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State and local government – US

Retiree healthcare obligations remain material for a segment of municipal issuers

Unfunded other post-employment benefits (OPEBs), though smaller than most municipal issuers' debt and pension liabilities, are the most material long-term liability for about one out of 10 state and local governments. As with pensions, falling interest rates continue to drive up adjusted net OPEB liabilities (adjusted NOLs). Unlike pensions, however, government OPEB funding levels will generally receive only a limited benefit from recently booming investment returns. Instead, the affordability of OPEB obligations, which are typically related to retiree healthcare, will depend far more on factors such as trends in healthcare premium costs and the political willingness to curtail benefits.

» **Low interest rates push up OPEB liabilities, which are material for some governments.** We peg adjusted NOLs at more than $1 trillion for state and local governments, still well below $3.2 trillion in bonded debt and around $4.3 trillion for adjusted net pension liabilities (ANPLs).[1] But while far smaller in aggregate, OPEBs are nevertheless the single-largest long-term liability for roughly 10% of the governments we rate.

» **Government OPEB funding will generally benefit far less from recent booming investment returns than pensions.** Most governments still have a relatively minimal buildup of OPEB assets, and frequently invest those assets less heavily in equities and alternatives, the asset classes that primarily drove recently strong pension investment returns. On the other hand, generally low OPEB asset levels also mean that exposure of government budgets to significant OPEB investment volatility risk is somewhat rare.

» **Healthcare cost trends will remain a significant driver of government OPEB costs and liabilities.** Less-than-expected growth in healthcare premium costs has reduced some governments' OPEB liabilities, and the rate of healthcare cost growth will continue to influence the size of OPEB liabilities to an extent on par with discount rate changes. Reduced pre-funding efforts by some governments in response to near-term budget challenges signal higher long-term costs for their OPEBs and less buffer to further pull back on contributions.

Lower interest rates push up OPEB liabilities, which are material for some governments

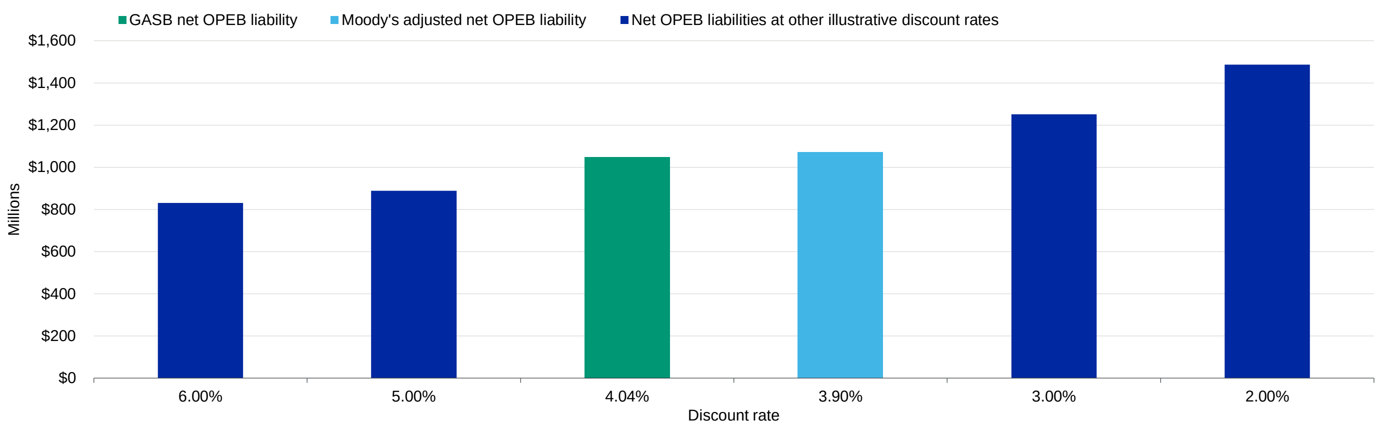
Falling interest rates continue to drive up OPEB liabilities, which, though usually smaller than debt and pension liabilities, remain the most material long-term obligation for about one out of 10 state and local governments.

Lower-for-longer interest rates put upward pressure on our adjusted net OPEB liabilities (adjusted NOLs) because the present value of accrued liabilities that we calculate rises as interest rates fall, and vice versa. We use the FTSE pension liability index, a high-grade corporate bond index, as a discount rate to value OPEB liabilities. Unfunded OPEB liabilities in aggregate were roughly $1.1 trillion for the 50 states and more than 7,000 cities, counties and K-12 school districts that we rate as of 2019 – the most complete fiscal year in our database as of publication. When governments report their 2021 OPEB liabilities, which for many will be in their fiscal year 2022 financial statements, adjusted NOLs will likely exceed $1.2 trillion for state and local governments since the FTSE pension liability index stood at just 2.84% on June 30, 2021 (see Exhibit 1).

Exhibit 1

State and local government unfunded OPEB liabilities exceed $1 trillion and, like pensions, rise as discount rates fall

Estimated state and local government unfunded OPEB liabilities under various discount rates



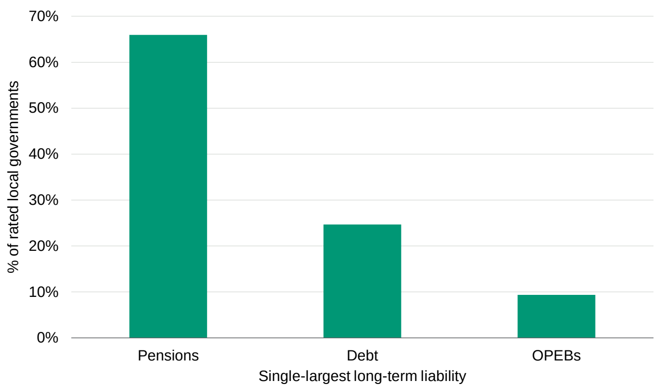
Moody's estimates based on fiscal 2019 financial reporting by the 50 states and more than 7,000 cities, counties and K-12 school districts.
Source: Moody's Investors Service

Even with discount rates near 3% under our adjustments, state and local governments' adjusted NOLs in aggregate remain far smaller than bonded debt (roughly $3.2 trillion) and ANPLs (about $4.3 trillion). Nevertheless, OPEBs are the single-largest long-term liability for some governments. As of its June 30, 2020 financial reporting, we size the State of Delaware's (Aaa stable) adjusted NOL at more than $7.3 billion, compared with an ANPL of $6.8 billion and $4.1 billion of debt and other long-term liabilities. As of its fiscal year ended December 31, 2020, Nassau County, NY (A2 positive) had an adjusted NOL of $5.8 billion, compared with an ANPL of $4.3 billion and debt of $3.1 billion.

The most significant adjusted NOL in fiscal year 2020 among the 50 states amounted to just 150% of revenues for the State of New Jersey (A3 positive), and adjusted NOLs amount to less than 100% of revenues for most local governments. Nevertheless, there are some governments whose adjusted NOLs are multiple times larger than their revenues. As of its fiscal year that ended June 30, 2020, the City of Saginaw, MI (Saginaw-Midland Municipal Water Supply Corporation rated Baa2 stable) had an adjusted NOL that amounted to more than 600% of its operating revenue. As of its June 2020 financial reporting, the City of White Plains, NY (Aa1 stable) had a much less severe, but still substantial adjusted NOL that amounted to almost 340% of its operating revenue.

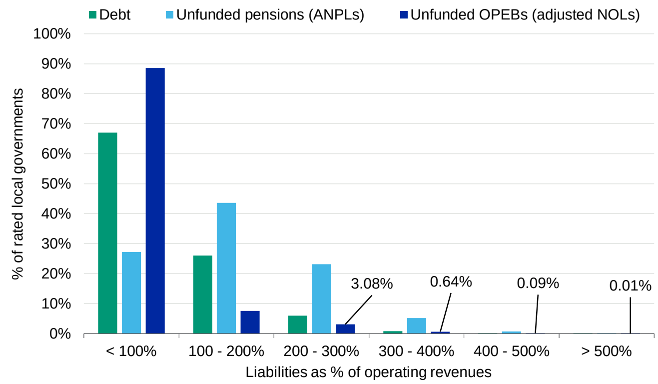
More broadly, OPEBs are the single-largest long-term liability for roughly 10% of local governments that we rate, as shown in Exhibit 2, whereas pensions are the most prominent liability for nearly two out of three. For nearly 90% of cities, counties and K-12 school districts, adjusted NOLs amount to less than 100% of their operating revenues. That said, adjusted NOLs exceed 200% of operating revenues for less than 5% of rated local governments, including several outlier cases with very substantial adjusted NOLs that amount to more than 400% of revenues (see Exhibit 3).

Exhibit 2
OPEBs are the largest long-term liability for roughly one out of 10 local governments...



"Local governments" in this exhibit refers to cities, counties and K-12 school districts
Source: Moody's Investors Service

Exhibit 3
...and adjusted NOLs amount to less than 100% of operating revenues for almost 90% of local governments, but are far more substantial for some outliers



"Local governments" in this exhibit refers to cities, counties and K-12 school districts
Source: Moody's Investors Service

Many of the local governments we rate with large unfunded OPEB liabilities are in either the State of Michigan (Aa1 stable) or the State of New York (Aa2 positive), as shown in Exhibit 4. Among the 48 other states, a government with an adjusted NOL amounting to 83% of revenues would be in the 95th percentile (i.e. among the highest 5% of governments in terms of scale of adjusted NOL). But in Michigan, the top 5% have adjusted NOLs totaling 231% of revenues or more, an amount that is 302% in New York. In Michigan, the high adjusted NOLs are typically carried by municipalities, while many K-12 school districts in New York carry heavy OPEB liabilities.

Large balance sheet liabilities for OPEBs can translate to heavy fixed costs, where OPEB contributions consume material portions of governments' revenue. For the fiscal year that ended June 30, 2020, Schuylerville Central School District, NY (A1) spent nearly 25% of its operating revenue on OPEBs, all of which directly funded retiree benefits, as opposed to pre-funding of benefits payable to retirees in future years. School districts in New York are prohibited by the state from pre-funding their OPEB liabilities. While not as significant, OPEB contributions nevertheless consumed almost 15% of operating revenues for the City of Taylor, MI (Baa2 stable) in its fiscal year 2020 (see Exhibit 5). While Taylor has built-up roughly $3 million in OPEB assets, its total adjusted liability of around $210 million nevertheless remains almost entirely unfunded and all but $255,000 of its $8.6 million OPEB contribution was used to fund current benefits for retirees (i.e., for "pay-as-you go," or "paygo" contributions).

Exhibit 4

Michigan and New York local governments tend to have high OPEB liabilities compared with the other 48 states

Percentile distributions of adjusted NOL to revenue ratio among local governments

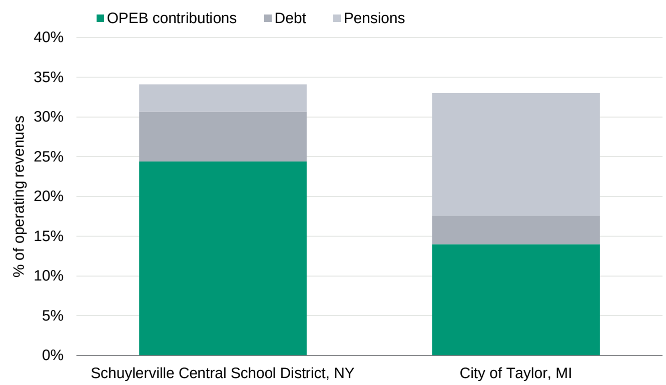
Percentile	All others	Michigan	New York	Aggregate
95th	83%	231%	302%	176%
75th	31%	69%	208%	43%
50th	**10%**	**64%**	**147%**	**13%**
25th	2%	58%	80%	3%
5th	0%	1%	0%	0%

Source: Moody's Investors Service

Exhibit 5

OPEB contributions consume a material portion of some governments' revenues

"Fixed costs" for OPEBs, debt and pensions as % of operating revenue



"Debt" = implied debt service for Schuylerville and debt service for Taylor.
"Pensions" = our tread water indicator, which is the cost to prevent unfunded liabilities from growing under reported assumptions
Source: Moody's Investors Service

Government OPEB funding will generally benefit far less from recently booming investment returns than pensions

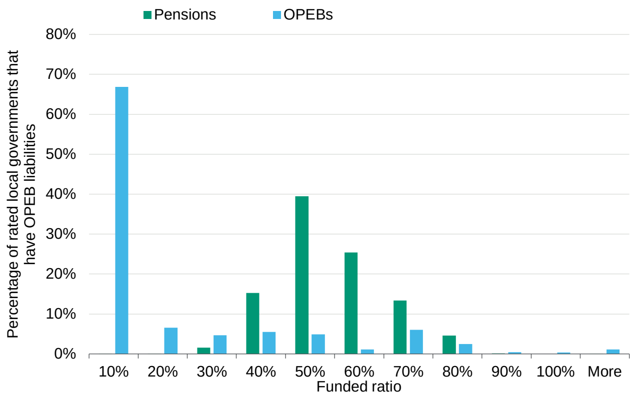
With comparatively lower levels of assets and investment allocations that typically prioritize liquidity over returns, government OPEB funding stands to benefit less than pension funding from recently roaring investment markets. Even though ANPLs greatly exceed adjusted NOLs in aggregate, state and local governments have nevertheless built-up far fewer OPEB assets to cover future benefits (a practice often called pre-funding) than they have for pension benefits. On the other hand, the risk to governments from investment volatility stemming from OPEBs is generally far less than that risk for pensions.

The scale of governments' OPEB assets is immaterial in many cases because their total liabilities for OPEBs generally fall significantly below that of pensions, and because of the widespread lack of substantial pre-funding. The lack of pre-funding is clearly illustrated among local governments that have any OPEB liabilities: roughly two-thirds have OPEB funding ratios of less than 10% under our standard discount rate adjustments, whereas most have adjusted pension funding ratios of between 40% and 60% (see Exhibit 6). While there are exceptions, the vast majority of governments' OPEB assets amount to less than 50% of their operating revenues, compared to about half with pension assets that amount to more than 200% of revenues (see Exhibit 7).

Exhibit 6

The extent of most governments' OPEB pre-funding is minimal relative to liabilities...

Distribution of Moody's-adjusted pension and OPEB funding ratios among local governments

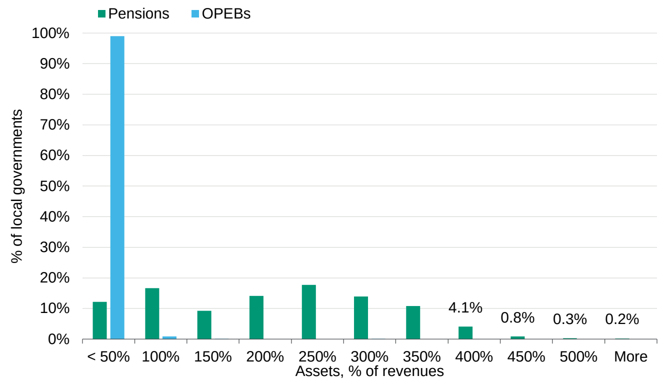


Source: Moody's Investors Service

Exhibit 7

...and the magnitude of OPEBs tends to be insignificant relative to governments' operating revenue

Distribution of OPEB assets relative to local governments' operating revenues



Source: Moody's Investors Service

In addition to being relatively small, the OPEB assets that governments do have are frequently invested in highly liquid and low-volatility assets. For example, as of its June 30, 2020 financial snapshot, the State of Connecticut's (Aa3 stable) $72 million in teacher OPEB assets were entirely invested in US Treasuries or other cash equivalents. By comparison, the state's teacher pension system had more than $18 billion in assets as of June 2020 and a target allocation of just over 20% to liquid and low-risk fixed income classes, with the remaining allocation spread across higher-risk fixed income and various equity and alternative investment classes. Like many governments' OPEB trusts with relatively minimal pre-funding levels, Connecticut's teacher OPEB system requires liquid investments because it has assets that are roughly sufficient to cover just one year of OPEB benefit payments.

Because of the low level of OPEB assets and their frequent allocation to more liquid asset classes, governments' OPEB funding will generally not benefit from the recently booming investment market, especially in comparison with their pension systems. While most US public pension systems have yet to announce their investment returns for the fiscal year ended June 30, 2021, the preliminary returns announced thus far have been above or near the best on record for many systems, ranging from 21% to 33%, in line with our early June expectations. While low interest rates will continue to drive up pension liabilities and thus prevent fiscal 2021 returns from driving substantial long-term funding improvements, near-term pension funding has nevertheless improved materially for many governments. Given the comparatively low level of OPEB assets and funding levels, government OPEB funding will not similarly improve in most cases.

In order to generate such robust returns like in fiscal year 2021, US public pension systems accept significant volatility risk through heavy investments in equities and alternatives. In contrast, the lack of material pre-funding generally means that most governments do not face similar volatility exposure from OPEBs. But there are exceptions, and those governments that have more aggressively pre-funded their OPEB liabilities and invested them similarly to their pension assets have experienced significant growth in assets as a result.

The Ohio Public Employees Retirement System (OPERS), a retirement system which administers both pension and OPEB benefits for certain employees of the State of Ohio (Aa1 stable) and more than 3,000 of its local governments, reported 12.02% pension returns and 10.96% OPEB returns for its fiscal year that ended December 31, 2020. We expect that those governments with June 30 fiscal year ends for their retirement systems, and which have material OPEB pre-funding and OPEB investments akin to those of their pension systems, will similarly report very strong growth in OPEB assets stemming from fiscal 2021 returns.

On the other hand, governments with material OPEB assets invested in high risk-return classes can exacerbate governments' exposure to investment volatility. In addition to Ohio, large retirement systems for states such as Alaska (Aa3 stable), Colorado (Aa1 stable), Delaware (Aaa stable), Hawaii (Aa2 stable) and Kentucky (Aa3 stable) invest OPEB assets similarly to pension assets, with heavy allocations to equities and alternatives, although only Alaska's OPEB assets exceed even 100% of its own-source revenue. Having issued OPEB bonds to help fund its liabilities, Oakland County, MI (Aaa stable) similarly invests its material OPEB asset base heavily in equities and alternatives. The county's balance sheet benefits significantly from lower unfunded liabilities driven by its substantial pension and OPEB assets. But its exposure to investment return volatility, illustrated by our asset shock indicator, is also pushed up significantly by OPEBs (see Exhibit 8). Our pension asset shock indicator is a one-year probability estimate that a government will experience retirement system investment losses that amount to 25%, or more, of its revenue.

Exhibit 8

Substantial OPEB assets reduce Oakland County's unfunded liabilities, but heavy allocations to equities and alternatives heighten its asset risk

$ millions

	Pensions	OPEBs	Combined
GASB total liability	$740	$953	$1,693
Assets	$718	$1,338	$2,055
GASB net liability	$22	($384)	($362)
GASB discount rate	7.25%	7.25%	7.25%
Moody's adjusted net liability	$396	$295	$691
Adj. discount rate	2.65%	2.65%	2.65%
Assets, % of operating revenue	135%	251%	386%
Shock return rate	-19%	-14%	-6%
Estimated volatility (2021 risk-return map)	15%	15%	15%
Asset shock indicator	4.0%	7.5%	17.6%

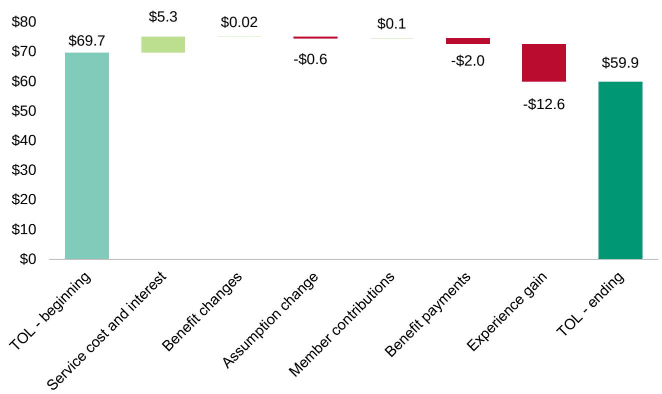
Sources: Oakland County audited financial statements and Moody's Investors Service

Healthcare cost trends will remain a significant driver of government OPEB liabilities

Healthcare cost trends will continue to heavily influence governments' unfunded OPEB liabilities, unlike the frequently minor impact of investment returns. Since many governments fund OPEBs on a paygo basis, their budgets are directly affected by changes in the cost to provide healthcare benefits to retirees. Recent liability reductions for some governments also illustrate how healthcare cost premium savings can bring down liabilities. While other items also affected its liability positively and negatively, the State of New Jersey (A3 positive) reported a $12.6 billion (18%) reduction in its Governmental Accounting Standards Board (GASB) total OPEB liability for state and local education retirees in its audited financial statements for the fiscal year that ended June 30, 2020, attributable to an actuarial “experience gain” (see Exhibit 9).

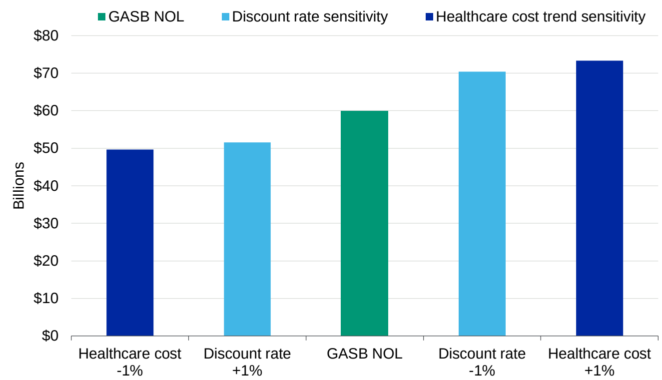
The state's “experience gain” liability reduction is largely attributable to lower premium rates, which it achieved through several savings initiatives such as a renegotiated Medicare contract with a provider and lower prescription drug costs through mandated use of generics. Looking ahead, healthcare cost trends will continue to influence the state's OPEB liability, and to an even greater extent than discount rates. The state's actuaries assume certain healthcare costs will grow at 5.7% annually in the near-term and converge to 4.5% annually. If healthcare costs grow by 1% more than assumed, the state's unfunded OPEB liability for state and local education employees rises to $73 billion (22%), from $60 billion. A 1% decline in discount rate would have slightly less influence, causing a 17% liability increase (see Exhibit 10).

Exhibit 9
Actuarial "experience gains" such as lower-than-assumed healthcare costs reduced New Jersey's OPEB liability in fiscal 2020...
Changes to state and local education GASB total OPEB liability, $ in billions



TOL = GASB total OPEB liability
Source: State of New Jersey June 30, 2020 audited financial statement

Exhibit 10
...and healthcare costs will continue to significantly influence the state's OPEB liability



Source: State of New Jersey June 30, 2020 audited financial statement

OPEB benefit changes, where legally permissible and politically attainable, can also effectively reduce participating governments' credit risks by helping to insulate their budgets and balance sheets from healthcare cost trends. The Ohio Police & Fire Retirement System's (OP&F), which administers the retirement benefits for state and local government public safety employees throughout Ohio, shifted OPEB benefits from retiree healthcare coverage to a fixed-dollar stipend that does not rise. In this regard, premium costs on private healthcare exchanges may influence the political ability of some governments to enact similar changes, because lower premium costs make a given fixed dollar stipend more palatable to employee and retiree groups, and vice versa.

While healthcare costs hold substantial influence over liabilities and costs, other factors have also driven recent OPEB changes for governments. For example, the State of Hawaii and New York City (Aa2 stable) each pulled back on their level of OPEB pre-funding in order to help address budget challenges stemming from the onset of the coronavirus. In the case of Hawaii, the state had previously set a target to increase its annual contributions in order to fully fund its OPEB liability over roughly the next two decades, but reverted to paygo funding due to budget challenges stemming from the coronavirus. In contrast, New York City used a portion of its OPEB trust fund as an extra reserve fund that enabled it to temporarily reduce expenditures on OPEBs for budget relief. Similar to pensions, lower near-term OPEB contributions by governments do not alter the timing or amount of benefit promises, but instead defer the costs of funding those benefits to the future. New York City estimates that a recently-announced shift of its group retiree health plan could reduce its annual costs by approximately $600 million, although the impact to its liability will not be known until an actuarial valuation after the plan takes effect in January 2022.

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» Huge investment returns set to benefit governments' pension funding, June 2021

» Investment risk high for governments with heavily negative pension cash flow, February 2021

Endnotes

1 The Board of Governors of the Federal Reserve System (the Fed) sizes the municipal securities market at approximately $4 trillion, of which state and local government debt comprises $3.2 trillion. Our $4.3 trillion figure for adjusted net pension liabilities reflects a sample of 164 large US public pension systems for which we have estimated ANPLs as of June 30, 2021 market conditions. Our aggregation of adjusted NOLs is comprised of the 50 US states and more than 7,000 cities, counties and K-12 school districts that we rate.

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