

OMAC MuniNews

Volume 18, Issue 3

News & Views About the Ohio Municipal Finance Industry

September 2016

This newsletter is available on our website: www.ohiomac.com

The following article was taken from Moody's Investors Service, dated April 18, 2016.

State and Local Governments - US

FAQ: Improved GASB Pension Disclosure Does Not Eliminate Need for Adjustments

Disclosure of pension liability exposure is improving as US state and local governments comply with new rules under Governmental Accounting Standards Board (GASB) Statement 68. The added disclosure enables improved assessment of the relative strength or weakness of government contributions for credit analysis, through our new “tread water” indicator. Other changes increase standardization and provide greater insight about pension exposure. While helpful, GASB’s reporting changes do not alter credit risk stemming from pensions, nor eliminate our need for balance sheet adjustments to reported data.

- » **Do the new pension disclosures alter credit risk?** Underlying credit risk from pensions is not changed by GASB 68, and our analytical process is only affected minimally. Our basic view that pensions are debt-like, balance sheet obligations is unchanged by reporting rules. Inclusion of net pension liabilities (NPLs) on government-wide balance sheets for the first time is not a credit event because under our state and local government rating methodologies, we already viewed unfunded pension liabilities, including shares of cost-sharing plans, as balance sheet obligations.
- » **What is Moody’s “tread water” analysis and how does it relate to GASB 68?** The “tread water” indicator measures the annual government contribution required to prevent the reported NPL from growing, under reported assumptions. Contributions above this level cover all NPL interest plus pay down some principal, making them stronger from a credit perspective than contributions below this level. Ratios comparing government contributions to the “tread water” level and “tread water” costs to government revenues shed light on budgetary fixed cost burdens.
- » **Why will Moody’s still make balance sheet adjustments to data reported under GASB 68?** We still adjust reported data because we measure the present value of liabilities using a market-based discount rate as a proxy for the risk of pension benefits, and to enhance comparability across rated entities. In contrast, the discount rates used to report liabilities under GASB 68 are either wholly or partially tied to assumed investment returns, which decreases reported liabilities as asset risk increases.
- » **How is pension disclosure improving under GASB 68?** The new disclosure provides better information about the sensitivity of liabilities to discount rate changes, allocation of cost-sharing plan exposure, and, in some cases, projected asset depletion dates. However, GASB 68 reporting is not a comprehensive depletion risk indicator because of the significant impact of assumptions related to future contributions and investment returns.

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Do the new pension disclosures alter credit risk?

Underlying credit risk from pensions is not changed by GASB 68 adoption, and our analytical process will be affected only minimally. Our basic view that pensions are debt-like, balance sheet obligations is unaffected by reporting rules. The fundamental economic exposure of governments to pension obligations does not change simply because the reporting rules surrounding those obligations have been altered. Thus, the inclusion of NPLs on government-wide balance sheets for the first time under GASB 68, as opposed to disclosure solely in the financial statement notes, is not a credit event.

The new accounting standards increasingly separate financial reporting on pension exposure from the funding of government pension obligations. For example, the reporting of pension obligations on government balance sheets under GASB 68 is no longer related to payment against the Annual Required Contribution (ARC) funding standard. For some governments, the significant impact of pension liabilities appearing on balance sheets may spur increased efforts to address unfunded pension obligations. However, the new accounting rules themselves are unlikely to fuel widespread changes, but instead are more likely to drive greater divergence between financial reporting and annual funding from government budgets.

Governments also have an incentive to establish contributions at a level sufficient to avoid projecting asset depletion, and thus the required use of lower discount rates. However, only a small portion of plans project depletion, so this incentive is unlikely to drive many changes to funding practices.

What is Moody's "tread water" analysis and how does it relate to GASB 68?

Using the required disclosure of service cost under GASB 67 and 68, "tread water" analysis measures whether or not a government annual pension contributions are sufficient to pay down a portion of reported unfunded pension liabilities. After accounting for employee contributions, annual government contributions that "tread water" equal the sum of employer service cost and interest the reported NPL at the start of the fiscal year. "Service cost" is the value of current year benefit accruals. We accrue interest on the beginning NPL using the reported single-equivalent discount rate from the prior year.

A plan that receives contributions equal to "tread water" will end the year with an unchanged NPL from the beginning of the year plan assumptions hold exactly. Our calculation of the "tread water" indicator is based entirely on reported data and assumptions state and local governments and their pension plans under the new accounting standards (see Exhibit 1).

Exhibit 1

Moody's "Tread Water" Analysis Uses Reported Data and Assumptions to Gauge Relative Strength of Government Pension Contributions

Tread Water Payment	Interest Rate	If government contributions greater than "Tread water"	If government contributions less than "Tread Water"
Employer service cost + interest on reported net pension liability at beginning of year	Prior year reported discount rate	Reported Net Pension Liability will decrease if plan assumptions are met	Reported Net Pension Liability will increase if plan assumptions are met

Source: Moody's Investors Service

Our "Tread water" indicator takes into consideration the present value of liabilities and the impact on those measurements due the passage of time. It is not a cash flow comparison of pension plan inflows and outflows. In a given year, a number of events impact pension liabilities and/or pension assets, characteristics that we use in the calculation of the "tread water" payment.

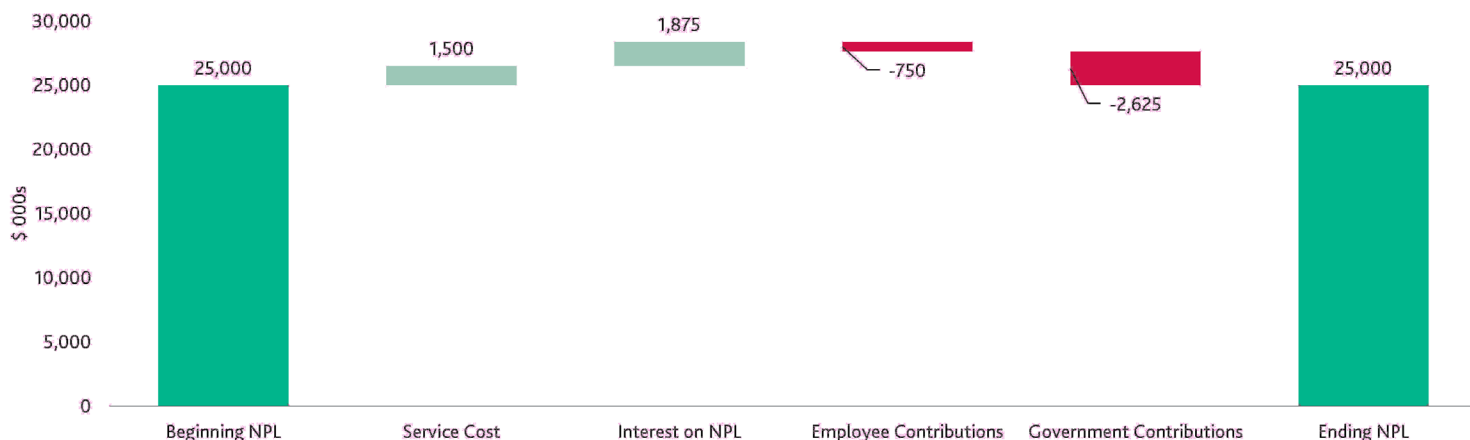
- » For example, service cost increases liabilities but has no impact on assets. Thus, all else being equal, service cost increases the NPL.
- » Conversely, contributions from employees and governments increase plan assets, and thus decrease the NPL, all else being equal.
- » Akin to the outstanding principal of a debt obligation, the NPL accrues annual compound interest at the plan reported discount rate. This reflects interest accrual on total liabilities each year to reflect the time value of money, and an accrual at the same on the asset side of the ledger for assumed investment returns.

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A hypothetical plan beginning the year with a \$25 million NPL ends the year with a \$25 million NPL when contributions cover service cost plus NPL interest, and no other new sources of unfunded liabilities emerge. In this example, government contributions of \$2.625 million exactly equal “tread water” (see Exhibit 2).

Exhibit 2
Unfunded Pension Liabilities “Tread Water” if Contributions Cover Service Cost Plus Interest on Reported Net Liabilities and Plan Assumptions Are Met

Impact of events on NPLs throughout the year, including a \$2.625 million “tread water” contribution



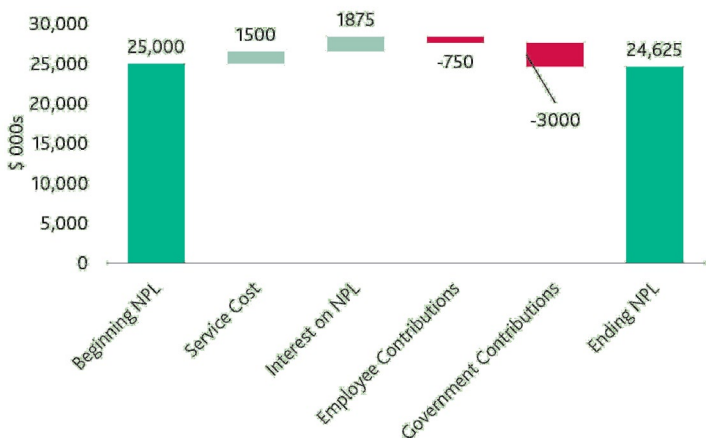
“NPL” stands for the GASB 67 and 68 accounting basis “net pension liability”

Source: Moody’s Investors Service

Contributions below “tread water” do not reduce the NPL during the year under reported assumptions. Conversely, contributions this benchmark cover all NPL interest and some principal, and are thus stronger from a credit perspective. Net liabilities may of course decrease or increase in a given year due to factors other than contribution strength, such as investment performance above or be the plan’s assumed rate. But stronger contributions will always work to reduce unfunded liabilities faster than weak contributions are thus a positive credit feature.

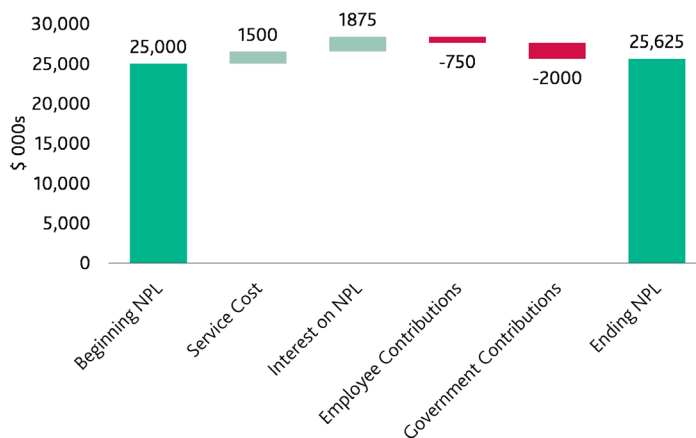
Using the same hypothetical plan, the NPL declines when contributions exceed the “tread water” threshold and plan assumptions met (see Exhibit 3), but the opposite occurs when contributions fall short of the “tread water” threshold (see Exhibit 4).

Exhibit 3
When Government Pension Contributions Exceed the “Tread Water” Threshold, Net Liabilities Decline if Plan Assumptions Hold
 Contributions of \$3 million exceed “tread water” level of \$2.625 million in hypothetical example



Source: Moody’s Investors Service

Exhibit 4
When Government Pension Contributions Fall Below the “Tread Water” Threshold, Net Liabilities Increase if Plan Assumptions Hold
 Contributions of \$2 million trail the “tread water” level of \$2.625 million in hypothetical example



Source: Moody’s Investors Service



We rely on two key ratios that use “tread water” payments in our credit analysis to shed light on state and local government pension burdens from an income statement perspective:

- » A gauge of total fixed cost burdens that compares the “tread water” cost plus debt service and Other Post-Employment Benefits (OPEBs) contributions to operating revenues.
- » A comparison of actual employer contributions relative to “tread water” across all plans in which a government participates, which indicates how much NPL principal payment, or conversely, negative amortization, is built into a government’s budget.

“Tread Water” Framework an Improvement Over the ARC Standard for Credit Analysis

“Tread water” provides better insight regarding annual funding strength than the discontinued ARC standard, because ARCs were highly incomparable and provided substantial leeway to backload contributions. Contributions according to ARC schedules commonly apply very lengthy, annually rising and backloaded amortization schedules. This type of approach is designed to gradually improve funded ratios and lower unfunded liabilities relative to covered payroll over time, but also increases pension debt (in nominal dollars) for many years even if all plan assumptions are met. While some ARCs are setup to more rapidly pay down unfunded liabilities, our reviews of disclosures by a large number of public plans covering plan fiscal years 2014 and 2015 have found that contributions to the majority of US public plans do not “tread water.”

In the example below, we’ve calculated two ARC payments for the exact same hypothetical plan, as well as the “tread water” payment for comparison. The amortization payment associated with ARC #1 is far more lenient than ARC #2, and results in a growing unfunded liability. In contrast, ARC #2 pays down some of the unfunded liability. Highlighting the incomparable nature of ARCs, both scenarios constitute “full payments” under the prior GASB 25 and 27 reporting rules, despite having dramatically different impacts on plan funding (see Exhibit 5).

Exhibit 5

Moody's “Tread Water” Payment Provides Improved Comparability Over the GASB ARC Standard

	ARC #1	ARC #2	Tread Water Payment
Amortization Period	30	15	n/a
Method	Level Percent of Pay	Level Dollar	n/a
Discount Rate	7.50%	7.50%	7.50%
Beginning Unfunded Liability	\$1,000,000	\$1,000,000	\$1,000,000
Employer Service Cost	\$75,000	\$75,000	\$75,000
Amortization Payment	\$62,262	\$113,287	\$75,000
ARC	\$137,262	\$188,287	\$150,000
Unfunded Liability After ARC Payment	\$1,012,738	\$961,713	\$1,000,000

Payroll growth assumption of 3% used to determine level percent of pay amortization payment. Assumes no additional sources of actuarial experience gains or losses for simplicity.

Source: Moody's Investors Service

The closest disclosure to the ARC under GASB 67 and 68 is the Actuarially Determined Contribution (ADC). The “tread water” framework is also more analytically useful than the ADC, for two key reasons. First, there are no standard parameters for the ADC, resulting in a lack of comparability across plans and governments. Second, not all plans even report an ADC under GASB 67. For example, if a statutory framework rather than an actuarial payment requirement guides plan funding, the ADC may not even exist and thus, will not be reported.



Government-Wide Pension Expense Under GASB 68 is Susceptible to Investment Performance Volatility

In our analysis of state and local governments, we rely on “tread water” costs and actual government contributions rather than accrual basis “pension expense” reported under GASB 68. First, the key financial metrics in our state and local government rating methodologies are based on modified accrual (i.e. “fund based”) statements more than the accrual basis statements. Second, GASB 68 pension expense is susceptible to volatility since it requires recognition of differences in investment performance from assumed levels over a five year period. In comparison, amortization periods of up to 30 years were allowed under the ARC standard.

In the case of government utilities that report on an accrual basis, we do not make standard data adjustments to reported expenses to calculate “net revenues” for debt service coverage, but will consider the impact of pension expense versus cash contributions and “tread water” costs as part of our analysis.

While an Improvement, “Tread Water” Retains Some Comparability Challenges

The “tread water” cost is based on reported assumptions, and thus remains subject to some comparability challenges associated with differences in reported discount rates across different plans. The discount rate is not only a significant input into the present value of accrued pension liabilities, but it also significantly impacts service cost. As described previously, both the reported liability and service cost are key inputs into our “tread water” analysis.

This challenge most significantly impacts some poorly funded plans that are forced to report using discount rates well below their assumed rates of investment return under GASB 67 and 68, because they project asset depletion. Materially lower GASB discount rates drive up “tread water” costs substantially. In those cases, governments likely set annual funding requirements using much higher discount rates than those used for GASB reporting. Since the risk of pension asset depletion is clearly heightened in these cases, our credit analysis also heavily weighs the potential timing and budget impact of pension benefit payment responsibility shifting from plan assets to government budgets.

Why will Moody’s still make balance sheet adjustments to data reported under GASB 68?

For most state and local governments, discount rate selection represents the most significant difference between Moody’s balance sheet pension measurements and reported values under the new GASB standards. We view point-in-time balance sheet measurements of accrued pension promises to be independent of expectations about future earnings on plan assets, in contrast to the GASB approach. To enhance comparability across rated entities, we discount liabilities in their entirety using a market-based interest rate index.

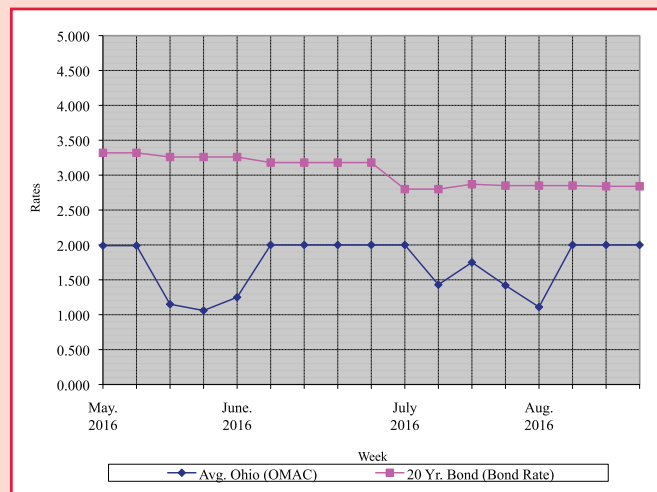
Accrued public pension benefits broadly enjoy strong legal protections, and thus carry very low risk of impairment. To reflect this high-grade nature, we use the Citigroup Pension Liability Index (CPLI) as of the measurement date to discount liabilities. The CPLI is comprised of minimum Aa rated corporate bonds, providing a reasonable proxy for a market-based discount rate of similarly low risk obligations. A high-grade corporate bond index serves as a more pure valuation of public pension benefit impairment risk than a municipal bond index because a corporate bond index does not reflect market value placed on tax exemption. After performing our discount rate adjustments, we compare the resulting adjusted liability to the market

MARKET UPDATE

GENERAL OBLIGATION

Note and Bond Interest Rates
for May thru August

The following graph compares Ohio short-term note rates with the Bond Buyer’s 20 year bond index. The short-term rates represent actual rates reported to OMAC by Ohio purchasers and reported on OMAC’s weekly calendar.



value of assets, generating the Moody's adjusted net pension liability (ANPL).

Discount rate rules for government reporting under GASB 67 (plans) and 68 (governments) changed substantially from the prior GASB 25 (plans) and 27 (governments) standards. Before allowing the assumed rate of investment return to serve as the liability discount rate, GASB 67 and 68 require a projection-based test to guide discount rate selection.

Plan actuaries must determine whether pension plan assets are expected to deplete at any future date. If no, then the discount rate applied to the entire accrued liability may continue to be the assumed rate of return on plan assets. If yes, then liability cash flows up until the projected depletion date may still be discounted using the assumed rate of return on plan assets. However, liability cash flows following the projected depletion date must be discounted using a municipal bond index as of the measurement date. In these scenarios, a resulting "single-equivalent" discount rate that is effectively a blend of two rates is applied for financial reporting purposes. Governments and plans may still determine plan funding using different assumptions and methods than those required for accounting.

While the GASB 67 and 68 discount rate rules are more stringent than under GASB 25 and 27, most public plans do not project asset depletion. Thus, in practice, most continue to use the assumed rate of investment return to discount liabilities in their entirety, effectively resulting in no change from the prior standards. Whether wholly or partially, the continued linkage of future pension investment return expectations with the discounting of plan liabilities leaves in place several significant measurement challenges that our adjustments to reported data seek to address:

- » The GASB approach leads to comparability challenges due to differences in key assumptions across governments and their plans.
- » Reporting under new GASB rules continues a sharp methodological divergence in pension reporting between US state and local governments versus the private sector. The exact same pension promise as of the same date is valued under a very different methodology on the balance sheet of a government as an employer than on the balance sheet of a corporation or not-for-profit organization as an employer. We strive to identically measure the same promise as of the same date regardless of what type of entity made the promise, even though our rating methodologies across different sectors may incorporate and evaluate those measurements differently.
- » Reported US public pension liabilities decrease as pension investment risk-taking *increases*, and vice-versa.

How is pension disclosure improving under GASB 68?

Beyond the new reporting of service cost, several other new disclosure requirements under GASB 67 and 68 represent improvements.

- » The disclosure of government proportional shares of multiple-employer cost-sharing plans must be reported under GASB 68 and incorporated in reported NPLs on government balance sheets. Rather than our estimates of government allocations of multiple employer cost sharing plans based on pro rata contributions under prior accounting standards, we use the reported proportional share allocations under GASB 68, provided we agree with the rationale.
- » The reporting of the sensitivity of NPLs to 100 basis point discount rate changes enables more precise estimates of plan-specific duration, which we use in our adjustments rather than a 13 year uniform assumption applied under the prior reporting without sensitivity disclosure.
- » Where applicable, projected pension asset depletion dates indicate the approximate amount of time remaining until government budgets may be forced to cover pension benefit payments directly. GASB 68 reporting is not a comprehensive depletion risk indicator, however, because of the significant impact of assumptions related to future contributions and investment returns. The size of annual benefit outflows relative to plan assets provides an alternate gauge of how quickly plan assets may be falling without the offsetting impact of contributions and investment returns. Furthermore, the relative size of plan inflows and outflows before considering investment returns also provides insight regarding plan sensitivity to asset volatility risk.



Appendix

Exhibit 6

Calculation of Moody's Fixed Cost Analysis, Including "Tread Water" Costs for Pensions

Exhibit depicts a hypothetical example

Line Item	Value	Label	Source
Reported Total Pension Liability (beginning of year)	\$50,000,000	A	Reported
Reported Plan Fiduciary Net Position (pension assets, beginning of year)	\$40,000,000	B	Reported
Reported Net Pension Liability (beginning of year)	\$10,000,000	C	= A - B
Reported Single-Equivalent Discount Rate (prior year)	7.50%	D	Reported
Reported Service Cost	\$500,000	E	Reported
Employee Contributions	\$200,000	F	Reported
Employer Service Cost	\$300,000	G	= E - F
Interest on Net Pension Liability	\$750,000	H	= C * D
Tread Water Benchmark	\$1,050,000	I	= G + H
Government Contributions	\$900,492	J	Reported
Government Contributions Above (Below) Tread Water	(\$149,508)	K	= J - I
Ratio of Contributions to Tread Water	86%	L	= J / I
Government Operating Revenues	\$7,500,000	M	Reported
Debt Service	\$800,000	N	Reported
Government OPEB Contributions	\$700,000	O	Reported
Fixed Costs for Pensions, Debt and OPEB to Revenues	34%	P	= (I + N + O) / M

Source: Moody's Investors Service

Exhibit 7

Calculation of Moody's Pension Balance Sheet Adjustments Under GASB 68 Reporting

Hypothetical example depicts participation in two plans, one single-employer and a reported cost-sharing plan allocation

	Plan A - Single Employer		Issuer Share of Cost-sharing Plan B		Government Total
	Value	Source	Value	Source	Value
Total Pension Liability	\$50,000,000	Reported	\$21,428,571	Calculated by Moody's	\$71,428,571
Plan Fiduciary Net Position (assets)	\$40,000,000	Reported	\$13,928,571	Calculated by Moody's	\$53,928,571
Net Pension Liability	\$10,000,000	Reported	\$7,500,000	Reported	\$17,500,000
Funded Ratio	80.0%	Reported	65.0%	Reported	75.5%
Single-equivalent Discount Rate	7.50%	Reported	7.75%	Reported	n/a
Net Pension Liability (-1% discount rate)	\$16,250,000	Reported	\$10,392,857	Reported	n/a
Measurement Date	6/30/2015	Reported	6/30/2014	Reported	n/a
CPLI at Measurement Date	4.44%	Society of Actuaries	4.33%	Society of Actuaries	n/a
Estimated Duration of Liabilities	12.5	Moody's estimate	13.5	Moody's estimate	n/a
Adjusted Liability	\$71,774,991	Moody's estimate	\$33,101,832	Moody's estimate	\$104,876,823
ANPL	\$31,774,991	Moody's estimate	\$19,173,260	Moody's estimate	\$50,948,252

Source: Moody's Investors Service

To demonstrate the influence of asset risk on reported US public pension balance sheet reporting, we simulated a highly simplified pension system comprised of two individuals, a 35 year old that began working at age 30 (Member 1), and a just-retired employee a age 65 about to begin collecting pension benefits (Member 2). For simplicity, we assume that both individuals retire at 65 and die at 80 with certainty, which translates to exactly 15 years of pension benefit payments. Other assumptions include the entry age normal actuarial cost method (level percent of pay), 2.5% annual salary increases, and a 3-year highest final average salary with a 2% benefit multiplier and no cost-of-living adjustment. We assume that a plan funding snapshot is measured as of 30 June 2015.

In Scenario 1, the plan has assets of \$700,000, comprised of \$50,000 in cash and US Treasuries, with the remaining \$650,000 invested in a mix of public equities, alternatives and fixed income. We've assumed that this asset portfolio mix corresponds to an expected rate of return of 7.5%. In a Scenario 2 balance sheet snapshot for the same date, the plan has identical accrued benefit promises, and also \$700,000 in total assets. However, the asset allocation is much less risky, comprised of \$650,000 in cash



and treasuries with only \$50,000 in equities, fixed income and alternatives. Again for simplicity, we've assumed this portfolio allocation corresponds to an expected return rate of 4.0%.

Under GASB reporting, the plan has a much smaller unfunded liability in Scenario 1 than in Scenario 2 (\$72,901 versus \$293,280), even though the accrued benefit promises are identical. The difference is entirely attributable to the application of a higher discount rate, driven by a riskier asset allocation in Scenario 1. Since less asset risk necessitates a lower expected rate of return and thus a lower GASB discount rate, the plan in Scenario 2 must value the accrued liabilities at \$993,280, compared to Scenario 1 where those same promises are valued at only \$772,901.

Unlike the GASB results, the unfunded liability measurement is equivalent in both scenarios under Moody's adjustments. We discount the liabilities based on the 4.44% CPLI as of the 30 June 2015 measurement and compare that to the value of assets set aside as of the same date. As a point-in-time balance sheet snapshot, our liability measurements have no linkage to asset allocation or future return expectations (see Exhibit 8).

Exhibit 8

Moody's Balance Sheet Pension Measurements Are Independent of Asset Mix and Expectations, While GASB Pension Liabilities Decrease as Asset Risk Increases

Results reflect hypothetical 2 person pension plan simulation as of 30 June 2015

	GASB Valuation - Scenario 1			Moody's Valuation - Scenario 1		
	Member 1	Member 2	Total	Member 1	Member 2	Total
Cash and Treasuries			\$50,000			\$50,000
Mix of Public Equities, Alternatives and Fixed Income			\$650,000			\$650,000
Total Assets			\$700,000			\$700,000
Discount Rate	7.50%	7.50%	7.50%	4.44%	4.44%	4.44%
Present Value of Future Benefits	\$73,549	\$753,688	\$827,237	\$214,031	\$921,056	\$1,135,087
Present Value of Future Normal Costs	(\$54,335)	\$0	(\$54,335)	(\$174,251)	\$0	(\$174,251)
Accrued Liability	\$19,213	\$753,688	\$772,901	\$39,781	\$921,056	\$960,836
Unfunded Liability			\$72,901			\$260,836

	GASB Valuation - Scenario 2			Moody's Valuation - Scenario 2		
	Member 1	Member 2	Total	Member 1	Member 2	Total
Cash and Treasuries			\$650,000			\$650,000
Mix of Public Equities, Alternatives and Fixed Income			\$50,000			\$50,000
Total Assets			\$700,000			\$700,000
Discount Rate	4.00%	4.00%	4.00%	4.44%	4.44%	4.44%
Present Value of Future Benefits	\$250,064	\$949,324	\$1,199,388	\$214,031	\$921,056	\$1,135,087
Present Value of Future Normal Costs	(\$206,108)	\$0	(\$206,108)	(\$174,251)	\$0	(\$174,251)
Accrued Liability	\$43,956	\$949,324	\$993,280	\$39,781	\$921,056	\$960,836
Unfunded Liability			\$293,280			\$260,836

Source: Moody's Investors Service

Moody's Related Research

Cross Sector Rating Methodology

» Adjustments to US State and Local Government Reported Pension Data, April 2013 (151398)

Sector In-Depth

» Market Volatility Points to Growing US Public Pension Debt in 2016, March 2016 (1018600)

» Past Pension Costs to Compete for Future Resources of Many US State and Local Governments, November 2015 (1009044)

» FAQ: US Public Higher Education and the Impact of GASB 68, October 2015 (1006004)

» New Pension Accounting Increases Clarity of Plan Funding Trajectories, March 2015 (1002636)

» Moody's US Public Pension Analysis Largely Unchanged By New GASB 67/68 Standards, June 2014 (171874)

Endnotes

1 GASB Statement 67 applies to pension plan reporting, while Statement 68 applies to government reporting on pension exposure.



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NAME	EVENT	DATE	LOCATION
CAAO	Winter Conference	Nov. 16 – 18	Embassy Suites - Dublin, Ohio
CTAO	Fall Meeting	November 15 - 17	Columbus Marriott NW at Tuttle Crossing – Dublin, Ohio
MFOA (OML)	OML Annual Conference MFOA Annual Conference	October 26 - 28 October 26 - 28	Renaissance Hotel – Columbus, Ohio Renaissance Hotel - Columbus, Ohio
OAPT	Annual Conference	October 5 – 7	Salt Fork State Park Lodge – Cambridge, Ohio
OMCA	Leadership Dev. & Parliamentary Procedures	November 10	Bucyrus, Ohio
OSBA	Capital Conference	November 13 – 16	Columbus Convention Center – Columbus, Ohio

(T) - means date or place is tentative.

Red lettering means revised or updated events.

CAAO – County Auditor’s Association of Ohio ----- (614) 228-2226 ----- www.caaao.org
CTAO – County Treasures Association of Ohio ----- (614) 517-5072 ----- www.ohiocountytreasurers.org
GFOA – Government Finance Officers Association ----- (614) 221-1900 ----- www.ohgfoa.com
MFOA – Municipal Finance Officers Association of Ohio ----- (614) 221-4349 ----- www.omloho.org
NACO – National Association of Counties ----- (614) 221-5627 ----- www.naco.org
OAPT – Ohio Association of Public Treasurers ----- (440) 576-3944 ----- www.ohioapt.org
OASBO – Ohio Association of School Business Officials ----- (614) 431-9116 ----- www.oasbo-ohio.org
OMCA – Ohio Municipal Clerks Association ----- (614) 221-4349 ----- www.omca.us
OSBA – Ohio School Boards Association ----- (614) 540-4000 ----- www.ohioschoolboards.org

If your organization has other events scheduled that you would like to see listed here, please contact OMAC at 800-969-6622 or email us at chris@Ohiomac.com.

