their career elsewhere, and who may be less reliant on what might typically be a small vested pension benefit based on a limited number of years with the state. In another type of approach, such as now being pursued by the State of Illinois, a buyout payment could be provided as an incentive for a plan participant to shift to a newer pension tier with lower long-term costs.
- Establishing a pension stabilization fund could also be considered to help manage volatility in employer contribution requirements. While the available tools for this approach will vary from state to state, a Section 115 Trust can be an option in many circumstances for setting aside funds that may be used to mitigate contribution volatility and provide future budget flexibility. With a Section 115 Trust, funds are safeguarded from diversion for other uses and may generally be invested in a broader range of securities than would typically be permitted for an operating reserve.
- Exploring alternative retiree benefit funding. There are a range of approaches for addressing funding shortfalls beyond just increasing annual contributions. These include:
  - Pension Obligation Bonds (POBs) and OPEB Obligation Bonds (OOBs).
  - The use of proceeds from asset sales or concessions for pension funding.
  - Several emerging financial engineering concepts such as asset-in-kind (AIK) transfers that dedicate a public asset to a retiree benefit trust and internal loans from surplus cash balances.[37]

With each of these alternatives, there are many pros and cons specific to each set of circumstances, and detailed legal and financial analysis is strongly recommended before moving forward.[38] In turn, this analysis is best executed when there is sufficient time to move through a thoughtful process, as is generally more available during better times, rather than being rushed within a shortened time-frame in reaction to immediate fiscal demands.

Further, overall economic conditions can have a bearing on the risks associated with such alternative approaches. For example, a 2014 study of POB performance by the Center for Retirement Research at Boston College found, perhaps not surprisingly, that POBs issued just prior to the market downturns with the past two recessions fared far more poorly as a financial strategy than those issued earlier or since.[39] Accordingly, all other factors being equal, the late stages of business cycle would not be the optimal time to issue a general POB or OOB, but could well be a good time to analyze whether such an issuance could be a beneficial option if the market were to turn sharply downward.

36 Pension buyouts are already relatively common among private sector Employee Retirement Income Security Act (ERISA) plans.
37 Fitch Ratings, "Fitch Focus on Munis: Pensions, States Use Financial Engineering to Lower Contributions" (July 31, 2017).
38 For debt issuance and other structures involving municipal securities, financial advice should be provided a municipal advisor registered with the Securities and Exchange Commission (SEC) and the Municipal Securities Rulemaking Board (MSRB) under the Dodd-Frank Act of 2010. The authors of this white paper are not municipal advisors; such services are provided by registered members of our affiliated firm, PFM Financial Advisors LLC.
39 Alicia H. Munnell, Jean-Pieere Aubrey, and Mark Cafarelli, Center for Retirement Research at Boston College, "An Update on Pension Obligation Bonds" (July 2014).

Capital Improvement Programs and Financing

Expansion periods of the business cycle can also create opportunities to address underfunding of a state or local government's infrastructure, as well as to explore debt management approaches and policies. For example:

- Greater investment in infrastructure renewal and replacement is already overdue for many governments. Where it is feasible to add funding under a pay-as-you-go approach, this can further enhance budget positioning as such investments do not add to the ongoing run rate, and similar levels of capital investment can be maintained with debt-financing during a downturn with a lower near-term impact on the budget.
- At the same time, governments might also plan for ongoing capital investment during a downturn when interest rates and construction costs may be more favorable and as the local economy may benefit from the stimulus activity.
- Such planning might also be combined with initiatives to improve the processes for capital project delivery — accelerating the turnaround time between when debt is incurred and when the project's impact is felt.
- As part of an overall debt management, credit, and capital financing strategy, there are also a broad range of topics that might be reviewed with a registered municipal advisor to address fiscal sustainability goals — taking into account potential business cycle and recession readiness considerations. While such concerns will vary from sector to sector and issuer to issuer, examples might include:
  - Rethinking debt mix to manage risk within a portfolio (e.g., fixed versus variable rate debt, exposure to liquidity providers and counterparties).
  - The structure of future debt issuances — managing the timing of debt repayment to provide adequate capacity for future issuance and/or to manage other anticipated budgetary pressures. Lower interest rate environments that often accompany a downturn may present cost-effective opportunities to amortize debt more slowly to lower debt service costs in the near-term — for example, with longer maturities and/or delayed principal repayment.
  - Timing for debt incurrence (e.g., the use of interim financing tools or cash).
  - Overall debt capacity.
  - Debt refinancing guidelines.

In turn, as options are evaluated, formal debt policies and the flexibility they include could be revised to provide clear direction going forward (or established, if not already in place).

Other Balance Sheet Considerations

Consistent with any issues identified during a stress test, the growth years of the business cycle are a good time to ensure that special funds and reserves outside of the General Fund are appropriately funded. Examples include workers' compensation reserves, landfill closure and/or replacement reserves, internal services funds, and food services funds in a school district.

Conclusion

The Chinese writer and philosopher, Laozi is credited with the following advice: *"Plan for what is difficult while it is easy, do what is great while it is small."*[40]

More than 2,600 years later, this is still a wise approach.

Of course, as noted throughout this white paper, "easy" and "small" are relative terms, and a sustainable path forward requires vision, commitment, and a willingness to overcome obstacles even in the best times.

With these challenges fully recognized, we hope that some of the approaches and ideas catalogued herein will prove useful for governments along this journey — helping to sustain progress along a positive path, through the next downturn and beyond.

40 From the Tao-te Ching. Translation drawn from the introduction to The Art of War by Sun-Tzu, as translated by Thomas Cleary, Shambala Dragon Editions (1988).

Recession Readiness Checklists

Budget Stress Test

- ☐ Develop a baseline long-range forecast
- ☐ Identify downturn scenario(s) — moderate, severe
- ☐ Analyze revenue volatility — scale and timing for key line items
- ☐ Analyze expenditure sensitivity — fixed costs, service demands, unit costs
- ☐ Evaluate reserve levels
- ☐ Evaluate the condition of internal services funds and any special reserves
- ☐ Review capital needs, fleet, and equipment condition
- ☐ Assess debt mix and structure with a municipal advisor

Action Plan for Sustainability

- ☐ Establish future spending parameters
- ☐ Calibrate and size reserve needs
- ☐ Position revenues sustainably through tax and fee policies and potential adjustments
- ☐ Explore rebalancing employee total compensation to improve competitiveness and reduce risk exposure
- ☐ Evaluate and develop options to improve efficiency and manage costs
- ☐ Invest in productivity improvements (e.g., energy efficiency, fleet renewal, technology)
- ☐ Address retiree benefit funding and risk exposure
- ☐ Plan for capital program sustainability
- ☐ Review debt-financing approach and policies with a municipal advisor
- ☐ Ensure that internal services funds and any special reserves are appropriately funded

Overall Approach

- ☐ **Communicate to build stakeholder buy-in**

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