#### OFFICE OF THE CITY ADMINISTRATIVE OFFICER

Date:

October 17, 2013

CAO File No.

0670-00006-0001

Council File No. New Council District: All

To:

The Mayor

The City Council

From:

Miguel A. Santana, City Administrative Officer

Reference:

Rating Agency Reports

Subject:

RATING AGENCY REPORTS REGARDING PENSION FUNDING

#### **SUMMARY**

On September 13, 2013, the California Superior Court issued a Decision and Order Granting Writ of Mandate on the litigation between the City and the employee organizations representing the Deputy City Attorneys and Confidential City Attorneys on the status of a vested right to retiree health benefits. Due to the ongoing nature of this litigation, in depth discussion is most appropriately held in closed session.

Moody's Investors Services (Moody's) and Fitch Ratings (Fitch) subsequently released reports commenting on the California Superior Court ruling. Moody's also released a separate report that addresses the various elements of retirement funding, including pension funding and retiree healthcare, i.e. Other Post-Employment Benefits (OPEBs). Pension funding and OPEBs combined represent the second largest expenditure in the General Fund, after police/public safety. Therefore, it is important that any news or negative information regarding the City's costs in these areas be promptly evaluated and discussed to ensure informed decision-making in these key areas of the City's cost structure.

#### Rating Agency Reports on Retiree Health Benefits Litigation

On September 27, 2013, Moody's released a sector comment report entitled, "Court Ruling on Retiree Health Benefits Credit Negative for Los Angeles, Could Impact Other California Municipalities" (Attachment 1). On October 2, 2013, Fitch issued a wire release entitled, "California OPEB Decision Could Be Credit Negative" (Attachment 2).

The following information, however, is appropriate for public release at this time in response to the assertions made in both reports:

1. As of October 15, 2013, the Superior Court has not issued a final Writ of Mandate on this case.

- 2. Based on preliminary information from the Plaintiff's attorney, there is agreement that this ruling should be very narrowly construed and limited to the involved employee organizations. This represents less than 500 employees, and our preliminary evaluation indicates that less than a dozen retired members have been impacted by the retiree healthcare subsidy freeze.
- 3. The Executive Employee Relations Committee was briefed on the Superior Court's findings on September 24, 2013. Instructions have been provided regarding next steps in the litigation.
- 4. Moody's, Fitch and Standard and Poor's Rating Services (S&P) have been contacted to clarify the factual circumstances around the pending decision.
- 5. Based on the preliminary finding, and the potentially very narrow construction of the final ruling, this Office believes it was premature to make an assessment of a negative credit implication for Los Angeles based on this ruling.
- 6. It is important to place this ruling in context of the City's fiscally responsible administration of retiree healthcare benefits. As verified by the Pew Institute Report dated January 2013, Los Angeles is one of a handful of local government to pre-fund retiree healthcare, with a current funded status of over 70%. This funded status compares very favorably to New York at 4%, Chicago at 0%, Houston at 0% and San Francisco at 1%. Given the narrow construction of the proposed ruling, this Office is confident that it does not materially affect the solid, fiscally disciplined approach the City has consistently taken toward funding this substantial employee benefit.

## Moody's Report: "Adjusted Pension Liability Measures for 50 Largest US Local Governments"

On September 26, 2013, Moody's released a report entitled, "Adjusted Pension Liability Measures for 50 Largest US Local Governments" (Attachment 3). As a rating agency, one of Moody's primary functions is to assess investment and credit risk across a wide spectrum of governmental and private entities. For the first time, Moody's is attempting to create standardized metrics that can be utilized to assess pension costs and the implication of those costs compared to a governmental entity's revenue. Similar in some respects to the Governmental Accounting Standards Bureau's (GASB) standardized financial reporting model, the Moody's model will provide investors with standardized information on pension costs and an agency's ability to fund those cost without impacting services.

#### Positive Elements of the City's Fiscally Disciplined Approach to Pensions

1. Moody's recognized that the City has consistently paid its full pension funding obligation as determined by the systems' actuaries. During good economic times, there is generally little concern over funding pension obligations. In bad economic times, however, particularly during the years since the Great Recession of 2009, some jurisdictions delayed or failed to make their pension payments. Los Angeles rejected that approach and thereby avoided the significant extra pension liability that could have resulted from failing to make payments timely. The commitment to fully fund the City's pension obligations in the long-term

- significantly reduces the City's overall costs compared to other jurisdictions that have not demonstrated that fiscal discipline.
- 2. The report also included information on aggregate pension and direct debt as a percentage of the tax base. In this area, Los Angeles has the lowest percentage of aggregate debt of any major city. Los Angeles' 4.5% compared very favorably to Chicago's 16.5%, New York's 17.6% and San Francisco's 5.4%. This further demonstrates Los Angeles' prudent approach to long-term obligations.
- 3. While the Moody's report only dealt with pension obligations, it is only a part of the total obligation related to retirees. Retiree healthcare costs escalate on average over 7% per year, and most local governments have not funded this obligation. The Pew Charitable Trust reports that Los Angeles is unique among major cities, by pre-funding retiree healthcare as indicated above. When major cities' pension and OPEB obligations are aggregated, Los Angeles is in better fiscal condition than other major cities on this issue.
- 4. The Moody's report also addresses the impact of multiple, overlapping jurisdictions' pension liability compared to the overall tax base. While Los Angeles City and Los Angeles County have substantial pension liability relative to their tax base, compared to other major cities, that liability is the lowest percentage at 12%. This compares very favorably with New York at 18%, Chicago at 29% and Philadelphia at 26%. This is indicative that overall the tax base in the Los Angeles region is better positioned to sustain and fund existing pension benefits.

#### **Negative Element of City's Pension Funding Status**

- 1. In creating this benchmark methodology, Moody's utilized the Citibank's Pension Liability Index, which is comprised of high quality taxable bonds, as the discount rate. This index is commonly used when valuing private sector pension plans. For Los Angeles, this resulted in a discount rate of 5.67%, which is significantly less than the discount rate of 7.75% currently utilized by our pension systems. Utilizing the lower discount rate substantially increased the calculation of the City's unfunded liability, and was a significant factor in the finding that Los Angeles' Pension Liability represented 324.5% of revenue. Other methodology assumptions, including market value of assets and actuarial amortization period, also increased the City's stated liability.
- 2. It is important to note that neither the City estimated unfunded liability of \$7.8 billion nor Moody's estimate of \$14.6 billion represents the exact dollar amount that will eventually be paid for the City's pension obligation. Both numbers are just estimates built on different assumptions, but both demonstrate that pension funding represents a substantial on-going cost of government, and must be considered within the constraints of revenue and demand for public services.

#### **Pension Funding Stress on Los Angeles**

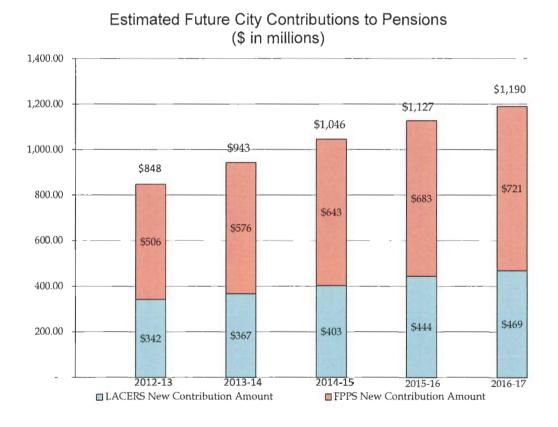
The Moody's report does not disclose a new problem, but does place the pension funding problem in the context of the jurisdiction's ability to meet that obligation. At 324.5% of revenue, Los Angeles' pension funding obligation is very high. However, the City has proactively mitigated these costs within the allowable legal framework over the past four years. The City's cost

The City's cost containment program included:

- 1. Adoption of a new lower cost sworn pension tier;
- 2. Adoption of employee cost sharing of retiree health costs;
- 3. Adoption of a new civilian pension tier; and,
- 4. On-going wage containment.

These efforts have resulted in lower costs that have been manageable within existing resources.

Notwithstanding these reforms, pension and OPEB funding continue to restrict the City's ability to provide or expand essential public services. Currently, the City's official financial forecast is still projecting deficits for Fiscal Year 2014-15 and beyond, with pension and OPEB costs being a major contributor to the deficits (Attachment 4). The following chart demonstrates the City's ongoing contribution to the sworn and civilian plans:



The chart demonstrates that while both civilian and sworn pension costs are high, the sworn costs represent the greater liability. This liability will be compounded in the future because the new pension tier adopted for civilians will produce significantly greater savings compared to the new tier adopted for sworn employees. At this time, it is projected that the long-term savings from the recently adopted new sworn tier will not be sufficient to overcome the projected escalation of sworn pension costs, due to on-going amortization of investment losses and changing actuarial assumptions.

#### RECOMMENDATION

That the Council, subject to the approval of the Mayor:

Direct the City Administrative Officer to report to the Executive Employee Relations Committee on additional strategies to control pension costs.

#### FISCAL IMPACT STATEMENT

The financial impact of the retiree healthcare litigation will be addressed upon the conclusion of that case.

MAS:NRB:MDG:09140111.docx

#### Attachments

Attachment 1 - Moody's report, "Court Ruling on Retiree Health Benefits Credit Negative for Los Angeles, Could Impact Other California Municipalities"

Attachment 2 – Fitch wire release, "California OPEB Decision Could Be Credit Negative"

Attachment 3 – Moody's report, "Adjusted Pension Liability Measures for 50 Largest US Local Governments"

Attachment 4 - CAO, First Financial Status Report FY 14, Four-Year Budget Outlook

#### ATTACHMENT 1

#### MOODY'S REPORT "COURT RULING ON RETIREE HEALTH BENEFITS CREDIT NEGATIVE FOR LOS ANGELES, COULD IMPACT OTHER CALIFORNIA MUNICIPALITIES

SEPTEMBER 27, 2013 U.S. PUBLIC FINANCE



#### SECTOR COMMENT

## Court Ruling on Retiree Health Benefits Credit Negative For Los Angeles, Could Impact Other California Municipalities

From US Public Finance Weekly Credit Outlook

SAN FRANCISCO

+1.415.274.1700

Eric Hoffmann Senior Vice President

But the implications are significant with the decision implying that health care and related non-pension benefits (Other Post-Employment benefits, or OPEBs) have legal protections comparable to pensions.

On September 13, a California Superior Court judge struck down efforts by the city of Los

Angeles (general obligation Aa2 stable) to limit contributions to retiree health care benefits. The ruling is limited, applying just to a limited group of Los Angeles public employees and

only within the judge's Los Angeles County jurisdiction. It is also likely to be appealed.

The ruling is credit negative for Los Angeles and other smaller municipalities within Los Angeles County. It is also credit negative for San Jose (general obligation Aa1 stable), which is embroiled in litigation with public employees dealing with similar issues to the Los Angeles case. Negative credit impacts could eventually hit many California municipalities looking to trim retiree health care commitments to rein in costs.

The case centered on what's known as the "freeze ordinance," where in 2011, Los Angeles offered employees the opportunity to contribute 4% more for post-employment health benefits or accept a plan with a \$1,140 a month cap throughout retirement. But the judge ruled that the health subsidies are a vested right and the city could not unilaterally change policy without ensuring replacement benefits would effectively be on equal terms.

Los Angeles had made the cost-saving initiative a key effort to curtail its obligations to retirees. The majority of the city's employee groups agreed to the increased contributions and monthly caps, saving the city an estimated \$80 million in the current fiscal year. But the unions representing city attorneys filed the case in 2012, and the union representing city engineers and architects joined later.

**Analyst Contact:** 

+1.415.274.1702 eric.hoffmann@moodys.com

The question whether health care retirement benefits are legally protected in a way similar to pensions is sure to become an area of increased focus for municipal market participants. The legal status of pensions and OPEB varies under the laws of different states, and legal outcomes will vary by state. For example, in March 2013, in contrast to the Los Angeles decision, an Illinois circuit judge ruled that a constitutional clause protecting pension benefits did not extend to health care.

The city of San Jose is in litigation as it seeks to limit retirement benefits for retirees by offering public employees options similar to Los Angeles. That case is in Santa Clara County Superior Court, so the Los Angeles ruling is not binding there, but could certainly prove influential.

Unlike pension obligations, which governments at least partially pre-fund in nearly all cases, OPEB liabilities receive little pre-funding. Instead, municipalities and states generally adopt a pay-as-you-go approach that, barring cuts in benefits, could create large scale financial problems over the next couple decades if current cost trajectories and funding practices continue.

Los Angeles is in better shape than most local governments in terms of OPEB risk. According to Pew Charitable Trusts research that looked at 61 cities (a group that includes the largest one in each state, plus all others with 500,000-plus residents), researchers found that in fiscal 2009 -- the most recent year with full data – Los Angeles had 55% of its retiree health care costs funded.

Only three other cities were at or above 40%: Denver at 51%, District of Columbia 49% and Louisville at 40%. The vast majority of cities were below 5%.

	\$	
Report Number: 158917		
Author	Senior Production Associate	
Eric Hoffmann	Judy Torre	

© 2013 Moody's Investors Service. Inc. and/or its licensors and affiliates (collectively, "MOODY'S"). All rights reserved

CREDIT RATINGS ISSUED BY MOODY'S INVESTORS SERVICE, INC. ("MIS") AND ITS AFFILIATES ARE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND CREDIT RATINGS AND RESEARCH PUBLICATIONS PUBLISHED BY MOODY'S ("MOODY'S PUBLICATIONS") MAY INCLUDE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL, FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS AND MOODY'S OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. CREDIT RATINGS AND MOODY'S PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. NEITHER CREDIT RATINGS NOR MOODY'S PUBLICATIONS COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S PUBLICATIONS COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS AND PUBLISHES MOODY'S PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the rating process. Under no circumstances shall MOODY'S have any liability to any person or entity for (a) any loss or damage in whole or in part caused by, resulting from, or relating to, any error (negligent or otherwise) or other circumstance or contingency within or outside the control of MOODY'S or any of its directors, officers, employees or agents in connection with the procurement, collection, compilation, analysis, interpretation, communication, publication or delivery of any such information, or (b) any direct, indirect, special, consequential, compensatory or incidental damages whatsoever (including without limitation, lost profits), even if MOODY'S is advised in advance of the possibility of such damages, resulting from the use of or inability to use, any such information. The ratings, financial reporting analysis, projections, and other observations, if any, constituting part of the information contained herein are, and must be construed solely as, statements of opinion and not statements of fact or recommendations to purchase, sell or hold any securities. Each user of the information contained herein must make its own study and evaluation of each security it may consider purchasing, holding or selling.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY SUCH RATING OR OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

MIS, a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MIS have, prior to assignment of any rating, agreed to pay to MIS for appraisal and rating services rendered by it fees ranging from \$1,500 to approximately \$2,500,000. MCO and MIS also maintain policies and procedures to address the independence of MIS's ratings and rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold ratings from MIS and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at <a href="https://www.moodys.com">www.moodys.com</a> under the heading "Shareholder Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

For Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail clients. It would be dangerous for retail clients to make any investment decision based on MOODY'S credit rating. If in doubt you should contact your financial or other professional adviser.



#### **ATTACHMENT 2**

# FITCH WIRE "CALIFORNIA OPEB DECISION COULD BE CREDIT NEGATIVE"

About Us Contact Us Press Room Events

My Account

Find Ratings, Research, Analysts, CUSIPs, ISINs

Search

More ways to search

Ratings and Research

**Fitch**Ratings

Multimedia

Tools

Products and Services

#### Fitch Wire

View All Articles

share: email

No Related Research

02 Oct 2013 4:41 PM

#### California OPEB Decision Could Be Credit Negative

Fitch Ratings-New York-02 October 2013: A superior court decision last month in California (although quite narrow and subject to appeal) is the most recent indication that local and state governments may not have as much ability to control other post-employment benefit (OPEB) liabilities and consequently have less overall budget flexibility than is traditionally assumed, Fitch Ratings says. We have generally viewed OPEB as more flexible than pensions, given local governments' demonstrated ability to make timely and

The Sept. 13 decision by the superior court in Los Angeles, while only affecting a small portion of the city's workforce, demonstrates that a local government's right to seek budgetary savings through adjustments to retiree benefits is in question. The ruling overturned a freeze on retiree healthcare cost inflation enacted by the city of Los Angeles in 2011.

Managing the growth of benefit costs is a challenge at all levels of government in the U.S. This decision shows that enacted pension and OPEB reforms could be successfully challenged in court or other forums. California transit system workers were excluded from statewide pension reform due to a challenge under a narrow provision of federal grants legislation.

The federal transit grant restraint and the Los Angeles superior court's decision arrive on the heels of Detroit's emergency manager's proposal to put OPEB in a basket of unsecured debt that includes general obligation bonds. These counterpoints raise important concerns. When thinking about budget flexibility, it is important to think in terms of avoidable versus unavoidable costs. Where state courts elevate OPEB to the same standing as pensions, overall budget flexibility will be reduced for locals in those states.

The city of Los Angeles (GO bonds rated 'AA-' with a Stable Rating Outlook by Fitch) has prudently taken steps to pre-fund its OPEB liability and is relatively well-positioned compared to other local governments that, for the most part, are only funding costs annually. Fitch believes the fiscal ramifications for the city, if the court decision is appealed and upheld, are minimal. Only a small number of employees would be affected and the majority of city employees have agreed to contribute to their retiree healthcare benefit costs under their current contracts.

#### Contact:

Jessalynn Moro Managing Director U.S. Public Finance +1 212 908-0608 33 Whitehall Street New York, NY

Rob Rowan Senior Director Fitch Wire +1 212 908-9159 1 State Street Plaza New York, NY

Media Relations: Elizabeth Fogerty, New York, Tel: +1 (212) 908 0526, Email: elizabeth.fogerty@fitchratings.com.

Additional information is available on www.fitchratings.com.

The above article originally appeared as a post on the Fitch Wire credit market commentary page. The original article, which may include hyperlinks to companies and current ratings, can be accessed at www.fitchratings.com. All opinions expressed are those of Fitch Ratings.

ALL FITCH CREDIT RATINGS ARE SUBJECT TO CERTAIN LIMITATIONS AND DISCLAIMERS, PLEASE READ THESE LIMITATIONS AND DISCLAIMERS BY FOLLOWING THIS LINK: http://fitchratings.com/understandingcreditratings. In Addition, RATING DEFINITIONS AND THE TERMS OF USE OF SUCH RATINGS ARE AVAILABLE ON THE AGENCY'S PUBLIC WEBSITE "WWW.FITCHRATINGS.COM". PUBLISHED RATINGS, CRITERIA AND METHODOLOGIES ARE AVAILABLE FROM THIS SITE AT ALL TIMES. FITCH'S CODE OF CONDUCT, CONFIDENTIALITY, CONFLICTS OF INTEREST, AFFILIATE FIREWALL, COMPLIANCE AND OTHER RELEVANT POLICIES AND PROCEDURES ARE ALSO AVAILABLE FROM THE 'CODE OF CONDUCT' SECTION OF THIS SITE. FITCH MAY HAVE PROVIDED ANOTHER PERMISSIBLE SERVICE TO THE RATED ENTITY OR ITS RELATED THIRD PARTIES. DETAILS OF THIS SERVICE FOR RATINGS FOR WHICH THE LEAD ANALYST IS BASED IN AN EU-REGISTERED ENTITY CAN BE FOUND ON THE ENTITY SUMMARY PAGE FOR THIS ISSUER ON THE FITCH WEBSITE.

#### **ATTACHMENT 3**

## MOODY'S REPORT "ADJUSTED PENSION LIABILITY MEASURES FOR 50 LARGEST US LOCAL GOVERNMENTS"

ENTEMBER 26, 2013
U.S. PUBLIC FINANCE

# Moody's INVESTORS SERVICE

#### SPECIAL COMMENT

Rate this Research



# Adjusted Pension Liability Measures for 50 Largest US Local Governments<sup>1</sup>

Several Local Governments Face Challenging Pension Risks Amidst Varied Landscape

#### Table of Contents:

SUMMARY
SEVERAL OF THE LARGEST LOCAL
GOVERNMENTS HAVE OUTSIZED
PENSION LIABILITIES
PENSION BURDEN OF OVERLAPPING
ENTITIES A FACTOR FOR SOME LOCAL
GOVERNMENTS
UNDERFUNDING OF ACTUARIAL
REQUIREMENTS INCREASES FUTURE
BURDEN
STATE SUPPORT SIGNIFICANTLY
REDUCES PENSION BURDEN FOR
SOME SCHOOL DISTRICTS
DATA APPENDICES
MOODY'S RELATED RESEARCH

#### Summary

9

10

24

- There are several large local governments with outsized pension burdens large enough to cause material financial strain. Notably, the adjusted net pension liabilities (ANPL) of the City of Chicago and Cook County are significantly higher than their annual revenues. The fiscal 2011 ANPL to revenue ratio exceeds 100% for 30 of the 50 local government issuers with the largest amount of debt outstanding ( the 'top 50').
- Several major local governments have large annual pension costs that account for a formidable and growing portion of their total costs. Four of the Top 50 local governments have actuarial contribution requirements in excess of 15% of operating revenues, including the City of Philadelphia (A2 stable), while seventeen of the Top 50 have actuarial costs that exceed 10% of the operating revenues when cost-sharing plan allocations are considered.
- » Pension burdens of overlapping entities strain the tax bases of some local governments. The city of Detroit's tax base is burdened not only by high pension and debt liabilities of the city, but also from overlapping entities. Similarly, Chicago's tax base is pressured by the unfunded pension liabilities of the city and overlapping local governments.
- Perennial underfunding of actuarial contribution requirements has amplified pension burdens. Underfunding pensions can be a deliberate strategy for local governments to temporarily manage budget strains. In fiscal 2011, 33 of the top 50 local governments contributed less than what was actuarially required, taking into account not only single employer and agent plans, but also exposure to cost-sharing plans where the ARC was not fully funded.
- » State support for local pensions alleviates the pension burden for some local governments, particularly school districts. In fiscal 2011, the state provided 6-81% of the total pension contributions for the 10 local governments in the top 50 that received support for pensions. While this state support reduces pension burdens, there is risk of cost-shifting to local governments from states. We allocate pension liabilities between states and local governments on a pro rata basis.

#### Analyst Contacts:

 CHICAGO
 +1.212.553.1653

 Tom Aaron
 +1.312.706.9967

 Analyst
 +1.212.553.1653

 NEW YORK
 +1.212.553.1653

 Timothy Blake
 +1.212.553.0849

 Managing Director - Public Finance
 timothy.blake@moodys.com

 Alfred Medioli
 +1.212.553.4173

alfred.medioli@moodys.com

DALLAS +1.214.979.6800

Toby Cook +1.214.979.6842

Vice President - Senior Analyst
toby.cook@moodys.com

Joshua Travis +1.214.979.6855

Vice President - Senior Credit Officer

Associate Analyst joshua.travis@moodys.com

We define the 50 largest US local governments with Moody's general obligation ratings according to gross debt outstanding.

#### Moody's Adjustments to Pension Data

We calculate the Adjusted Net Pension Liability (ANPL) for local governments as the difference between the actuarial value of a pension plan's assets and its adjusted liabilities. We adjust reported pension liabilities of US state and local governments by applying a bond index rate to future liabilities in order to discount the present value of these obligations. We also distribute the liabilities of multiple-employer cost-sharing plans to participating governments based on their pro rata share of contributions. We expect to utilize the market value of assets for local governments in accordance with expected disclosure improvements by the Governmental Accounting Standards Board (GASB).

To assess pension burden we compare the ANPL to issuers' operating revenues and to the size of their tax base, measured by full value of taxable property. For greater detail on our adjustments and their application in our ratings methodology, please refer to our reports "Adjustments to US State and Local Reported Pension Data," released in April 2013 and "Request for Comment: US Local Government General Obligation Bond Methodology" released in August 2013.

The pension data we use includes the local governments' largest multiple-employer cost-sharing, multiple-employer agent, and single-employer plans. We excluded plans that account for less than 5% of the local government's total liabilities.

We harnessed pension data from 2011 financial reports of the local governments and the pension plans. The pension data may be from valuation periods that do not coincide with a local government's 2011 fiscal year. Reported valuations often lag by a year, and sometimes by two years. Pension plans may also report on a calendar year or some other basis that differs from the state's fiscal year. Where possible we report pension costs and ANPL net of support for pension costs from self-supporting enterprises and non-major/non-operating funds. Table 2 of the Appendix provides ANPL covered by the financial statements as a whole, subject to the exclusion in some cases of very small plans, and the "net" ANPL attributable solely to core government operations.

#### Several of the Largest Local Governments Have Outsized Pension Liabilities

The pension burden of current and future employees is significant and growing for many local governments across the US. To assess a local government's pension burden we compare ANPL to several different metrics that measure its capacity to pay pension liabilities, including revenues, taxable full value and outstanding debt. The degree of pension burden varies widely across the 50 US local government debt issuers with the most debt outstanding (the 'top 50'), but there are several outliers with challenging pension liabilities. Notably, the City of Chicago (A3 negative) has the largest pension burden among its peers<sup>2</sup> as measured by its adjusted net pension liability relative to revenues (ANPL/revenue). By this measure, Cook County, IL ranks second, and Denver County School District ranks third (see Exhibit 1). Moreover, 30 of the top 50 local governments' have ANPL/revenue greater than 100% and seven are greater 300% (Exhibit 2).

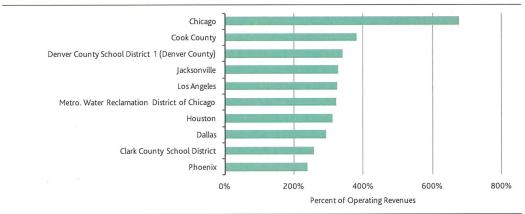
Conversely, there are plenty of local governments in the top 50 with very low pension burdens. For example, Washington DC's ANPL/revenue is only 11%, and Wake County, NC's is only 15%.

Note that the all ANPL figures discussed in this report cover fiscal 2011 financial reporting only. Our recent rating action for the City of Chicago also incorporated fiscal 2012 reported and Moody's-adjusted pension information.

EXHIBIT 1

Net Pension Burdens Vary Widely Although Several Exceed 300% of Revenues

Ten Largest ANPL to Revenue Ratios



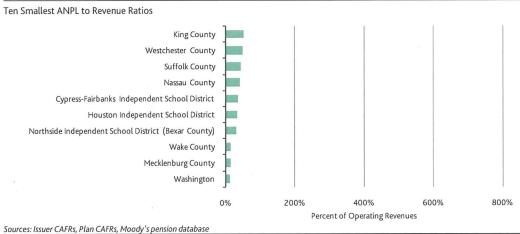
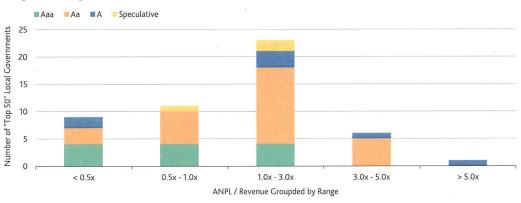


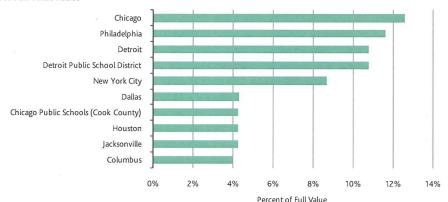
EXHIBIT 2
Thirty of 50 Largest Local Governments ANPL greater than 100% of Revenues in Fiscal 2011

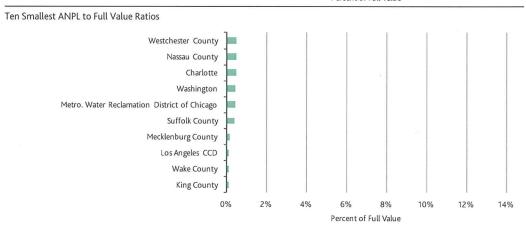


Sources: Issuer CAFRs, Plan CAFRs, Moody's pension database

Comparing issuers' ANPL to the full value of their taxable real estate (ANPL/full value) is useful for assessing their pension burden because for most, property taxes are their single largest source of revenue; taxable value is also a useful proxy measure of total economic wealth. Local governments have limited revenue flexibility compared to states, and often resort to raising property tax rates when they need to increase revenues. Evaluating ANPL/revenues and ANPL/full value paints a more robust picture of pension burdens by measuring issuers' immediate ability to fund pension liabilities and the amount of taxable resources they could harness in the future. For example, the Metropolitan Water Reclamation District of Chicago (Aa1 negative) ranks in the top 10 highest ANPL/revenues, but compared to most of the top 50 local governments, the district's ANPL/taxable full value is low (Exhibit 3). Conversely, the cities of Chicago, Dallas, Houston and Jacksonville rank in the top 10 for highest ANPL/revenue and ANPL/full value.

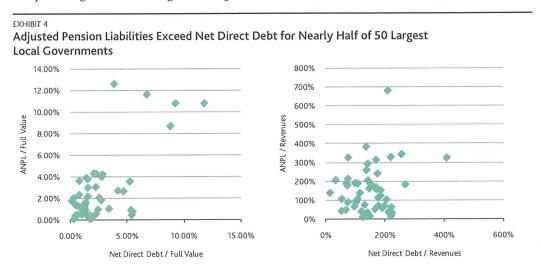
EXHIBIT 3
Fiscal 2011 Pension Burdens Exceed 8% of Full Value for 5 of the Largest Local Governments
Ten Largest ANPL to Full Value Ratios





Sources: Issuer CAFRs, Plan CAFRs, Moody's pension database, Moody's MFRA

The ANPL to net direct debt is greater than 100% for 23 local governments in the top 50, which is indicative of how large local government pension liabilities are, and the degree to which they compound a government's long-term obligations (Exhibit 4).



Sources: Issuer CAFRs, Plan CAFRs, Moody's pension database, Moody's MFRA

#### Pension Burden of Overlapping Entities A Factor for Some Local Governments

The level of debt and pension liabilities of overlapping jurisdictions relative to full taxable value indicates the extent that the entire tax base is leveraged. In the table below we add the direct and overlapping debt and adjusted pension liabilities of the five largest US cities and the City of Detroit (Exhibit 5). The data show that Detroit has the most combined debt and pension liabilities as a percentage of full value. Chicago has the largest overlapping pension liabilities, which includes the large unfunded pension liabilities of: Cook County, Chicago Public Schools, the Metropolitan Water Reclamation District of Chicago, the Cook County Forest Preserve District (A1 negative) and the Chicago Park District (A1 negative). Chicago and these overlapping local governments have been downgraded recently because of their pension liabilities.

MOODY'S INVESTORS SERVICE

**EXHIBIT 5** 

#### Overlapping Debt and Pension Liabilities Far Higher in Detroit than Other Large Cities (\$in billions)

\$ in billions	New York	Los Angeles	Chicago	Houston	Philadelphia	Detroit
GO Rating	Aa2	Aa2	А3	Aa2	A2	Caa3
Net Direct Debt	\$70.3	\$3.5	\$8.9	\$3.3	\$4.3	\$2.2
ANPL	\$69.0	\$14.6	\$28.5	\$6.1	\$7.3	\$2.0
Direct Debt and Pension Sub-total	\$139.3	\$18.1	\$37.3	\$9.4	\$11.6	\$4.3
	\$793.7	\$401.3	\$225.6	\$141.8	\$63.0	\$18.9
Direct Debt and Pensions as % of Full Value	18%	5%	17%	7%	18%	23%
Overlapping Debt	\$0.0	\$14.1	\$9.9	\$6.4	\$2.9	\$1.9
Overlapping ANPL	\$0.0	\$16.9	\$17.4	\$1.9	\$1.7	\$2.5
Overlapping Sub-Total	\$0.0	\$31.0	\$27.3	\$8.4	\$4.6	\$4.4
Total Direct and Overlapping Debt and Pensions	\$139.3	\$49.1	\$64.6	\$17.8	\$16.2	\$8.6
Total Direct and Overlapping Debt and Pension as % of Full Value	18%	12%	29%	13%	26%	46%

Notes

#### **Underfunding of Actuarial Requirements Increases Future Burden**

Local governments' annual pension costs vary considerably. On the high end, Chicago's fiscal 2011 actuarial pension cost was a formidable 28% of its revenues, compared to only 1% for Northside Independent School District, TX (Aa1 stable). Exhibit 6 below shows the ten local governments with highest actuarial pension costs relative to operating revenues, and the ten with the lowest. To measure how much a local government's annual contributions fall short of actuarial standards, we include our estimate of its pro rata share of contribution shortfalls to cost sharing plan(s) it participates in, a figure that is not typically disclosed in issuers' financial statements and is not considered in the computation of the GASB ARC. For example, the Clark County, NV (Aa1 stable) has a track record of making its full pension contributions as required by state statute, but these payments do not include what we estimate is its share of the contribution shortfall of the cost sharing plan that it participates in. When this share is included, Clark County's contributions fall short of actuarial requirements (Exhibit 6).

<sup>1)</sup> Philadelphia has implemented a new property assessment system. As a result, the city's full value is likely to increase considerably. The impact of the reassessment is not incorporated into this report.

<sup>2)</sup> Overlapping ANPL estimate for Los Angeles excludes a number of small special districts.

<sup>3)</sup> Overlapping ANPL estimate for Houston excludes a number of small special districts.

<sup>4)</sup> Overlapping ANPL for Chicago excludes city colleges.

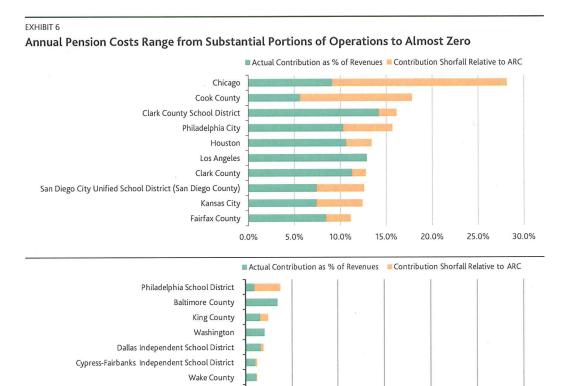
<sup>5)</sup> All data reflects fiscal 2011 totals. Totals and sub-totals may not sum due to rounding. Net direct debt does not include enterprise revenue or self-supporting debt backed out by Moody's. Sources: City CAFRs, Moody's Pension Database

30.0%

20.0%

15.0%

25.0%



Sources: Issuer CAFRs, Plan CAFRs, Moody's pension database
Note: "ARC" includes pro rata shares of cost-sharing plan actuarial requirements allocated by Moody's

Mecklenburg County

Houston Independent School District

Northside Independent School District (Bexar County)

The ARC can vary considerably between local governments because of different actuarial assumptions such as the cost method, discount rate, and unfunded liability amortization. While contribution shortfalls reduce near term expenditures, they also increase the liability that must be amortized, raising future costs to levels that might be unsustainable. In fiscal 2011, more than half of the top 50 either underfunded their single-employer or agent plan(s), or contributed to a cost-sharing plan that did not meet its ARC. The size of contribution shortfalls relative to operating budgets varies considerably, from nearly zero to a very severe 19% (Exhibit 7).

5.0%

10.0%

EXHIBIT 7	
Ten Largest Contribution Shortfalls Relative to ARCs as a Perc	centage of Revenues

0.0%

	Single-Agent	Moody's Cost-sharing Allocation	Total
Chicago	19.0%	0.0%	19.0%
Cook County	12.2%	0.0%	12.2%
Denver County School District 1 (Denver County)	0.0%	6.2%	6.2%
Philadelphia City	5.4%	0.0%	5.4%
San Diego City Unified School District (San Diego County)	0.0%	5.1%	5.1%
Kansas City	5.0%	0.0%	5.0%
Metro. Water Reclamation District of Chicago	5.0%	0.0%	5.0%
Chicago Public Schools (Cook County)	4.4%	0.0%	4.4%
Los Angeles Unified School District) Los Angeles County	0.0%	3.3%	3.3%
Columbus	0.0%	2.8%	2.8%

Sources: Issuer CAFRs, Plan CAFRs, Moody's pension database

Of the eight top 50 local governments with ANPL to revenues greater than 300%, only two contributed their full ARC in fiscal 2011. The city of Jacksonville (Aa1 stable) was the only one among the top 50 that: paid its full ARC, didn't have exposure to cost-sharing contribution shortfalls, and didn't report a Net Pension Obligation (NPO)<sup>3</sup> (Exhibit 8). Jacksonville has a high net pension liability not because of contribution underfunding but because of other factors such as asset performance and benefit accruals. Jacksonville's ANPL is also driven by a relatively low adjusted discount rate for its fiscal 2011 data (4.69%), tied to its actuarial valuation dates. Los Angeles is another example of a large local government with relatively high liabilities despite full ARC payments in fiscal 2011 and a relatively modest NPO in comparison to several of the issuers in Exhibit 8.

There is a positive correlation between ANPL and contribution shortfalls. Exhibit 9 shows that in general, as contribution shortfalls relative to revenues increase, so does ANPL to revenues. Chicago and Cook County are two clear outliers that have both high ANPL to revenues and large contribution shortfalls; the majority of issuers' contribution shortfalls are below 5% of revenues.

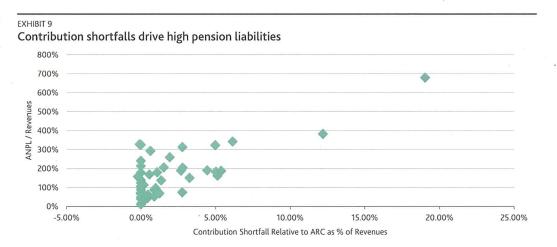
Most Large ANPL to Revenue Ratios Belong to Issuers with Contribution Shortfalls

Issuer	ANPL / Op Revs	Contribution Shortfalls Relative to Revenues	2011 Net Pension Obligation (as reported in \$000s)*
Chicago	678%	19%	\$ 5,386,668
Cook County	382%	12%	\$ 1,830,262
Denver County School District 1	342%	6%	. \$-
Jacksonville	327%	0%	\$ (3,449)
Los Angeles	324%	0%	\$ 58,821
Metro. Water Reclamation District of Chicago	322%	5%	\$ 108,482
Houston	312%	3%	\$ 757,321

<sup>\*</sup>As reflected on government-wide financial statements. Does not incorporate any back out for enterprise support. Sources: Issuer CAFRs, Plan CAFRs, Moody's pension database

The Net Pension Obligation (NPO) reflects accumulated contribution shortfalls relative to actuarial requirements, also accounting for interest and amortization. Local governments are not required to report a Net Pension Obligation related to their contributions to cost sharing plans, provided that they make a full contractual contribution. Nonetheless, local governments could face higher future contribution rates to make up for funding shortfalls of cost sharing plans caused by statutory or contractual contribution requirements that do not meet actuarial requirements, which adds risk and underscores their lack of control as participants in cost sharing plans.

Enterprises and various other funds supported approximately \$9 million of Jacksonville's fiscal 2011 pension contributions. This support is not reflected in Jacksonville's ANPL data. While the enterprises contribute to pension contributions, city management has indicated that they are not self-supporting, and receive operating subsidies from the city.



Sources: Issuer CAFRs, Plan CAFRs, Moody's pension database, Moody's MFRA

EXHIBIT 10

#### State Support Significantly Reduces Pension Burden for Some School Districts

Twenty-three states subsidize part or all of school districts' annual pension contributions. In 11 states, these 'on-behalf' payments cover 40% or more of school districts' total annual employer contributions.

On-behalf payments for school districts in the top 50 range from 6% of total annual contributions for Chicago Public Schools (A3 negative) to 81% for Northside Independent School District (ISD), TX (Exhibit 10). Chicago Public Schools differs significantly from other school districts in Illinois in that its employees participate in a single employer plan, as opposed to the statewide Teachers Retirement System (TRS). Most Illinois school districts receive on-behalf payments from the state that cover most of their pension costs, but the state only contributes a small proportion of Chicago Public Schools' pension costs.

State Support for Pensions Substantially Reduces Allocated Liabilities for Some Local Governments % Contributed by State 2.5 100% % of Pension Contributionts by State 80% ANPL / Revenues 2.0 1.5 60% 1.0 40% 20% 0.5 San Diego City Unified School District (San Diego County) Northside Independent School District (Bexar County) Baltimore County Philadelphia School District Cypress-Fairbanks Independent School Dallas Independent School District Houston Independent Washington Chicago Public Schools School District (Cook County) District

SEPTEMBER 26, 2013

#### **Data Appendices**

Note: The data in the following tables reflects pension information as disclosed by local governments and cost sharing plans, and information on budgetary allocation of pension contributions that was provided to us by some of the local governments. Appendix 3 provides Moody's ANPL derived entirely from government-wide financial reporting, as well as Moody's ANPL net of support from self-supporting enterprise and non-operating governmental funds. The various funds considered by Moody's as "operating funds" for each issuer are listed in Appendix 6.

TABLE 1
Selected Characteristics of Local Government Pension Plans

					Number of	plans <sup>1</sup>					
Issuer	State	Underlying Rating	Gross Debt Outstanding (\$000)	Single- Employer	Agent	Cost- Sharing	Total	Valuation Date for Largest Plan	As Reported Discount Rate for Largest Plan	Aggregate UAAL (\$000) <sup>2</sup>	Moody's Adjusted Discount Rate for Largest Plan
Baltimore County	MD	Aaa	2,254,585	0	0	2	2	6/30/2010	7.88%	515,213	5.47%
Broward County School District	FL	Aa2	1,851,336	0	0	1	1	7/1/2011	7.75%	702,443	5.67%
Charlotte	NC	Aaa	1,583,463	2	0	1	3	12/31/2010	7.25%	101,674	5.54%
Chicago	IL -	А3	8,636,060	4	0	0	4	12/31/2011	8.00%	16,298,961	4.40%
Chicago Public Schools (Cook County)	IL	А3	5,895,391	1	0	0	1	6/30/2010	8.00%	5,372,773	5.47%
Clark County	NV	Aa1	2,739,047	1	0	1	2	6/30/2011	8.00%	2,725,894	5.67%
Clark County School District	NV	A1	3,554,575	0	0	1	1	6/30/2011	8.00%	2,722,208	5.67%
Columbus	ОН	Aaa	2,385,570	0	0	2	2	1/1/2011	8.25%	996,606	5.54%
Cook County	IL	A1	3,780,315	1	0	0	1	12/31/2011	7.50%	4,731,173	4.40%
Cypress-Fairbanks Independent School District	TX	Aa2	1,736,892	0	0	1	1	8/31/2011	8.00%	86,497	5.21%
Dallas	TX	Aa1	1,644,657	2	0	0	2	1/1/2011	8.50%	1,140,530	5.54%
Dallas Independent School District	TX	Aa2	2,567,329	0	0	1	1	8/31/2011	8.00%	238,357	5.21%
Denver County School District 1 (Denver County)	СО	Aa2	1,875,196	0	0	1	1	12/31/2011	8.00%	637,821	4.40%
Detroit	MI	Caa3	2,233,508	2	0	0	2	6/30/2010	7.50%	615,701	5.47%
Detroit Public School District	MI	B2	2,105,805	0	0	1	1	9/30/2010	8.00%	895,124	5.14%
Fairfax County	VA	Aaa	3,490,527	4	0	1	5	6/30/2010	7.00%	3,812,355	5.47%
Harris County	TX	Aaa	3,334,349	0	1	0	1	12/31/2010	8.00%	383,476	5.54%
Honolulu City and County	HI	Aa1	2,570,807	0	0	1	1	6/30/2011	7.75%	1,373,619	5.67%
Houston	TX	Aa2	3,441,463	3	0	0	3	7/1/2010	8.50%	2,286,100	5.47%
Houston Independent School District	TX	Aaa	2,345,443	0	0	1	1	8/31/2011	8.00%	174,970	5.21%
Jacksonville	FL	Aa1	2,477,974	3	0	0	3	9/30/2011	7.75%	2,140,721	4.69%
Kansas City	МО	Aa2	1,640,784	4	0	0	4	5/1/2010	7.50%	550,094	5.79%
King County	WA	Aaa	2,288,449	0	0	2	2	6/30/2011	8.00%	182,520	5.67%
Los Angeles	CA	Aa2	3,361,857	3	0	0	3	6/30/2011	7.75%	7,811,520	5.67%
Los Angeles CCD	CA	Aa1	2,305,907	0	1	2	3	6/30/2010	7.75%	340,755	5.47%
Los Angeles County	CA	Aa2	1,805,634	1	0	0	1	6/30/2010	7.75%	7,807,446	5.47%
Los Angeles Unified School District (Los Angeles County)	CA	Aa2	11,712,521	0	1	2	3	6/30/2010	7.75%	4,590,901	5.47%
Mecklenburg County	NC	Aaa	1,848,300	0	1	3	4	12/31/2010	7.25%	11,940	5.54%
Metro. Water Reclamation District of Chicago	IL	Aa1	2,609,740	1	0	0	1	12/31/2011	7.75%	1,003,922	4.40%

TABLE 1
Selected Characteristics of Local Government Pension Plans

Number of plans<sup>1</sup> Moody's Adjusted As Reported Discount Gross Debt Aggregate UAAL Discount Valuation Underlying Outstanding Single-Cost-Date for Rate for Rate for  $($000)^2$ Sharing Largest Plan State Rating (\$000) Employer Agent Total Largest Plan Largest Plan Issuer 7/1/2011 7.75% 1,374,258 5.67% 0 1 2 FL 4,148,168 Miami-Dade County Aa2 5.67% 0 0 1 7/1/2011 7.75% 991,739 Miami-Dade County School FL Aa3 3,279,171 District 5.67% 1 6/30/2011 7.50% 875,291 MD 2,871,408 0 0 1 Montgomery County Aaa 5.47% 7/1/2010 8.00% 603,209 7 ΤN 2,815,734 6 0 Nashville-Davidson Aa1 1 NY A2 3,557,503 0 0 2 2 4/1/2010 7.50% 208,884 6.05% Nassau County NY 77,318,459 2 0 3 5 6/30/2009 8.00% 38,745,436 6.20% New York City Aa2 5.21% 8.00% 0 0 1 8/31/2011 73,752 Northside Independent School TX Aa1 1,831,543 1 District (Bexar County) 7.75% 499,885 5.67% 0 0 1 7/1/2011 Palm Beach County School 1,832,003 1 FL Aa3 District Philadelphia City PA 4,173,400 1 0 0 1 7/1/2010 8.15% 4,936,172 5.47% A2 5.47% 8.00% 688,803 Philadelphia School District PA 3,144,227 0 0 1 1 6/30/2010 Ba<sub>2</sub> 1,843,896 0 5.67% 2,410,745 1 2 6/30/2011 8.00% Phoenix AZ Aa1 0 7.80% 5.14% 3 2 5 10/1/2010 517,443 TX 1,963,194 San Antonio Aaa 0 0 1 6/30/2011 7.75% 1,409,087 5.67% San Bernardino County CA Aa2 1,564,800 2 0 5.47% San Diego City Unified School CA Aa3 1,824,029 0 2 6/30/2010 7.75% 856,226 District (San Diego County) 5.47% 0 7/1/2010 7.75% 1,621,927 San Francisco City and County CA 2,334,044 1 1 Aa1 0 0 7.75% 1,532,076 5.47% CA 4 4 6/30/2010 Santa Clara County Aa2 1,973,935 TN 1,455,753 1 1 1 3 6/30/2011 8.00% 192,746 5.67% **Shelby County** Aa1 6.05% 0 4 4/1/2010 7.50% 235,053 0 Suffolk County NY A2 1,412,059 0 1 2 12/31/2010 7.25% 11,497 5.54% NC 2,058,808 1 Wake County Aaa 5.14% Washington DC Aa2 8,486,798 1 0 0 1 10/1/2010 7.00% (494,635)0 5 5 7.50% 6.05% 0 4/1/2010 292,550 Westchester County NY 1,687,823 Aaa

<sup>1</sup> Excludes very small plans and very small cost-sharing shares.

<sup>2</sup> UAAL on a reported basis includes shares of cost-sharing plans.

TABLE 2

#### Moody's Adjusted Net Pension Liability (ANPL) Rankings

ANPL net of Self-Supporting Enterprises, Non-Major Funds, and Component Units (\$000) State Aggregate UAAL (\$000)1 ANPL (\$000) Rank Issuer 68,992,354 68,992,354 New York City NY 38,745,436 28,461,177 31,682,969 2 Chicago IL 16,298,961 18,950,600 3 CA 7,807,446 22,759,165 Los Angeles County 4 Los Angeles CA 7,811,520 19,130,422 14,621,055 IL 5,372,773 10,593,127 10,593,127 5 Chicago Public Schools (Cook County) Cook County IL 4,731,173 10,566,294 10,566,294 6 4,590,901 10,540,897 9,679,740 7 Los Angeles Unified School District (Los Angeles County) CA VA 3,812,355 7,395,728 7,395,728 8 Fairfax County 7,332,867 9 PA 4,936,172 8,532,453 Philadelphia City TX 2,286,100 7,276,403 6,084,482 10 Houston NV 2,722,208 5,708,337 5,708,337 11 Clark County School District CA 1,621,927 7,490,991 5,602,188 12 San Francisco City and County 4,424,648 4,424,648 13 FL 1,374,258 Miami-Dade County 4.288.050 1,532,076 4,302,931 14 Santa Clara County CA 15 NV 2,725,894 5,634,312 3,874,564 Clark County 3,765,837 FL 4,571,533 16 Jacksonville 2,140,721 TX 4,291,958 3,613,470 17 Dallas 1,140,530 3,176,805 18 Miami-Dade County School District FL 991,739 3,176,805 ΑZ 1,843,896 3,974,886 3,159,749 19 Phoenix 20 Denver County School District 1 (Denver County) CO 637,821 2,541,476 2,541,476 21 **Broward County School District** FL 702,443 2,250,111 2,250,111 22 CA 1,409,087 3,358,014 2,236,404 San Bernardino County 2,186,434 2,186,434 Detroit Public School District MI 895,124 23 IL 1,003,922 2,069,064 2,069,064 24 Metro. Water Reclamation District of Chicago 2,038,526 MI 615,701 3,019,068 25 Detroit 1,974,084 1,974,084 26 CA 856,226 San Diego City Unified School District (San Diego County) 2,348,538 1,941,910 27 HI 1,373,619 Honolulu City and County 1,810,200 MD 875,291 1,810,200 28 Montgomery County 1,781,364 29 ОН 996,606 2,399,939 Columbus 1,718,317 TN 603,209 1,792,636 30 Nashville-Davidson 1,685,877 1,685,877 31 Philadelphia School District PA 688,803 1,601,266 FL 1,601,266 32 Palm Beach County School District 499,885 TX 1,474,185 33 383,476 1,474,185 Harris County 1,392,744 34 **Baltimore County** MD 515,213 1,392,744 35 San Antonio TX 517,443 2,021,450 1,309,654 36 Nassau County NY 208,884 1,080,222 1,080,222 NY 235,053 1,270,980 1,067,479 37 Suffolk County 38 MO 550,094 1,202,429 1,041,931 Kansas City 845,244 NY 292,550 1,265,963 39 Westchester County CA 340,755 812,229 812,229 40 Los Angeles CCD

TX

797,964

797,964

238,357

41

Dallas Independent School District

TABLE 2

#### Moody's Adjusted Net Pension Liability (ANPL) Rankings

ANPL net of Self-Supporting Enterprises, Non-Major Funds, and Component

Rank	Issuer	State	Aggregate UAAL (\$000) <sup>1</sup>	ANPL (\$000)	Units (\$000)
42	Washington	DC	(494,635)	658,313	658,313
43	Shelby County	TN	192,746	741,959	642,496
44	Houston Independent School District	TX	174,970	585,759	585,759
45	King County	WA	182,520	1,329,585	397,720
46	Charlotte	NC	101,674	463,872	374,974
47	Cypress-Fairbanks Independent School District	TX	86,497	289,573	289,573
48	Northside Independent School District (Bexar County)	TX	73,752	246,905	246,905
49	Mecklenburg County	NC	11,940	206,153	178,285
50	Wake County	NC	11,497	150,958	147,913

<sup>1</sup> Does not reflect back out for support from enterprises and other funds.

TABLE 3	
Adjusted Pension and Debt Burdens Relative to Tax Base Size	4

Rank	Issuer	State	ANPL as % of Full Value	Net Direct Debt as % of Full Value
1	Chicago	IL	12.6%	3.9%
2	Philadelphia City	PA	11.6%	6.8%
3	Detroit	MI	10.8%	11.8%
4	Detroit Public School District	MI	10.8%	9.3%
5	New York City	NY	8.7%	8.9%
6	Dallas	TX	4.3%	2.1%
7	Chicago Public Schools (Cook County)	IL	4.3%	2.3%
8	Houston	TX	4.3%	2.3%
9	Jacksonville	FL	4.3%	2.9%
10	Columbus	ОН	4.0%	2.8%
11	Fairfax County	VA	3.9%	1.5%
12	San Francisco City and County	CA	3.8%	. 1.6%
13	Los Angeles	CA	3.6%	0.9%
14	Kansas City	МО	3.6%	5.3%
15	Denver County School District 1 (Denver County)	СО	3.1%	2.3%
16	Clark County School District	NV	3.0%	1.6%
17	Nashville-Davidson	TN	2.7%	4.2%
18	Philadelphia School District	PA	2.7%	4.7%
19	Cook County	IL	2.3%	0.8%
20	Phoenix	AZ	2.2%	1.6%
21	Los Angeles Unified School District (Los Angeles County)	CA	2.1%	2.6%
22	Clark County	NV	2.1%	0.3%
23	San Antonio	TX	1.8%	2.8%
24	Los Angeles County	CA	1.8%	0.2%
25	Miami-Dade County	FL	1.7%	1.4%
26	Baltimore County	MD	1.6%	1.3%
27	San Diego City Unified School District (San Diego County)	CA	1.5%	1.3%
28	Santa Clara County	CA	1.4%	0.5%
29	San Bernardino County	CA	1.3%	0.7%
30	Honolulu City and County	HI	1.3%	1.3%
31	Broward County School District	FL	1.2%	1.1%
32	Miami-Dade County School District	FL	1.2%	1.3%
33	Dallas Independent School District	TX	1.0%	3.4%
34	Shelby County	TN	1.0%	2.5%
35	Palm Beach County School District	FL	1.0%	1.1%
36	Montgomery County	MD	0.9%	1.4%
37	Cypress-Fairbanks Independent School District	TX	0.9%	5.4%
38	Northside Independent School District (Bexar County)	TX	0.8%	5.5%
39	Houston Independent School District	TX	0.6%	2.3%
40	Harris County	TX	0.5%	1.1%
41	Westchester County	NY	0.5%	0.7%
42	Nassau County	NY	0.5%	1.5%

U.S. PUBLIC FINANCE

TABLE 3 Adjusted Pension and Debt Burdens Relative to Tax Base Size

Rank	Issuer	State	ANPL as % of Full Value	Net Direct Debt as % of Full Value
43	Charlotte	NC	0.5%	1.7%
44	Washington	DC	0.5%	5.5%
45	Metro. Water Reclamation District of Chicago	IL	0.5%	0.6%
46	Suffolk County	NY	0.4%	0.5%
47	Mecklenburg County	NC	0.2%	1.9%
48	Los Angeles CCD	CA	0.1%	0.4%
49	Wake County	NC	0.1%	1.8%
50	King County	WA	0.1%	0.4%

Note: Philadelphia has implemented a new property assessment system. As a result, the city's full value is likely to increase considerably. The impact of the reassessment is not incorporated into this report.

TABLE 4	
Adjusted Pension and Debt Burdens Relative to Revenues	

Rank	Issuer	State	ANPL as % of Operating Revenue Ne	et Direct Debt as % of Operating Revenue
1	Chicago	IL	678.2%	210.9%
2	Cook County	IL	381.6%	137.7%
3	Denver County School District 1 (Denver County)	СО	341.6%	256.8%
4	Jacksonville	FL	326.9%	220.7%
5	Los Angeles	CA	324.5%	77.0%
6	Metro. Water Reclamation District of Chicago	IL	323.4%	410.5%
7	Houston	TX	312.4%	171.0%
8	Dallas	TX	292.5%	143.0%
9	Clark County School District	NV	259.1%	139.0%
10	Phoenix	AZ	240.2%	175.7%
11	Santa Clara County	CA	213.0%	76.1%
12	Clark County	NV	205.6%	34.6%
13	Columbus	ОН	203.7%	143.0%
14	Chicago Public Schools (Cook County)	IL	190.5%	100.4%
 15	Fairfax County	VA	188.6%	70.6%
16	Philadelphia City	PA	187.3%	109.4%
17	Kansas City	МО	182.4%	269.1%
18	Detroit Public School District	MI	179.6%	154.7%
19	San Francisco City and County	CA	177.8%	74.7%
21	San Diego City Unified School District (San Diego County)	CA	162.0%	147.7%
22	Detroit	MI	157.3%	172.4%
23	Los Angeles Unified School District (Los Angeles County)	CA	150.6%	186.5%
20	Honolulu City and County	HI	168.5%	170.4%
24	Los Angeles County	CA	139.1%	15.5%
25	Miami-Dade County	FL	137.5%	116.2%
26	San Antonio	TX	123.9%	185.8%
27	Nashville-Davidson	TN	113.8%	177.5%
28	New York City	NY	106.3%	108.3%
29	San Bernardino County	CA	106.2%	54.7%
30 .	Harris County	TX	102.5%	205.6%
31	Miami-Dade County School District	FL	96.1%	103.2%
32	Broward County School District	FL	88.9%	76.4%
33	Baltimore County	MD	88.6%	75.6%
34	Palm Beach County School District	FL	87.5%	103.5%
 35	Philadelphia School District	PA	74.7%	132.1%
36	Shelby County	TN	70.8%	177.9%
 37	Los Angeles CCD	CA	69.1%	198.9%
38	Montgomery County	MD	66.8%	97.7%
39	Charlotte	NC	61.8%	222.0%
40	Dallas Independent School District	TX	58.4%	192.3%
41	King County	WA	52.6%	167.4%
42	Westchester County	NY	48.8%	69.0%

U.S. PUBLIC FINANCE

TABLE 4
Adjusted Pension and Debt Burdens Relative to Revenues

Rank	Issuer	State	ANPL as % of Operating Revenue	Net Direct Debt as % of Operating Revenue
43	Suffolk County	NY	43.6%	54.0%
44	Nassau County	NY	40.6%	121.0%
45	Cypress-Fairbanks Independent School District	TX	36.7%	211.9%
46	Houston Independent School District	TX	34.4%	140.9%
47	Northside Independent School District (Bexar County)	TX	31.7%	225.4%
48	Wake County	NC	15.2%	220.6%
49	Mecklenburg County	NC	13.9%	149.6%
50	Washington	DC	10.9%	126.2%

TABLE 5

TABLE Buds	5 getary Metrics: Annual Required Contribution (AF	RC)				
	,,	,	Annual I	Required Contributions (\$0	000)	
Rank	Issuer	State	Single-Employer & Agent Plans	Cost-Sharing Plans Pro-rata ARC (share of plan-level actuarial requirement)	Total	ARC as % of Operating Revenue
1	Chicago	IL	1,182,399	-	1,182,399	28.2%
2	Cook County	IL	493,724	-	493,724	17.8%
3	Clark County School District	NV	-	355,511	355,511	16.1%
4	Philadelphia City	PA	614,939	-	614,939	15.7%
5	Houston	TX	261,710	-	261,710	13.4%
6	Los Angeles	CA	580,653	-	580,653	12.9%
7	Clark County	NV	-	241,305	241,305	12.8%
8	San Diego City Unified School District (San Diego County)	CA	-	153,306	153,306	12.6%
9	Kansas City	МО	71,011	-	71,011	12.4%
10	Fairfax County	VA	259,634	176,946	436,580	11.1%
11	Santa Clara County	CA	223,729	-	223,729	11.1%
12	Miami-Dade County	FL	41,610	308,606	350,216	10.9%
13	Jacksonville	FL	125,374	i a	125,374	10.9%
14	Metro. Water Reclamation District of Chicago	IL	69,393	-	69,393	10.8%
15	New York City	NY	2,974,300	3,917,618	6,891,918	10.6%
16	Columbus	ОН	-	92,895	92,895	10.6%
17	Dallas	TX	130,867	-	130,867	10.6%
18	San Antonio	TX	101,211	-	101,211	9.6%
19	Nashville-Davidson	TN	112,115	31,028	143,143	9.5%
20	Detroit Public School District	MI	-	112,351	112,351	9.2%
21	San Francisco City and County	CA	276,484		276,484	8.8%
22	Los Angeles Unified School District (Los Angeles County)	CA	2,500	529,235	531,735	8.3%
23	Detroit	MI	102,272	-	102,272	7.9%
24	Denver County School District 1 (Denver County)	СО	-	58,620	58,620	7.9%
25	Phoenix	AZ	100,758	-	100,758	7.7%
26	Chicago Public Schools (Cook County)	ĪL	425,647	_	425,647	7.7%
27	Honolulu City and County	HI	. =	81,141	81,141	7.0%
28	Miami-Dade County School District	FL .	Ħ	232,647	232,647	7.0%
29	San Bernardino County	CA	-	142,063	142,063	6.7%
30	Broward County School District	FL	-	164,782	164,782	6.5%
31	Harris County	TX	93,003	- · · · · · · · · · · · · · · · · · · ·	93,003	6.5%
32	Palm Beach County School District	FL	-	117,265	117,265	6.4%
33	Los Angeles County	CA	786,174		786,174	5.8%
34	Westchester County	NY	-	90,323	90,323	5.2%
35	Suffolk County	NY		112,513	112,513	4.6%
36	Charlotte	NC	14,025	12,642	26,667	4.4%
37	Nassau County	NY	-	114,112	114,112	4.3%
38	Shelby County	TN	19,360	18,257	37,617	4.1%
20	и	MD			100 0 1 1	

MD

Montgomery County

109,344

109,344

4.0%

39

DY'S INVESTORS SERVICE

U.S. PUBLIC FINANCE

TABLE 5
Budgetary Metrics: Annual Required Contribution (ARC)

Annual Required Contributions (\$000)

			Annual	30)	_	
Rank	Issuer	State	Single-Employer & Agent Plans	Cost-Sharing Plans Pro-rata ARC (share of plan-level actuarial requirement)	Total	ARC as % of Operating Revenue
40	Los Angeles CCD	CA	148	44,552	44,700	3.8%
41	Philadelphia School District	PA	-	85,201	85,201	3.8%
42	Baltimore County	MD	-	54,739	54,739	3.5%
43	King County	WA	:-	19,110	19,110	2.5%
44	Washington	DC	127,200	-	127,200	2.1%
45	Dallas Independent School District	TX	-	27,021	27,021	2.0%
46	Cypress-Fairbanks Independent School District	TX	5	9,806	9,806	1.2%
47	Wake County	NC	966	10,799	11,765	1.2%
48	Houston Independent School District	TX	-	19,835	19,835	1.2%
49	Mecklenburg County	NC	954	13,178	14,132	1.1%
50	Northside Independent School District (Bexar County)	TX	-	8,360	8,360	1.1%

U.S. PUBLIC FINANCE

TABLE 6

#### **Budgetary Metrics: Contributions**

Contributions (\$000) -Net of Enterprise and non-operating funds

			non-oper	ating funds				
Rank	Issuer	State	On-Behalf Payments	Issuer Contributions	Operating Revenue (\$000)		Contribution (excluding on- behalf payments) as % of Operating Revenue	as % of ARC (including
1	Clark County School District	NV	-	312,850	2,203,478	General, Debt Service	14.2%	88%
2	Los Angeles	CA	-	580,653	4,506,243	General, Debt Service	12.9%	100%
3	Clark County	NV		212,348	1,884,884	General, Debt Service, Las Vegas Metro Police	11.3%	88%
4	Santa Clara County	CA	.=:	223,729	2,013,135	General, Debt Service	11.1%	100%
5	Jacksonville	FL	_	126,342	1,152,132	General, Debt Service, Special Revenue	11.0%	101%
6	Houston	TX	-	207,418	1,947,800	General, Debt Service	10.6%	79%
7	New York City	NY	-	6,891,918	64,889,788	General, Debt Service	10.6%	100%
8	Philadelphia City	PA	-	404,051	3,915,801	General, Debt Service	10.3%	66%
9	Dallas	TX	-	122,928	1,235,180	General, Debt Service	9.95%	94%
10	San Antonio	TX	_	101,211	1,056,806	General, Debt Service	9.6%	100%
11	Miami-Dade County	FL	:=	306,384	3,216,767	General, Debt Service, Special Revenue	9.5%	87%
12	Nashville-Davidson	TN	:-	140,400	1,509,502	General, Debt Service, General Purpose School Fund	9.3%	98%
13	Chicago	IL	v <u>-</u>	383,393	4,196,335	General, Debt Service, Pension Levy	9.1%	32%
14	San Francisco City and County	CA	-	276,484	3,150,565	General, Debt Service	8.8%	100%
15	Fairfax County	VA	-	330,875	3,921,708	General, Debt Service, School Bd - GF (Net of County)	8.4%	76%
16	Detroit Public School District	MI	-	99,036	1,217,277	General, Debt Service	8.1%	88%
17	Detroit	MI	-	104,877	1,295,575	General, Debt Service	8.1%	103%
18	Columbus	ОН	-	68,336	874,675	General, Debt Service Fund, Income Tax Fund	7.8%	74%
19	Phoenix	AZ	-	100,758	1,315,260	General, Debt Service, Neighborhood Protection, Public Safety Enhancement	7.7%	100%
20	Kansas City	МО	-	42,272	571,267	General, Debt Service	7.4%	60%
21	San Bernardino County	CA	-	142,063	2,106,156	General, Debt Service	6.7%	100%
22	Harris County	TX	-	93,003	1,437,640	General, Debt Service, Road & Bridge Fund	6.5%	100%
23	Honolulu City and County	HI	=	74,500	1,152,137	General, Debt Service	6.5%	92%
24	Miami-Dade County School District	FL	-	199,917	3,304,185	General, Debt Service, Non-Major Special Revenue & Other Fed.	6.1%	86%
25	Metro. Water Reclamation District of Chicago	IL	-	37,379	639,759	General, Debt Service, Retirement Fund, Construction Fund, Storm Water Fund	5.8%	54%
26	Los Angeles County	CA	-	786,174	13,620,804	General	5.8%	100%
27	Cook County	IL	-	155,819	2,769,219	General, Debt Service, Special Revenue, Health and Hospital,	5.6%	32%

**Contribution Contribution** 

TABLE 6

#### **Budgetary Metrics: Contributions**

Contributions (\$000) -Net of Enterprise and non-operating funds

Rank	Issuer	State	On-Behalf Payments	Issuer Contributions	Operating Revenue (\$000)	Funds Included in Operating Revenue	(excluding on- behalf payments) as % of Operating	(including
						Health and Hospital Non- Operating		
28	Broward County School District	FL	-	141,600	2,529,702	General, Debt Service, Special Revenue	5.6%	86%
29	San Diego City Unified School District (San Diego County)	CA	22,507	68,156	1,218,684	General, Debt Service	5.6%	59%
30	Palm Beach County School District	FL	-	100,768	1,830,975	General, Debt Service, Special Revenue	5.5%	86%
31	Westchester County	NY	-	90,323	1,730,703	General	5.2%	100%
32	Los Angeles Unified School District (Los Angeles County)	CA	, -	321,877	6,428,934	General	5.0%	61%
33	Nassau County	NY	-	114,112	2,663,360	General, Debt Service, Police D and Police HQ	4.3%	100%
34	Shelby County	TN		37,789	908,066	General, Debt Service, Education	4.2%	100%
35	Suffolk County	NY	-	101,865	2,450,016	General, Police District	4.2%	91%
36	Montgomery County	MD	-	109,344	2,709,431	General, Debt Service	4.0%	100%
37	Charlotte	NC	-	23,762	607,125	General, Debt Service	3.9%	89%
38	Baltimore County	MD	100,000	54,739	1,571,442	General	3.5%	100%
39	Chicago Public Schools (Cook County)	IL	10,449	167,938	5,559,384	General, Debt Service	3.0%	42%
40	Los Angeles CCD	CA	-	29,867	1,176,083	General, Debt Service	2.5%	67%
41	Washington	DC	491,690	127,200	6,019,319	General	2.1%	100%
42	Denver County School District 1 (Denver County)	CO	-	12,859	744,021	General, Debt Service	1.7%	22%
43	Dallas Independent School District	TX	41,700	23,238	1,367,069	General, Debt Service	1.7%	86%
44	King County	WA	-	12,303	756,257	General, Debt Service	1.6%	64%
45	Wake County	NC	-	11,544	971,408	General, Debt Service	1.2%	98%
46	Cypress-Fairbanks Independent School District	TX	27,793	8,433	788,685	General, Debt Service	1.1%	86%
47	Mecklenburg County	NC	-	13,658	1,281,576	General	1.1%	97%
48	Philadelphia School District	PA	41,987	22,608	2,255,538	General, Debt Service	1.0%	27%
49	Houston Independent School District	TX	68,612	17,058	1,704,249	General, Debt Service	1.0%	86%
50	Northside Independent School District (Bexar County)	TX	30,638	7,190	779,397	General, Debt Service	0.9%	86%

MOODY'S INVESTORS SERVICE

TABLE 7

#### Fiscal 2011 Contribution Shortfalls Relative to ARCs

## Contribution Shortfall (\$000) - Net of Enterprise and non-operating fund support

Rank         Issuer         State         Single-Employer & Allocation         Calcal Special Revenues           1         Chicage         II.         799,006         -         799,006         19.0%           2         Cook County         II.         337,905         -         337,905         12.2%           3         Deriver County School District I (Denwer County)         CO         -         45,761         45,761         62.8%           4         Philadelphia City         PA         210,888         -         210,888         5.4%           5         San Diego City Urified School District (San Diego         CA         -         -         62,643         -         210,888         5.4%           6         Kanasa City         MO         28,739         -         28,739         0.5%           7         Metro Water Reclamation District (Ghicago         II.         247,260         -         247,260         4.4%           9         Chicago Public School District (San Angeles         CA         -         -         247,260         -         247,260         -         4.4%         -         -         26,2593         28,957         28,857         -         28,857         -         24,559         24,559							Under Contributions
Cook County School District 1 (Derwer County)	Rank	Issuer	State			Total	as % of Operating
3   Denver County School District   Denver County   CO   - 45,761   45,761   6.2%   4   Philiadelphia City   PA   210,888   - 210,888   5.4%   5   San Digo City Unified School District (San Digo CA   - 62,643   62,643   5.1%   County)   CA   - 62,643   62,643   5.1%   County)   CA   - 62,643   62,643   5.1%   CA   County)   CA   - 62,643   62,643   5.1%   CA   County)   CA   - 28,739   - 28,739   5.0%   CA   - 32,014   5.0%   CA   - 32,014   5.0%   CA   - 247,260   - 247,260   - 44,760   - 247,260   - 44,760   - 247,260   - 44,760	1	Chicago	IL	799,006	-	799,006	19.0%
4 Philadelphia City PA 210,888 - 210,888 5.4% 5 5 8n Diego City Unified School District (San Diego CA - 62,643 62,643 5.1% County)  6 Kansas City MO 28,739 - 28,739 5.0% 7 Metro. Water Reclamation District of Chicago II. 32,014 - 32,014 5.0% 247,260 - 247,260 4.4% 9 Los Angeles Unified School District (Los Angeles County) II. 247,260 - 247,260 - 247,260 4.4% 9 Los Angeles Unified School District (Los Angeles County) II. 247,260 - 209,857 209,857 3.3% County)  10 Columbus OH - 24,559 24,559 2.8% 11 Houston TX 54,292 - 54,292 2.8% 12 Philadelphia School District PA - 62,593 62,593 2.8% 13 Fairfax County VA 40,917 64,788 105,705 2.7% 13 Fairfax County Chrolo District NV - 40,917 64,788 105,705 2.7% 15 Clark County School District NV - 28,957 28,957 15% 15 Maimi-Dade County School District MI - 416 43,416 43,832 1.4% 15 Clark County Exhool District MI - 416 43,416 43,832 1.4% 15 Detroit Public School District FI - 32,730 32,730 1.0% 18 Detroit Public School District FI - 23,182 23,182 0.9% 19 Maimi-Dade County Exhool District FI - 23,182 23,182 0.9% 19 Maimi-Dade County Exhool District FI - 32,730 32,730 1.0% 19 Maimi-Dade County Exhool District FI - 32,730 32,730 1.0% 19 Maimi-Dade County Exhool District FI - 32,730 32,730 1.0% 19 Maimi-Dade County Exhool District FI - 32,730 32,730 1.0% 19 Maimi-Dade County Exhool District FI - 32,730 32,730 1.0% 19 Maimi-Dade County Exhool District FI - 32,730 32,730 1.0% 19 Maimi-Dade County Exhool District FI - 32,730 32,730 1.0% 19 Maimi-Dade County Exhool District FI - 32,730 32,730 1.0% 19 Maimi-Dade County Exhool District FI - 32,730 32,730 1.0% 19 Maimi-Dade County Exhool District FI - 32,730 32,730 3.0% 10 Maimi-Dade County Exhool District FI - 32,730 32,730 3.0% 10 Maimi-Dade County Exhool District FI - 32,730 32,730 3.0% 10 Maimi-Dade County Exhool District FI - 32,730 32,730 32,730 3.0% 10 Maimi-Dade County Exhool District FI - 32,730 3	2	Cook County	IL	337,905	-	337,905	12.2%
5         San Diego City Unified School District (San Diego CA County)         CA         6,2,643         62,643         62,643         5,1% county)           6         Kansas City         MO         28,739         -         28,739         5,0%           7         Metro. Water Reclamation District of Chicago         IL         32,014         -         32,014         5,0%           8         Chicago Public Schools Cook County)         IL         247,260         -         247,260         4,4%           9         Los Angeles Unified School District (Los Angeles         CA         -         209,857         209,857         209,857         209,857         3,3%           10         Columbus         OH         -         24,559         24,559         24,559         2,8%           11         Houston         TX         54,292         -         54,292         2,8%           12         Philadelphia School District         PA         -         62,593         62,593         2,8%           13         Fairlax County         VA         40,917         64,788         105,705         2,7%           14         Clark County School District         NV         -         42,661         42,661         1,9%	3	Denver County School District 1 (Denver County)	CO	n <del>-</del>	45,761	45,761	6.2%
County   County	4	Philadelphia City	PA	210,888	-	210,888	5.4%
7         Metro. Water Reclamation District of Chicago         IL         32,014         -         32,014         5,0%           8         Chicago Public Schools (Cook County)         IL         247,260         -         247,260         4.4%           9         Los Angeles Unified School District (Los Angeles         CA         -         209,857         209,857         3.3%           10         Columbus         OH         -         24,559         24,559         2.8%           11         Houston         TX         54,292         -         54,252         2.8%           12         Philadelphia School District         PA         -         62,593         62,593         2.8%           13         Fairfax County         VA         40,917         64,788         105,705         2.7%           14         Clark County         VA         40,917         64,788         105,705         2.7%           15         Clark County         NV         -         28,957         28,957         1.5%           15         Clark County         FL         416         43,416         43,832         1.4%           15         Clark County         FL         416         46,416         43,416	5		CA	-	62,643	62,643	5.1%
8         Chicago Public Schools (Cook County)         IL         247,260         -         247,260         4,4%           9         Los Angeles Unified School District (Los Angeles County)         CA         -         209,857         209,857         3.3%           10         Columbus         OH         -         24,559         24,559         2.8%           11         Houston         TX         54,292         -         54,292         2.8%           12         Philadelphia School District         PA         -         62,593         62,593         2.8%           13         Fairfax County         VA         40,917         64,788         105,705         2.7%           14         Clark County School District         NV         -         42,661         42,661         1.9%           15         Clark County         NV         -         42,661         43,832         1.4%           16         Miami-Dade County         FL         416         43,416         43,832         1.4%           17         Los Angeles CCD         CA         0         14,685         14,685         1.2%           18         Detroit Public School District         FL         416         43,416 <th< td=""><td>6</td><td>Kansas City</td><td>МО</td><td>28,739</td><td>-</td><td>28,739</td><td>5.0%</td></th<>	6	Kansas City	МО	28,739	-	28,739	5.0%
Society   Soci	7	Metro. Water Reclamation District of Chicago	IL	32,014	-	32,014	5.0%
County   Columbus	8	Chicago Public Schools (Cook County)	IL .	247,260	-	247,260	4.4%
Houston	9		CA	:=	209,857	209,857	3.3%
12         Philadelphia School District         PA         -         62,593         62,593         2,8%           13         Fairfax County         VA         40,917         64,788         105,705         2.7%           14         Clark County School District         NV         -         42,661         42,661         1.9%           15         Clark County         NV         -         28,957         28,957         1.5%           16         Miami-Dade County         FL         416         43,416         43,832         1.4%           17         Los Angeles CCD         CA         0         14,685         14,685         1.2%           18         Detroit Public School District         MI         -         13,315         13,315         1.1%           19         Miami-Dade County School District         FL         -         32,730         32,730         1.0%           20         Broward County School District         FL         -         23,182         23,182         0.9%           21         Palm Beach County School District         FL         -         16,497         16,497         0.9%           21         Palm Beach County School District         FL         -         16,49	10	Columbus	ОН	-	24,559	24,559	2.8%
13         Fairfax County         VA         40,917         64,788         105,705         2,7%           14         Clark County School District         NV         -         42,661         42,661         1,9%           15         Clark County         NV         -         28,957         28,957         1,5%           16         Miami-Dade County         FL         416         43,416         43,832         1,4%           17         Los Angeles CCD         CA         0         14,685         14,685         1,2%           18         Detroit Public School District         MI         -         13,315         13,315         1,1%           19         Miami-Dade County School District         FL         -         32,730         32,730         1,0%           20         Broward County School District         FL         -         23,182         23,182         0,9%           21         Palm Beach County School District         FL         -         16,497         16,497         0,9%           22         King County         WA         -         6,807         6,807         0,9%           23         Dallas         TX         7,939         -         7,939         0,6%<	11	Houston	TX	54,292	-	54,292	2.8%
14         Clark County School District         NV         -         42,661         42,661         1.9%           15         Clark County         NV         -         28,957         28,957         1.5%           16         Miami-Dade County         FL         416         43,416         43,832         1.4%           17         Los Angeles CCD         CA         0         14,685         14,685         1.2%           18         Detroit Public School District         MI         -         13,315         13,315         1.1%           19         Miami-Dade County School District         FL         -         32,730         32,730         1.0%           20         Broward County School District         FL         -         32,182         23,182         0.9%           21         Palm Beach County School District         FL         -         16,497         16,497         0.9%           22         King County         WA         -         6,807         6,807         0.9%           23         Dallas         TX         7,939         -         7,939         0.6%           24         Honolulu City and County         HI         -         6,641         6,641         0,6	12	Philadelphia School District	PA	-	62,593	62,593	2.8%
15         Clark County         NV         -         28,957         28,957         1,5%           16         Miami-Dade County         FL         416         43,416         43,832         1,4%           17         Los Angeles CCD         CA         0         14,685         14,685         1,2%           18         Detroit Public School District         MI         -         13,315         13,315         1,1%           19         Miami-Dade County School District         FL         -         32,730         32,730         1,0%           20         Broward County School District         FL         -         23,182         23,182         0,9%           21         Palm Beach County School District         FL         -         16,497         16,497         0,9%           21         Palm Beach County School District         FL         -         16,497         16,497         0,9%           22         King County         WA         -         6,807         6,807         0,9%           23         Dallas         TX         7,939         -         7,939         0,6%           24         Honolulu City and County         HI         -         6,641         6,641 <t< td=""><td>13</td><td>Fairfax County</td><td>VA</td><td>40,917</td><td>64,788</td><td>105,705</td><td>2.7%</td></t<>	13	Fairfax County	VA	40,917	64,788	105,705	2.7%
16         Miami-Dade County         FL         416         43,416         43,832         1.4%           17         Los Angeles CCD         CA         0         14,685         14,685         1.2%           18         Detroit Public School District         MI         -         13,315         13,315         1.1%           19         Miami-Dade County School District         FL         -         32,730         32,730         1.0%           20         Broward County School District         FL         -         23,182         23,182         0.9%           21         Palm Beach County School District         FL         -         16,497         16,497         0.9%           22         King County         WA         -         16,497         16,497         0.9%           23         Dallas         TX         7,939         -         7,939         0.6%           24         Honolulu City and County         HI         -         6,641         6,641         0.6%           25         Charlotte         NC         2,905         -         2,905         0.5%           26         Suffolk County         NY         -         10,648         10,648         0.4%	14	Clark County School District	NV	-	42,661	42,661	1.9%
17         Los Angeles CCD         CA         0         14,685         14,685         1.2%           18         Detroit Public School District         MI         -         13,315         13,315         1.1%           19         Miami-Dade County School District         FL         -         32,730         32,730         1.0%           20         Broward County School District         FL         -         23,182         23,182         0.9%           21         Palm Beach County School District         FL         -         16,497         16,497         0.9%           22         King County         WA         -         6,807         6,807         0.9%           23         Dallas         TX         7,939         -         7,939         0.6%           24         Honolulu City and County         HI         -         6,641         6,641         0.6%           25         Charlotte         NC         2,905         -         2,905         0.5%           26         Suffolk County         NY         -         10,648         10,648         0.4%           27         Dallas Independent School District         TX         -         3,783         3,783         0.2%	15	Clark County	NV	-	28,957	28,957	1.5%
18         Detroit Public School District         MI         -         13,315         13,315         1.1%           19         Miami-Dade County School District         FL         -         32,730         32,730         1.0%           20         Broward County School District         FL         -         23,182         23,182         0.9%           21         Palm Beach County School District         FL         -         16,497         16,497         0.9%           22         King County         WA         -         6,807         6,807         0.9%           23         Dallas         TX         7,939         -         7,939         0.6%           24         Honolulu City and County         HI         -         6,641         6,641         0.6%           25         Charlotte         NC         2,905         -         2,905         0.5%           26         Suffolk County         NY         -         10,648         10,648         0.4%           27         Dallas Independent School District         TX         -         3,783         3,783         0.3%           28         Nashville-Davidson         TN         2,743         -         2,743         0.2% <td>16</td> <td>Miami-Dade County</td> <td>FL</td> <td>416</td> <td>43,416</td> <td>43,832</td> <td>1.4%</td>	16	Miami-Dade County	FL	416	43,416	43,832	1.4%
19         Miami-Dade County School District         FL         32,730         32,730         1,0%           20         Broward County School District         FL         -         23,182         23,182         0.9%           21         Palm Beach County School District         FL         -         16,497         16,497         0.9%           22         King County         WA         -         6,807         6,807         0.9%           23         Dallas         TX         7,939         -         7,939         0.6%           24         Honolulu City and County         HI         -         6,641         6,641         0.6%           25         Charlotte         NC         2,905         -         2,905         0.5%           26         Suffolk County         NY         -         10,648         10,648         0.4%           27         Dallas Independent School District         TX         -         3,783         3,783         0.3%           28         Nashville-Davidson         TN         2,743         -         2,743         0.2%           29         Cypress-Fairbanks Independent School District         TX         -         1,373         1,373         1,373	17	Los Angeles CCD	CA	0	14,685	14,685	1.2%
20         Broward County School District         FL         -         23,182         23,182         0.9%           21         Palm Beach County School District         FL         -         16,497         16,497         0.9%           22         King County         WA         -         6,807         6,807         0.9%           23         Dallas         TX         7,939         -         7,939         0.6%           24         Honolulu City and County         HI         -         6,641         6,641         0.6%           25         Charlotte         NC         2,905         -         2,905         0.5%           26         Suffolk County         NY         -         10,648         10,648         0.4%           27         Dallas Independent School District         TX         -         3,783         3,783         0.3%           28         Nashville-Davidson         TN         2,743         -         2,743         0.2%           29         Cypress-Fairbanks Independent School District         TX         -         1,373         1,373         1,373         0.2%           30         Houston Independent School District         TX         -         2,777	18	Detroit Public School District	MI	=	13,315	13,315	1.1%
21       Palm Beach County School District       FL       -       16,497       16,497       0.9%         22       King County       WA       -       6,807       6,807       0.9%         23       Dallas       TX       7,939       -       7,939       0.6%         24       Honolulu City and County       HI       -       6,641       6,641       0.6%         25       Charlotte       NC       2,905       -       2,905       0.5%         26       Suffolk County       NY       -       10,648       10,648       0.4%         27       Dallas Independent School District       TX       -       3,783       3,783       0.3%         28       Nashville-Davidson       TN       2,743       -       2,743       0.2%         29       Cypress-Fairbanks Independent School District       TX       -       1,373       1,373       0.2%         30       Houston Independent School District       TX       -       2,777       2,777       0.2%         31       Northside Independent School District (Bexar County)       TX       -       1,170       1,170       1,170       0.0%         32       Mecklenburg County       NC	19	Miami-Dade County School District	FL	-	32,730	32,730	1.0%
22         King County         WA         -         6,807         6,807         0.9%           23         Dallas         TX         7,939         -         7,939         0.6%           24         Honolulu City and County         HI         -         6,641         6,641         0.6%           25         Charlotte         NC         2,905         -         2,905         0.5%           26         Suffolk County         NY         -         10,648         10,648         0.4%           27         Dallas Independent School District         TX         -         3,783         3,783         0.3%           28         Nashville-Davidson         TN         2,743         -         2,743         0.2%           29         Cypress-Fairbanks Independent School District         TX         -         1,373         1,373         0.2%           30         Houston Independent School District         TX         -         2,777         2,777         0.2%           31         Northside Independent School District (Bexar County)         TX         -         1,170         1,170         0.2%           32         Mecklenburg County         NC         474         -         474	20	Broward County School District	FL	=	23,182	23,182	0.9%
23         Dallas         TX         7,939         -         7,939         0.6%           24         Honolulu City and County         HI         -         6,641         6,641         0.6%           25         Charlotte         NC         2,905         -         2,905         0.5%           26         Suffolk County         NY         -         10,648         10,648         0.4%           27         Dallas Independent School District         TX         -         3,783         3,783         0.3%           28         Nashville-Davidson         TN         2,743         -         2,743         0.2%           29         Cypress-Fairbanks Independent School District         TX         -         1,373         1,373         0.2%           30         Houston Independent School District         TX         -         2,777         2,777         0.2%           31         Northside Independent School District (Bexar County)         TX         -         1,170         1,170         0.2%           32         Mecklenburg County         NC         474         -         474         0.0%           34         Baltimore County         MD         -         -         - <td< td=""><td>21</td><td>Palm Beach County School District</td><td>FL</td><td>H</td><td>16,497</td><td>16,497</td><td>0.9%</td></td<>	21	Palm Beach County School District	FL	H	16,497	16,497	0.9%
24         Honolulu City and County         HI         -         6,641         6,641         0.6%           25         Charlotte         NC         2,905         -         2,905         0.5%           26         Suffolk County         NY         -         10,648         10,648         0.4%           27         Dallas Independent School District         TX         -         3,783         3,783         0.3%           28         Nashville-Davidson         TN         2,743         -         2,743         0.2%           29         Cypress-Fairbanks Independent School District         TX         -         1,373         1,373         0.2%           30         Houston Independent School District         TX         -         2,777         2,777         0.2%           31         Northside Independent School District (Bexar County)         TX         -         1,170         1,170         0.2%           32         Mecklenburg County         NC         474         -         474         0.0%           34         Baltimore County         NC         221         -         221         0.0%           34         Harris County         TX         -         -         -	22	King County	WA		6,807	6,807	0.9%
25         Charlotte         NC         2,905         -         2,905         0.5%           26         Suffolk County         NY         -         10,648         10,648         0.4%           27         Dallas Independent School District         TX         -         3,783         3,783         0.3%           28         Nashville-Davidson         TN         2,743         -         2,743         0.2%           29         Cypress-Fairbanks Independent School District         TX         -         1,373         1,373         0.2%           30         Houston Independent School District         TX         -         2,777         2,777         0.2%           31         Northside Independent School District (Bexar County)         TX         -         1,170         1,170         0.2%           32         Mecklenburg County         NC         474         -         474         0.0%           34         Baltimore County         MD         -         -         -         0.0%           34         Los Angeles         CA         -         -         -         -         0.0%           34         Los Angeles County         CA         -         -         -         <	23	Dallas	TX	7,939	-	7,939	0.6%
26         Suffolk County         NY         -         10,648         10,648         0.4%           27         Dallas Independent School District         TX         -         3,783         3,783         0.3%           28         Nashville-Davidson         TN         2,743         -         2,743         0.2%           29         Cypress-Fairbanks Independent School District         TX         -         1,373         1,373         0.2%           30         Houston Independent School District         TX         -         2,777         2,777         0.2%           31         Northside Independent School District (Bexar County)         TX         -         1,170         1,170         0.2%           32         Mecklenburg County         NC         474         -         474         0.0%           33         Wake County         NC         221         -         221         0.0%           34         Baltimore County         MD         -         -         -         0.0%           34         Los Angeles         CA         -         -         -         0.0%           34         Los Angeles County         CA         -         -         -         0.0% <td>24</td> <td>Honolulu City and County</td> <td>HI</td> <td></td> <td>6,641</td> <td>6,641</td> <td>0.6%</td>	24	Honolulu City and County	HI		6,641	6,641	0.6%
27         Dallas Independent School District         TX         -         3,783         3,783         0.3%           28         Nashville-Davidson         TN         2,743         -         2,743         0.2%           29         Cypress-Fairbanks Independent School District         TX         -         1,373         1,373         0.2%           30         Houston Independent School District         TX         -         2,777         2,777         0.2%           31         Northside Independent School District (Bexar County)         TX         -         1,170         1,170         0.2%           32         Mecklenburg County         NC         474         -         474         0.0%           33         Wake County         NC         221         -         221         0.0%           34         Baltimore County         MD         -         -         -         0.0%           34         Los Angeles         CA         -         -         -         0.0%           34         Los Angeles County         CA         -         -         -         0.0%	25	Charlotte	NC	2,905		2,905	0.5%
28       Nashville-Davidson       TN       2,743       -       2,743       0.2%         29       Cypress-Fairbanks Independent School District       TX       -       1,373       1,373       0.2%         30       Houston Independent School District       TX       -       2,777       2,777       0.2%         31       Northside Independent School District (Bexar County)       TX       -       1,170       1,170       0.2%         32       Mecklenburg County       NC       474       -       474       0.0%         33       Wake County       NC       221       -       221       0.0%         34       Baltimore County       MD       -       -       -       0.0%         34       Los Angeles       CA       -       -       -       0.0%         34       Los Angeles County       CA       -       -       -       0.0%	26	Suffolk County	NY	-	10,648	10,648	0.4%
29         Cypress-Fairbanks Independent School District         TX         -         1,373         1,373         0.2%           30         Houston Independent School District         TX         -         2,777         2,777         0.2%           31         Northside Independent School District (Bexar County)         TX         -         1,170         1,170         0.2%           32         Mecklenburg County         NC         474         -         474         0.0%           33         Wake County         NC         221         -         221         0.0%           34         Baltimore County         MD         -         -         -         0.0%           34         Los Angeles         CA         -         -         -         0.0%           34         Los Angeles County         CA         -         -         -         0.0%	27	Dallas Independent School District	TX	-	3,783	3,783	0.3%
30 Houston Independent School District TX - 2,777 2,777 0.2% 31 Northside Independent School District (Bexar County) TX - 1,170 1,170 0.2% 32 Mecklenburg County NC 474 - 474 0.0% 33 Wake County NC 221 - 221 0.0% 34 Baltimore County MD 0.0% 34 Harris County TX 0.0% 34 Los Angeles County CA 0.0%	28	Nashville-Davidson	TN	2,743	· -	2,743	0.2%
31       Northside Independent School District (Bexar County)       TX       -       1,170       1,170       0.2%         32       Mecklenburg County       NC       474       -       474       0.0%         33       Wake County       NC       221       -       221       0.0%         34       Baltimore County       MD       -       -       -       -       0.0%         34       Harris County       TX       -       -       -       0.0%         34       Los Angeles       CA       -       -       -       0.0%         34       Los Angeles County       CA       -       -       -       0.0%	29	Cypress-Fairbanks Independent School District	TX	-	1,373	1,373	0.2%
32       Mecklenburg County       NC       474       -       474       0.0%         33       Wake County       NC       221       -       221       0.0%         34       Baltimore County       MD       -       -       -       -       0.0%         34       Harris County       TX       -       -       -       -       0.0%         34       Los Angeles       CA       -       -       -       -       0.0%         34       Los Angeles County       CA       -       -       -       -       0.0%	30	Houston Independent School District	TX	-	2,777	2,777	0.2%
33     Wake County     NC     221     -     221     0.0%       34     Baltimore County     MD     -     -     -     -     0.0%       34     Harris County     TX     -     -     -     -     0.0%       34     Los Angeles     CA     -     -     -     -     0.0%       34     Los Angeles County     CA     -     -     -     -     0.0%	31	Northside Independent School District (Bexar County)	TX	-	1,170	1,170	0.2%
34       Baltimore County       MD       -       -       -       0.0%         34       Harris County       TX       -       -       -       0.0%         34       Los Angeles       CA       -       -       -       0.0%         34       Los Angeles County       CA       -       -       -       0.0%	32	Mecklenburg County	NC	474	-	474	0.0%
34 Harris County       TX       -       -       -       0.0%         34 Los Angeles       CA       -       -       -       -       0.0%         34 Los Angeles County       CA       -       -       -       0.0%	33	Wake County	NC	221	-	221	0.0%
34       Los Angeles       CA       -       -       -       0.0%         34       Los Angeles County       CA       -       -       -       0.0%	34	Baltimore County	MD	-	:=	-	0.0%
34 Los Angeles County CA 0.0%	34	Harris County	TX	-	-		0.0%
	34	Los Angeles	CA	-	-	-	0.0%
34 Montgomery County MD 0.0%	34	Los Angeles County	CA	-	-	-	0.0%
	34	Montgomery County	MD		-	-	0.0%

MOODY'S INVESTORS SERVICE

U.S. PUBLIC FINANCE

#### TABLE 7

#### Fiscal 2011 Contribution Shortfalls Relative to ARCs

## Contribution Shortfall (\$000) - Net of Enterprise and non-operating fund support

Rank	Issuer	State	Single-Employer & Agent Plans	Cost-Sharing Allocation	Total	Under Contributions as % of Operating Revenues
34	Nassau County	NY	-		-	0.0%
34	New York City	NY	-	-	1=	0.0%
34	Phoenix	AZ	-	-	-	0.0%
34	San Antonio	TX	-	-	: -	0.0%
34	San Bernardino County	CA	-	-	-	0.0%
34	San Francisco City and County	CA	-	-	-	0.0%
34	Santa Clara County	CA	-	-	-	0.0%
34	Washington	DC	-	-	-	0.0%
34	Westchester County	NY	-	-	1-	0.0%
48	Shelby County	TN	(172)	-	(172)	0.0%
49	Jacksonville	FL	(968)		(968)	-0.1%
50	Detroit	MI	(2,605)	1-	(2,605)	-0.2%

#### Moody's Related Research

- » The US Public Pension Landscape: Patterns of Funding, Correlation, and Risk, September 2013 (157154)
- » <u>US Local Government General Obligation Bond Methodology Request for Comment, August 2013 (151664)</u>
- » Chicago: How Pensions Have Weakened the Credit Quality of America's Third-Largest City, August 2013 (157171)
- » Adjusted Pension Liability Medians for US States, June 2013 (155103)
- » Adjustments to US State and Local Government Reported Pension Data, April 2013 (151398)

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.

Rate this Research



Report Number: 158713		
	•	
Author	Production Associate	
Tom Aaron	Prabhakaran Elumalai	

© 2013 Moody's Investors Service, Inc. and/or its licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

CREDIT RATINGS ISSUED BY MOODY'S INVESTORS SERVICE, INC. ("MIS") AND ITS AFFILIATES ARE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND CREDIT RATINGS AND RESEARCH PUBLICATIONS PUBLISHED BY MOODY'S ("MOODY'S PUBLICATIONS") MAY INCLUDE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL, FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS AND MOODY'S OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. CREDIT RATINGS AND MOODY'S PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. NEITHER CREDIT RATINGS NOR MOODY'S PUBLICATIONS COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS AND PUBLISHES MOODY'S PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S DRIVED WRITTEN CONSENT.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the rating process. Under no circumstances shall MOODY'S have any liability to any person or entity for (a) any loss or damage in whole or in part caused by, resulting from, or relating to, any error (negligent or otherwise) or other circumstance or contingency within or outside the control of MOODY'S or any of its directors, officers, employees or agents in connection with the procurement, collection, compilation, analysis, interpretation, communication, publication or delivery of any such information, or (b) any direct, indirect, special, consequential, compensatory or incidental damages whatsoever (including without limitation, lost profits), even if MOODY'S is advised in advance of the possibility of such damages, resulting from the use of or inability to use, any such information. The ratings, financial reporting analysis, projections, and other observations, if any, constituting part of the information contained herein any securities. Each user of the information contained herein must make its own study and evaluation of each security it may consider purchasing, holding or selling.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY SUCH-RATING OR OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

MIS, a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MIS have, prior to assignment of any rating, agreed to pay to MIS for appraisal and rating services rendered by it fees ranging from \$1,500 to approximately \$2,500,000. MCO and MIS also maintain policies and procedures to address the independence of MIS's ratings and rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold ratings from MIS and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at <a href="https://www.moodys.com">www.moodys.com</a> under the heading "Shareholder Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

For Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail clients. It would be dangerous for retail clients to make any investment decision based on MOODY'S credit rating. If in doubt you should contact your financial or other professional adviser.



#### **ATTACHMENT 4**

#### FOUR-YEAR BUDGET OUTLOOK

# Four-Year Budget Outlook (\$ millions)

	dopted 013-14		2014-15		2015-16	i	2016-17		2017-18
ESTIMATED GENERAL FUND REVENUE									
General Fund Base (1)	\$ 4,550.5	\$	4,866.9	\$	4,878.6	\$	5,014.4	\$	5,156.3
Revenue Growth (2)									
Property Related Taxes (3)	152.0		29.7		66.6		69.2		61.1
Sales and Business Taxes (4)	40.6		17.6		23.8		24.5		25.2
Utility Users' Tax (5)	19.0		10.3		10.7		11.2		9.3
License, Permits and Fees (6)	62.8		(49.6)		22.4		23.2		24.3
Other Fees, Taxes and Transfers (7)	31.5		9.9		16.2		16.8		17.5
SPRF Transfer (8)	2.6		(13.6)		Anna son				-
Transfer from the Budget Stabilization Fund (9)	8.0		7.3		(3.8)		(2.9)		(8.6)
Transfer from Reserve Fund	 		-						
Total Revenue	\$ 4,866.9	\$	4,878.6	\$	5,014.4	\$	5,156.3	\$	5,285.0
General Fund Revenue Increase %	7.0%		0.2%		2.8%		2.8%		2.5%
General Fund Revenue Increase \$	316.4		11.7		135.8		141.9		128.7
ESTIMATED GENERAL FUND EXPENDITURES									
General Fund Base (10)	\$ 4,550.5	\$	4,866.9	\$	5,032.0	\$	5,126.8	\$	5,252.0
Incremental Changes to Base: (11)							(a) 193		
Employee Compensation Adjustments (12)	89.6		36.5		21.2		2.8		2.8
City Employees Retirement System (13)	25.6		35.757		41.2		24.9		(4.5)
Fire and Police Pensions (13)	69.9		67.1		40.5		37.6		(2.0)
Workers Compensation Benefits (14)	0.2		6.1		6.2		9.2		14.2
Health, Dental and Other Benefits (15)	11.1		17.0		29.6		30.4		30.4
Debt Service (16)	14.6		1.0		(24.8)		(6.1)		-
Delete Resolution Authorities (17)	(39.7)		-		-		-		-
Add New and Continued Resolution Authorities	24.3		-		-		-		-
Delete One-Time Costs (18)	(32.4)		-		-		-		-
Add One-Time Costs (19)	36.1		(36.1)		-		-		-,
Unappropriated Balance (20)	56.5		(42.2)		-		-		-
New Facilities (21)	0.4		0.02		0.03		-		- (10.0)
City Elections (22)	(17.0)		17.5		(17.5)		18.0		(18.0)
CIEP (23)	33.8		42.5		(1.7)		8.4		4.1
Appropriation to the Reserve Fund (24)	(4.9)		-		- '		-		-
Net - Other Additions and Deletions (25)	 48.4	Α.	20.0	Φ.	- 400.0	Φ.	-	Φ.	
Subtotal Expenditures	\$ 4,866.9	\$	5,032.0	\$	5,126.8	\$	5,252.0	\$	5,279.1
Expenditure Growth %	7.0%		3.4%		1.9%		2.4%		0.5%
Expenditure Growth \$	316.4		165.1		94.7		125.2		27.1
TOTAL BUDGET GAP	\$ 0.0	\$	(153.4)	\$	(112.3)	\$	(95.7)	\$	5.9
Incremental Increase %					-26.8%		-14.8%		-106.2%
Incremental Increase \$			(153.4)		41.1		16.6		101.6

#### FOUR-YEAR GENERAL FUND BUDGET OUTLOOK FOOTNOTES

(Changes from Proposed in bold)

#### **REVENUE:**

- (1) General Fund (GF) Base: The revenue base for each year represents the prior year's estimated revenues.
- (2) Revenue Growth: Revenue projections reflect the consensus of economists that economic recovery will continue to be gradual and that economy-sensitive revenues will grow between 2 percent and 4 percent. Amounts represent projected incremental change to the base. Any one-time receipts are deducted from the estimated revenue growth for the following fiscal year.
- (3) Property tax is projected to return to growth rates between 3 percent and 3.5 percent from 2013-14 to 2017-18. Included in this revenue line is tax increment revenue from the redirection of the former Community Redevelopment Agency. This revenue category was first received in June 2012. Ongoing revenue is projected at \$24 million with increases tied to secured property tax growth.
- (4) The projected revenue assumes above average growth in 2013-14, with a return to average growth from 2014-15 through 2017-18. No assumptions are made regarding policy changes to the business tax.
- (5) Moderate growth is projected for the gas and electric users' tax. The telephone users' tax revenue is projected to continue to decline due to the changing makeup of the landline and mobile markets.
- (6) One-time revenue including Transportation Grant receipts (\$45 million), California Assembly Bill AB678 (\$23.6 million), and other revenues is included in the 2013-14 projection and removed from the base in 2014-15. The reduction is offset by a growth rate of 3 percent for 2014-15.
- (7) California Senate Bill SB89 of 2011 eliminated, effective July 1, 2011, Vehicle License Fee (VLF) revenue allocated under California Revenue and Taxation Code 11005 to cities. The projected ongoing loss in City revenue is approximately \$15 million. However, a special apportionment of approximately \$2 million annually has been received for the last five years and is expected to continue.
- (8) Revenue from the Special Parking Revenue Fund (SPRF) represents the projected surplus that may be available to transfer to the General Fund after accounting for debt service and other expenditures associated with the maintenance, upgrades, and repairs of parking structures, meters and related assets. A base-level surplus of about \$21 million is projected in 2013-14 through 2017-18. Any amounts above this are considered one-time receipts and deducted from the estimated revenue growth for the following fiscal year.
- (9) Transfer from the Budget Stabilization Fund (BSF) is subject to an available balance in the BSF. BSF transfers are considered one-time receipts are deducted from the estimated revenue growth for the following fiscal year.

#### **ESTIMATED GENERAL FUND EXPENDITURES:**

- (10) Estimated Expenditure General Fund Base: Using the 2012-13 General Fund budget as the baseline year, the General Fund base is the "Total Obligatory and Potential Expenditures" carried over to the following fiscal year.
- (11) The 2013-14 incremental changes reflect funding adjustments to the prior fiscal year General Fund budget. The Five-Year Outlook expenditures included for subsequent years are limited to those obligatory and major expenses known at this time and are subject to change. Amounts represent projected incremental changes to the base.
- (12) Employee Compensation Adjustments: This line includes cost of living adjustments ("COLA"), salary step adjustments, change in number of working days, salary step and turnover effect, and full funding for partially financed positions from the prior year. The Five-Year Outlook reflects existing labor agreements,

Memoranda of Understanding ("MOUs"), with all City bargaining units as presented in Table 1 unless otherwise noted below.

Coalition of Los Angeles City Unions and Management Attorneys ("Coalition"): The term of the Coalition MOUs (with the exception MOU 9, Plant Equipment Operators) expires June 30, 2014. The Salary Adjustment scheduled for January 1, 2014 is not reflected in the Five-Year Outlook to account for anticipated permanent savings from Coalition MOU members beginning in 2013-14. No COLAs are assumed for 2014-15 and beyond.

MOU 09, Plant Equipment Operators: The term of MOU 09 expires June 30, 2013. No COLAs are assumed for 2014-15 and beyond.

MOU 29, Deputy City Attorneys: The term of MOU 29 expires June 30, 2013. The Five-Year Outlook reflects salary adjustments in the Office of the City Attorney to account for anticipated permanent salary reductions from MOU 29 members beginning in 2013-14. No COLAs are assumed for 2014-15 and beyond.

MOUs 8, Professional Engineering and Scientific, and 17, Supervisory Professional Engineering & Scientific: The term of MOUs 8 and 17, members of Service Employees International Union ("SEIU"), expires on June 30, 2014. No COLAs are assumed for 2014-15 and beyond.

MOU 32, Management Attorneys: The term of MOU 32 expires June 30, 2013. No COLAs are assumed for 2014-15 and beyond.

<u>Engineers and Architects Association ("EAA"):</u> The term of the City's contract with EAA expires on June 30, 2014. No COLAs are assumed for 2014-15 and beyond.

MOU 61, Senior Administrative and Administrative Analysts: The term of 61 will expire on June 30, 2013. No COLAs are assumed for 2014-15 and beyond.

MOU 05, Inspectors ("MCIA"): The term of MOU 05 expires on June 30, 2014. No COLAs are assumed for 2014-15 and beyond.

MOU 28, GSD Police Officers: The term of MOU 28 expires on June 30, 2014. No COLAs are assumed for 2014-15 and beyond.

Sworn Fire and Police Officers: The term of the City's contracts with the Los Angeles Police Protective League ("LAPPL") and the United Firefighters of Los Angeles ("UFLAC") expire on June 30, 2014. No COLAs are assumed for 2014-15 and beyond. It is assumed that a portion of overtime will be paid out, but that the practice of banking overtime will be continued with the new LAPPL contract. This is reflected in the 2014-15 Net - Other Additions and Deletions line.

Table 1 Highlights of MOUs									
"	(Various Terr								
	2013-14	2014-15	2015-16	2016-17	2017-18				
Coalition MOUs (except MOUs 09 and 29)									
COLA - July 1 <sup>st</sup>	1.75%								
Salary Adjustment - Jan. 1 <sup>st</sup>	5.5% <sup>1</sup>								
MOU 09 and 29									
COLA - July 1 <sup>st</sup>	n/a								
MOUs 8 and 17 (SEIU):			1 1 6 1 1 W						
COLA - July 1 <sup>st</sup>	0%								

<sup>&</sup>lt;sup>1</sup> The Salary Adjustment scheduled for January 1, 2014 is not reflected in the Five-Year Outlook to account for anticipated permanent savings from Coalition MOU members beginning in 2013-14.

MOU 32 Management Attorneys:					
COLA – July 1 <sup>st</sup>	n/a				
EAA				of the second	
COLA – July 1 <sup>st</sup>	1.5%				
	Table 1 (Contine Highlights of Months) (Various Terror)	OUs	2		
	2013-14	2014-15	2015-16	2016-17	2017-18
MOU 61 FPPA			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
COLA – July 1 <sup>st</sup>	n/a				
MOU 00 and 05 (Non-Rep & MCIA):					
Contribution Offset	1.5%		Mark and		
MOU 28 GSD Police Officers					
COLA – July 1 <sup>st</sup>	1%				
COLA – Jan. 1 <sup>st</sup>	1%				
LAPPL and UFLAC	2.5.0				
COLA – July 1 <sup>st</sup>	1%				
COLA - Nov. 1 <sup>st</sup>	1%		e in proting		
COLA – March 1 <sup>st</sup>	2%				

(13) City Employment Retirement System ("LACERS") and Fire & Police Pensions ("Pensions"): The LACERS and Pensions contribution are estimated based on information from the departments' actuaries commissioned by the CAO and include employee compensation adjustment assumptions as noted above. The LACERS contribution rate is a combination of the Tier 1 and Tier 2 rates, and assumes Tier 2 will be one percent of the covered payroll in 2013-14 and grow by one percent each year. The amounts reflected in the Five-Year Outlook represent incremental changes. The estimates are mostly driven by changes in assumptions and investment returns.

Table 2 LACERS and Pensions								
Assumptions	2013-14	2014-15	2015-16	2016-17	2017-18			
LACERS								
6/30 <sup>th</sup> Investment Returns	7.75%	7.75%	7.75%	7.75%	7.75%			
Combined Contribution Rate	25.26%	27.56%	30.06%	31.56%	31.08%			
Pensions		-						
6/30 <sup>th</sup> Investment Returns	7.75%	7.75%	7.75%	7.75%	7.75%			
Combined Contribution Rate	44.40%	48.78%	51.85%	54.70%	54.55%			

- (14) Workers' Compensation Benefits (WC): Based on the draft April 2013 actuarial analysis that projects annual medical inflation of 7 percent and a 5 percent annual cost increase in permanent disability costs a decrease of approximately \$1.2 million for workers' compensation claims is anticipated in 2013-14. The WC line-item also includes an increase in the State Assessment Fee of \$1.5 million and a \$2.1 million decrease in contracts: Third Party Administrator (TPA) and Utilization Review.
- (15) Health and Dental Benefits: The projections assume that all civilian employees will contribute 10 percent towards the cost of the City-sponsored health plan. Mercer Consulting provides the assumed enrollment, as well as the civilian plan rate forecast. Civilian FLEX medical premiums are expected to increase each calendar year around 8 percent to 11 percent from 2014 to 2018. Police and Fire health benefits are historically higher due to the subsidy increases and type and level of coverage elected by sworn employees. Police and Fire enrollment projections are consistent with the hiring plan. It is anticipated that the health care reform laws of 2010 may cause changes to health plans starting in 2014; however, its impact is unknown at this time.

- (16) Debt Service: The debt service amounts include Capital Finance and Judgment Obligation Bond budgets.
- (17) Deletion Resolution Authorities: Reflects City practice of deleting positions that are limited-term and temporary in nature at the start of the budget process. Funding for these positions is reviewed on a case-by-case basis and dependent upon continuing need for the fiscal year. Continued or new resolution positions added are embedded in the "Add New and Continued Resolution Authorities" line item of the forecast. None are deleted in subsequent years to provide a placeholder for continuation of resolution authority positions for various programs. As such, these costs are therefore incorporated into the beginning General Fund base of subsequent years.
- (18) Deletion of One-time Costs: Reflects City practice of deleting programs and costs that are limited-term and temporary in nature at the start of the budget process. Funding for these programs and expenses is reviewed on a case-by-case basis and dependent upon continuing need for the fiscal year. Continued items are embedded in the "Net Additions and Deletions" line item of the forecast. None of the continued items are deleted in subsequent years to provide a placeholder for continuation of equipment and other one-time expenses incurred annually. As such, these costs are therefore incorporated into the beginning General Fund base of subsequent years.
- (19) Add One-time Costs: Reflects the addition of new costs that are limited-term and temporary in nature. These costs are primary funded by one-time revenue receipts and therefore deleted from subsequent years.
- (20) Unappropriated Balance (UB): One-time UB items are eliminated while ongoing items are continued the following year to provide a placeholder for various ongoing and/or contingency requirements in the future.
- (21) New Facilities: Funding projections are based on preliminary departmental estimates for ongoing staffing and expenses that have not been prioritized.
- (22) Elections: Citywide elections occur bi-annually.
- (23) Capital Improvement Expenditure Program (CIEP): The 2013-14 Adopted Budget includes \$24 million for various capital projects, several of which are one-time and deleted in 2014-15. It also includes an additional \$16.6 million for the Pavement Preservation Program to maintain and repair 800 miles of streets each year. It is assumed that the program will be continued through 2017-18 at 735 miles per year, the minimum number of miles required to maintain the current pavement condition. In 2014-15, the Sidewalk Repair Program is deleted from the UB and added to CIEP.
- (24) Appropriation to the Reserve Fund: In certain years, a General Fund appropriation to the Reserve Fund has been budgeted to strengthen the status of the Reserve Fund. These appropriations are reviewed on a case-by-case basis and dependent upon continuing need for the subsequent fiscal year.
- (25) Net Other Additions and Deletions: Prior year one-time additions to the budget that are continued and new regular positions are embedded in the "Net Additions and Deletions" line item of the forecast. Also included in this line item are the reductions to programs and positions that were previously part of the base budget. For 2014-15, \$20 million has been added to payout a portion of Police overtime. It is assumed that the City will continue banking the remaining overtime.