MOODY'S

OUTLOOK

6 December 2022



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Local Government – US

2023 Outlook – Stable with reliable revenue sources and robust reserves

Summary

The outlook for US local governments — cities and counties, K-12 school districts and water and sewer enterprises — remains stable for 2023 as traditionally reliable revenue sources and healthy reserves will blunt the effects of a slower economy and high inflation. Management will also remain largely a sector strength with a track record of maintaining credit quality amid adverse economic conditions. Financial challenges from inflation will linger, including rising employee wages and construction costs. Adjusted pension liabilities will fall with higher interest rates, though 2023 pension contributions will remain relatively steady.

- » Revenue growth will slow, but key revenue sources will provide stability. Aggregate revenue for cities and counties, schools and utilities will increase by 3% to 4% in 2023, or about half the growth rate expected in 2022. Property tax revenues will benefit from a typical lag between changes in market values and assessed values for tax purposes. The state funding environment for schools remains strong, while water and sewer enterprises will benefit from reliable rate increases, albeit at a slower pace.
- » Reserves will provide financial flexibility. Helped by federal pandemic aid, increased liquidity will provide cities, counties and school districts with a buffer against the effects of inflation and a weaker economy. Water and sewer enterprises also have robust cash on hand, providing flexibility to manage escalating costs.
- » Strong governance will help issuers manage the economic downturn. Local government management is typically strong with a history of adapting to budgetary flux, signaling an ability to avoid credit deterioration in 2023. Combatting cyber risks, an increasing expense, will remain a challenge.
- » Rising construction costs and employee compensation will remain budgetary challenges, though pension liabilities will lessen. Inflation will increase employee wages and drive higher construction costs. Higher capital costs will be difficult for some water and sewer enterprises amid a need to address aging infrastructure. Unfunded pension and retiree health obligations will remain substantial, but higher interest rates will cause adjusted liabilities to fall.
- » What could change the outlook. Revenue growth comfortably above the rate of inflation could lead to a positive outlook, while a material revenue decline could contribute to a revision to negative. An inability of local governments to contain rising costs or increase revenue as expenses rise could also play a role in a change to negative.

Outlook definition

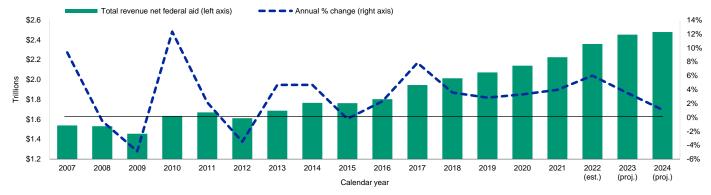
The stable outlook reflects our view of credit fundamentals in the US local government sector over the next 12 months. Sector outlooks are distinct from rating outlooks, which, in addition to sector dynamics, also reflect issuers' specific characteristics and actions.

A sector outlook does not represent a sum of upgrades, downgrades or ratings under review, or an average of rating outlooks.

Revenue growth will slow, but key revenue sources will provide stability

Total revenue for local governments — cities and counties, K-12 school districts and water and sewer enterprises — will grow by about 3% to 4% in 2023 (see Exhibit 1), which is less than half the estimated growth rate in 2022 and below increases in recent years. Still, revenue growth in 2023 would represent eight consecutive years of revenue growth, reflecting the strong credit fundamentals of the sector. Our stable outlook is underpinned by the continued flow of traditionally reliable revenue streams: property taxes for cities and counties; state funding for schools; and rate increases for water and sewer utilities, albeit at a slower pace than immediately before the pandemic.

Exhibit 1
Total local government revenue will increase in 2023 and 2024



Total revenue includes governmental and enterprise revenue. Sources: US Census Bureau and Moody's Investors Service

Slowing revenue growth reflects a variety of macroeconomic challenges, including restrictive monetary policy to address inflation that both weakens demand for housing as mortgage rates rise and potentially decreases sales and income tax revenue if personal and business spending ease. However, municipal entities benefit from a partial hedge against inflation if increased prices translate into a lift in sales tax revenue.

Our stable outlook could move to positive if sector wide revenue growth comfortably exceeds inflation, while it could drop to negative if revenue materially decreases. An inability of municipal entities to manage rising costs or increase revenue to combat rising expenses could also contribute to a negative outlook.

Property tax revenue will serve as source of stability

Property tax revenue, which, in aggregate, accounts for the largest single source of local government revenue at 28% of all revenue, will remain a credit strength as any major falloff lags adverse changes in macroeconomic conditions (see Exhibit 2). Property taxes are based on property values, which generally are adjusted annually or at longer intervals, and any widespread declines in values may take two years or longer to have a material effect on finances. Depending on geography, median home values will remain flat or decline, in

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some cases by up to 10% in 2023, according to Moody's Analytics. But the lag between a decline in valuation and actual revenue effect means local government finances are at least partially insulated from the immediate effects of an economic slowdown.

Exhibit 2
Timing of an economic downturn's impact varies by revenue source
Typical lag time from beginning of downturn to effect on major revenue sources

	Start of Star economic downturn next fis		ionths after downturn
	Home and other property prices start to decline		
Property values			
Assessed value		Properties are reassessed annually	
Property tax revenue		Governments set tax rates after annual assessments	and revenues are collected over the next fiscal year
Sales	Revenue effect is immediate		during both the decline and
Sales tax revenue			the recovery
State funding to local governments		Funding is cut in order to reduce expenditures	and increases during recovery may be delayed as states are cautious

Source: Moody's Investors Service

Individual states' legal restrictions¹ on raising property taxes will affect the magnitude of property tax fluctuations and the ability to keep revenues level during the economic slowdown. Tax caps can apply to the tax rate, tax levy or both. Local governments that operate under property tax rate caps, such as in Oregon and Florida, are more vulnerable to declines in assessed, or taxable, values because they may not have enough capacity to raise the rate to fully offset valuation declines.

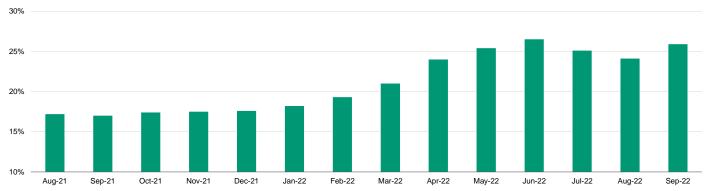
Local governments that have caps on the levy amount rather than the tax rate, such as in Minnesota and New York, are more insulated from declines in assessed values. In states with levy caps, local governments determine the levy dollar amount, and the tax rate is then set based on the taxable values. Therefore, when values decline, there is no impact on receipts because rates automatically increase to yield the levy amount. Still, there are political and practical barriers to tax increases, particularly in places where property values are stagnant or declining.

Other important revenue sources, such as sales taxes and state aid, are affected more quickly by changing market conditions in a downturn. Sales tax revenue is affected by changing consumption patterns and, with recent widespread layoffs and the weaker economy, consumer demand stands to lessen and negatively affect tax collections. However, the unemployment rate remains near a 30-year low, providing some protection against a mass falloff in nominal sales tax and income tax revenue, which can be key sources of revenue for some local governments. While the amount of state aid to local governments can be hurt by a slump in state revenue, we don't expect a slowdown in state revenue in 2023 to lead to cuts in state aid, partly due to states' robust reserves.

Housing affordability remains a concern for local governments. In extreme cases, unaffordable housing will force people out of towns and cities to other, more affordable communities, resulting in lower populations, lower tax revenue, and a smaller tax base. The National Association of Realtors' Housing Affordability Index compares the mortgage payment on the median priced home in

the country against median family income (MFI). The index spiked in June 2022 (see Exhibit 3) when median principal and interest payments represented 27% of MFI, up from 15% in 2020. Following the June 2022 peak, mortgage payments relative to incomes decreased, before ticking up again in September 2022. Based on our expectations of slowing inflation in 2023, housing will become slightly more affordable as we expect MFI to grow modestly while mortgage rates stabilize.

Exhibit 3
National Association of Realtors Housing Affordability Index hit a peak in June 2022



The National Association of Realtors' index reflects the median principal and interest payment for the median priced home in the country divided by median family income. As an example, in June 2022, the median mortgage payment represented 27% of median family income. In August 2021, mortgage payments represented a significantly lower 17% of income. Source: National Association of Realtors

K-12 districts will benefit from a strong state funding environment

Many K-12 school districts face tighter budgets and erosion of reserves amid declining enrollment, rising wages, staff shortages and learning loss from the pandemic. Yet state funding, a leading revenue source along with property taxes, is robust. For example, year-over-year increases for fiscal 2023 top 7% in states such as New York and Pennsylvania and 15% in Michigan (see Exhibit 4).

Exhibit 4

Many states have continued to increase K-12 spending in fiscal 2023

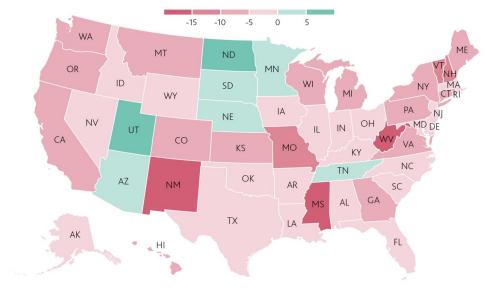
The 10 states with the highest number of Moody's-rated school districts

State	Fiscal 2023 increase	Budget notes
California	2.9%	To support fiscal stability for districts with declining enrollment, local control funding will be determined by the greater of each district's prior-year or current-year average daily attendence or an average of the three prior years.
Illinois	4.6%	The fiscal 2023 budget includes a \$598.1 million increase in early childhood education grants and state tax holidays for groceries and gas.
Michigan	15.2%	The state's education budget includes a per-pupil funding increase to a record high \$9,150 as well as an additional \$408 million for a weighted funding model for higher-need students, \$1.7 billion for educator retention and \$600 million for recruitment to address teacher shortages.
Minnesota	5.1%**	The biennial budget increases per-pupil funding to \$6,800, the highest ever.
New York	7.1%	The fiscal 2023 budget includes an 8.1% increase in Foundation Aid and a guarantee to increase every district's Foundation Aid by a minimum of 3%.
Ohio	7.1%*	The biennial budget marks the first phase of a Fair School Funding Plan, which includes an equalizing mechanism for districts with higher poverty. Average per-pupil funding has increased to about \$7,200 from about \$6,020.
Pennsylvania	7.7%	The budget includes \$225 million for "Level Up" funding for economically distressed districts and a \$100 million increase for special education.
Texas	5.6%*	The biennial budget includes a \$1.5 billion increase in Foundation Aid and increasing contribution rates to the Teacher Retirement System (7.75% in fiscal 2022 and 8.0% in fiscal 2023).
Washington	11.9%*	The biennial budget includes \$27.8 million to offset reductions in state aid linked to enrollment declines and includes increased funding for special education and teacher retention to combat declining enrollment.
Wisconsin	3.5%*	The biennial budget eliminates delayed general aid payments, distributing 100% of general aid during the applicable school year. Revenue limits remain flat, so state increases shift the composition of school districts' revenue away from local sources, such as property taxes, but does not increase the amount of operating revenue available.

^{*2021} to 2023 biennial budget increase; **2023 to 2025 biennial budget increase Source: Moody's Investors Service

While state revenue growth is slowing, state finances will likely remain strong enough to avoid cuts in school funding in fiscal 2024 (which begins in mid-2023 for most states) in part because state reserves are so strong. If the state funding environment weakens, districts in states with funding formulas based on enrollment that have had drop-offs in students stand to lose funding. The National Center for Education Statistics projects national public school enrollment will decrease by 4.4% through 2030, primarily due to declines in the school-age population (see Exhibit 5). Only seven states and the District of Columbia will have increases.

Exhibit 5
Public K-12 enrollment projected to continue declining between 2022 and 2030
National decline estimated at 4.4% through 2030



Data includes both traditional public schools and public charter schools.

Sources: National Center for Education Statistics and US Department of Education

School districts less dependent on state funding face a reduced risk if a state's finances weaken. State funding can vary as a share of revenue even within states, as states have their own funding formulas based on a variety of factors, including resident wealth. For districts with wealthy tax bases, local property tax revenue makes up a larger percentage of revenue than state funding. For districts with less wealthy tax bases, fluctuations in state aid are a greater risk, particularly in districts with declining enrollment.

Water and sewer utilities face revenue-raising challenges driven by affordability concerns

Water and sewer enterprises will continue to benefit from rate increases in 2023, though at a slower pace compared with the years immediately preceding the pandemic. Municipal utilities have independent rate-setting authority, but rate increases will remain moderate to ease the burden on consumers impacted by the weaker economy, muting revenue growth compared with historical trends

While there are multiple causes, many water and sewer enterprises endured revenue declines in fiscal 2021 (the latest data available), in part due to moderations in rate hikes. The fiscal 2021 median total revenue increase for water and sewer enterprises we rate (for which we have data) was 2.4%, down from a 4.1% average median increase over the prior five-year period. In addition, 35% of the enterprises had revenue falloffs in fiscal 2021 versus a 22% average for the prior five-year period.

Affordability will continue to affect utility rate-setting nationwide in 2023 and management will likely face public and political resistance to implementing sizable rate increases to meet escalating operating and capital spending challenges. The American Society of Civil Engineers has estimated that "up to 36% of households will not be able to afford the cost of drinking water by 2024" based on the Environmental Protection Agency's affordability standard.²

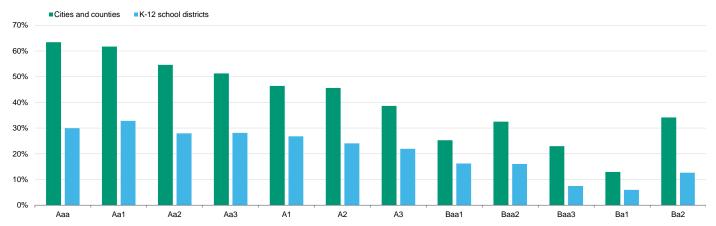
Further, even as utilities begin to reinstitute shutoffs, past-due balances have accumulated. While various programs at the local, state and federal levels are designed to provide arrearage relief to ratepayers, overdue bill collections will take longer than usual.

Reserves will provide financial flexibility

Strong reserves built up in recent years (see Exhibit 6), partly due to federal pandemic aid, will provide cities, counties, and schools with financial flexibility to manage inflation and rising interest rates. Unspent federal pandemic aid that needs to be allotted by late 2024 will add to the flexibility, though another mass infusion of federal aid is unlikely.

Exhibit 6

Median available fund balance ratio for local governments and K-12 districts remain strong across most rating categories



Under some state regulations, K-12 districts are more limited than cities and counties in the amount of fund balance they can carry from year to year, which is one reason for the lower balances across the rating categories.

Source: Moody's Investors Service

Water and sewer utilities also enter 2023 well positioned to navigate through a weaker economic environment as balance sheets are reinforced by robust levels of liquidity. Median days cash on hand for enterprises we rate continued to improve in fiscal 2021 to 534 days (the latest data available) and exceed the level prior to the pandemic of 475 days in 2019, highlighting the emphasis management teams have placed on liquidity as a hedge against ongoing economic uncertainty and rising operating and capital costs. Some cities and counties manage their own water and sewer enterprises, meaning aggregate cash and net transfers can affect liquidity.

Strong governance will help issuers manage the economic downturn

City, county and school district management has a track record of by and large adjusting effectively to economic turmoil, signaling an ability to preserve credit quality amid the current changing macroeconomic conditions. The success comes despite considerable hurdles to raise revenue such as the need for voters to approve budgets and tax hikes in some cases.

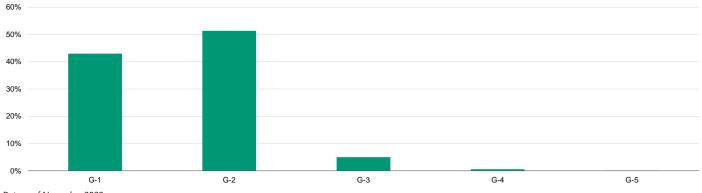
Characteristics of solid management include the development and implementation of effective fiscal, economic and social policies as well as the ability to adjust spending without a material loss in services in the face of economic turmoil. Multiyear financial planning and maintaining debt affordability are also marks of effective governance.

Our assessment of environmental, social and governance (ESG) factors demonstrates management's largely successful track record. For cities, counties and school districts with a public ESG score, 94% have either a G-1 or G-2 issuer profile score, indicating governance is either a positive consideration or risks stemming from governance are neutral to low (see Exhibit 7).

Exhibit 7

Cities, counties and school districts demonstrate strong governance

Most cities, counties and school districts with public ESG scores have either G-1 (positive) or G-2 (neutral to low) considerations



Data as of November 2022 Source: Moody's Investors Service

Water and sewer management teams have experience regularly managing challenges posed by revenue volatility, in some cases caused by climate events such as drought that are increasing. Management advantages include independent rate-raising authority, the essentiality of water and sewer services and typically solid legal covenants. Still, the independent rate-raising authority comes with practical and political constraints on rate hikes, which intensify during a weak economy. The current turbulence will prompt management teams to deploy various strategies in an effort to drive revenue growth. Las Vegas Valley Water District, NV (issuer rating Aa1 stable), for example, has for years incorporated indexed, inflationary rate increases (subject to annual caps) into its rate structure.

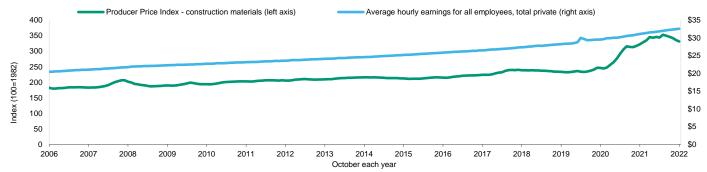
Cyber risk is a growing concern

While the cost of cyberattacks have generally been manageable, management's focus on minimizing cyber risk will become increasingly important. Local governments continue to grapple with multiple challenges involving cyber insurance: stricter underwriting standards, increasing premiums and demand outweighing expected supply. As a result, obtaining cyber insurance has become increasingly difficult, increasing local governments' exposure to potential financial losses associated with cyberattacks. Based on our cyber-risk scoring, we score regional and local governments as having "Moderate" overall cyber risk exposure, while critical infrastructure entities such as water and sewer utilities have a "Very High" overall cyber risk exposure.

Rising construction costs and employee compensation will remain budgetary challenges, though pension liabilities will lessen

Building materials and labor costs remain above historical levels (see Exhibit 8), forcing some issuers to confront cost overruns while others delay projects outright. Higher borrowing costs also threaten to markedly affect capital plans.

Exhibit 8
Rising costs of construction materials and labor are driving up expenses for capital projects



Hourly earnings are seasonally adjusted; Producer Price Index is not. Source: US Bureau of Labor Statistics via Federal Reserve Bank of St. Louis

Richardson Independent School District, TX (Aaa stable), for example, is facing a more than 10% cost overrun on \$750 million in projects funded by a bond program approved by voters in 2021. In order to address the shortfall, the district faces a decision whether to hold a vote prior to the next planned election in 2026 to obtain approval to issue additional debt to cover the overages, or simply reduce the scope of projects. Similarly, inflation has increased costs by 30% versus original estimates for Paris, TX's Water and Sewer Enterprise's (A3) new wastewater treatment plant.

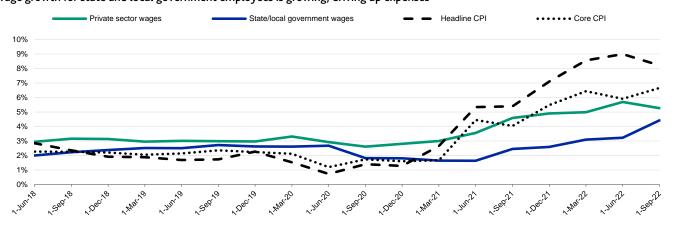
For water and sewer enterprises, the cost increases come at a time when the utilities are confronted with greater needs associated with aging infrastructure, including adverse effects tied to the increase in the frequency and severity of extreme weather events, and regulatory requirements to replace lead service lines and remediate PFAS (per- and polyfluoroalkyl substances). A recent infusion of federal dollars will help address some of the needs. Longer term, though, without continued and consistent increases in federal dollars, the burden of investing in water and sewer infrastructure will fall largely on ratepayers.

Compounding cost increases will only intensify if renewed supply-chain issues take hold. Overall, until sharp expense increases ease, long-range financial and capital planning will remain challenging.

Public sector labor costs will remain an expense driver

Cities, counties, school districts and water and sewer enterprises face higher labor costs as employee compensation increases to attract and retain workers amid a tight labor market and private-sector competition. Wages for state and local government workers, which includes teachers, are trailing CPI (see Exhibit 9), likely contributing to current and prospective employees' demands for higher compensation. Even if inflation moderates, employment-related budget squeezes will not ease immediately because budgets are generally enacted once a year.

Exhibit 9
Wage growth for state and local government employees is growing, driving up expenses



Source: US Bureau of Labor Statistics

Rising interest rates offer opportunities to tackle pension challenges, while investment volatility and inflation will remain risks

Rising interest rates are pushing down local governments' pension liabilities to a greater extent than volatile investment performance is constraining asset accumulation, resulting in lower adjusted net pension liabilities (ANPLs). Falling ANPLs signal lower point-in-time costs to governments in the event they wish to transfer a portion of their pension obligations to a third party, such as an insurance company, or pay off legacy obligations to their retirement system(s). The rising rate environment also provides US public pension systems with an opportunity to reduce their investment portfolio volatility by increasing allocations to fixed-income securities with a less detrimental effect on investment return potential than in recent years. Most governments and US public pension systems have thus far shown little appetite for such material de-risking moves, but activity along these lines could increase, especially if interest rates continue to rise.

Very strong pension investment returns in 2021, combined with investment losses in 2022, will produce relatively stable pension costs for governments over the next two years. Governments continue to depend on high allocations to volatile equity and alternative

investments to produce returns they hope will largely offset the budgetary costs of providing defined-benefit pensions. US public pension assets have suffered from declining public equity market values, which will be compounded in many cases by value declines for private equity and other alternative assets which are reported on a lagged basis.

Beyond the direct challenges to governments, such as construction costs and rising wages, inflation will also indirectly drive pension risk. To the extent that governments increase employee wages beyond actuarially assumed levels, new unfunded liabilities will be created. The challenge for retirees stemming from inflation will also drive political and practical pressure on some governments and their retirement systems to restore or grant new pension cost-of-living adjustments (COLAs), pushing up liabilities and costs. Rising healthcare costs will also translate into higher insurance premiums, which will in turn push up retiree healthcare (OPEB) costs and liabilities for some local governments.

Pandemic-induced learning loss adds to school district expenses

Learning loss from the pandemic, which has disproportionally affected students from lower-income areas, will continue to increase expenses. The National Assessment of Educational Progress' 2022 testing found declines in math and reading proficiency among 4th and 8th grade students in its first full assessment since the pandemic, with lower-income students experiencing larger declines in proficiency. Many districts, however, still have significant unspent federal pandemic aid, which needs to be allocated by late 2024, to address the problems and help with other expenses. With another round of major federal funding unlikely, districts may need to continue funding programs launched with pandemic relief money with their own budgets.

Moody's 2023 global credit themes affecting the US local government sector

Exhibit 10



Higher rates, slower growth

- » Traditionally reliable revenue sources and healthy reserves will blunt the adverse effects of a slower economy and high inflation.
- » Financial challenges posed by inflation will linger, however, including rising employee wages and construction costs.
- » Adjusted pension liabilities will fall with higher interest rates though 2023 pension contributions will remain relatively steady.
- » Local government management is typically strong with a history of adapting to budgetary flux.



Social challenges

- With inflation rising, consumer affordability will continue to affect rate-setting and, in turn, revenue for water and sewer enterprises as management will likely face public and political resistance to implementing sizable rate increases.
- » Learning loss from the pandemic, which has disproportionally affected students from lower-income areas, will continue to increase expenses for school districts.

Source: Moody's Investors Service

Appendix

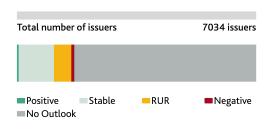
Exhibit 11

Rating and outlook distribution for local governments

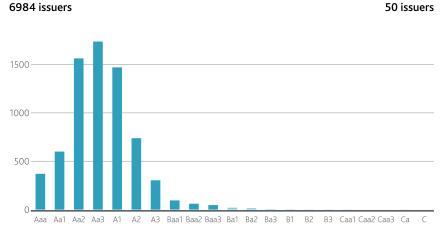
Cities, counties, K12 districts and water/sewer as of November 23, 2022

RATING DISTRIBUTION BY NUMBER OF ISSUERS

INVESTMENT-GRADE SPECULATIVE-GRADE 99% 1%



OUTLOOK DISTRIBUTION



Higher number of RUR outlooks primarily pertains to the November 2, 2022, <u>US Cities and Counties Methodology</u> publication. RUR stands for rating under review. Source: Moody's Investors Service

Moody's related publications

Outlook

» States - US: 2023 Outlook - Stable as strong reserves, governance counter economic volatility, December 5, 2022

Sector In-Depth

- » Local Government US: Period of high inflation and interest rates will test ability to raise property tax revenues, December 1, 2022
- » State and Local Government US: Sales taxes provide partial hedge against inflation, July 13, 2022
- » Public Finance US: US public finance issuers not immune from pressure if inflation persists past 2022, March 8, 2022

To access any of these reports, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available. All research may not be available to all clients.

Endnotes

- 1 Occasionally, these legal restrictions are modified. For example, New York had no property tax cap until adding one in 2011. In 2019, Texas changed its property tax cap to require voter approval for any increases greater than 3.5% (down from 8% prior).
- 2 According to the society, the "EPA standard for affordability is that households spend no more than 2% on drinking water and 4.5% of median household income on both drinking water and wastewater services."

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