MOODY'S

OUTLOOK

4 May 2020



Contacts

Natalie Claes +1.312.706.9973

Analyst

natalie.claes@moodys.com

Austin Harris +1.415.274.1707

Associate Lead Analyst
austin.harris@moodys.com

Rachel Cortez +1.312.706.9956
Associate Managing Director
rachel.cortez@moodys.com

Naomi Richman +1.212.553.0014
Senior Vice President
naomi.richman@moodys.com

Alexandra S. Parker +1.212.553.4889

MD-Public Finance
alexandra.parker@moodys.com

Leonard Jones +1.212.553.3806 MD-Public Finance

leonard.jones@moodys.com

Michael Rowan +1.212.553.4465
MD-Gbl Pub Proj and Infra Fin
michaelj.rowan@moodys.com

CLIENT SERVICES

Americas 1-212-553-1653
Asia Pacific 852-3551-3077
Japan 81-3-5408-4100
EMEA 44-20-7772-5454

Local government – US

Outlook changes to negative as coronavirus intensifies severity and length of recession

The outlook for US local governments is changing to negative from stable as our expectation of the duration and intensity of the coronavirus impact on the economic downturn grows in severity. The slow recovery will impair revenue and pressure operating reserves.

The sector will face challenges for the remainder of 2020 and continuing into 2021 as the economy recovers, because trends in local governments' primary revenue source, property taxes, lag changes in economic activity. Sales and income tax revenue, a significant source of revenue for some local governments, is already declining sharply given a rise in unemployment, reduced consumer spending, and income tax filing extensions. Property tax revenue will not take as great a hit until 2021 because assessments are set before the collection year, but a rise in delinquencies will start to weigh on revenue this year. The full impact on pension costs will not arrive for several years, but the economic fallout from the coronavirus is threatening local governments' ability to afford higher pension costs. To date, federal aid to local governments has been focused on immediate coronavirus-related expenses rather than future revenue replacement, while actions by states to balance their fiscal 2021 budgets on the back of local governments by reducing transfers will negatively affect the sector.

Weakened economic conditions will persist. The US economy will contract by 5.7% in 2020, according to our projections, with a full return to pre-coronavirus levels in the third quarter of 2021. The crisis has altered the daily operating environment for both governments and individuals, who have had to make swift adjustments in the face of an uncertain timeline for economic recovery. High unemployment and significant reductions in discretionary spending, as well as changes in consumer behavior, will linger beyond the social shutdown. The likely prolonged recovery will necessitate continued flexibility to adjust to changing economic conditions, but the pace of recovery will vary as different regions relax social distancing guidelines.

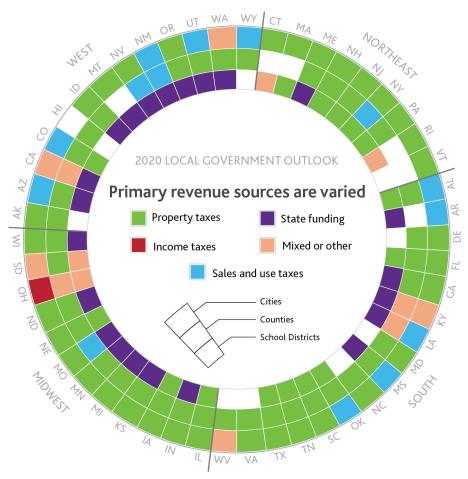
THIS REPORT WAS REPUBLISHED ON 7 MAY 2020 WITH A CORRECTED EXHIBIT 1. THE EXHIBIT WAS UPDATED TO REFLECT THAT MISSOURI CITIES ARE PRIMARILY FUNDED THROUGH PROPERTY TAXES AND SCHOOLS BY STATE FUNDING, RATHER THAN THE OTHER WAY AROUND.

Declines in property tax revenue will take longer to materialize compared with drops in other revenue sources. Growth in property tax revenue will be materially lower than anticipated in our <u>original 2020 outlook</u>. While property tax revenue will stagnate and potentially decline in 2020 because of payment moratoriums and an increase in delinquencies, the bulk of declines will not show up in local government collections until 2021. The delayed decline in property tax revenue contrasts with the more immediate drops in income and sales taxes. Local governments that are primarily dependent on property tax revenue will therefore have more time to consider budgetary adjustments than local governments that are mainly reliant on sales or income taxes. While funding mechanisms differ across the US, cities and counties in at least two thirds of states are primarily funded through property taxes compared to roughly one third of school districts (see Exhibit 1).

Exhibit 1

Property taxes make up the bulk of local government revenue

Empty spaces indicate the absence, or very limited number, of rated entities in those sectors

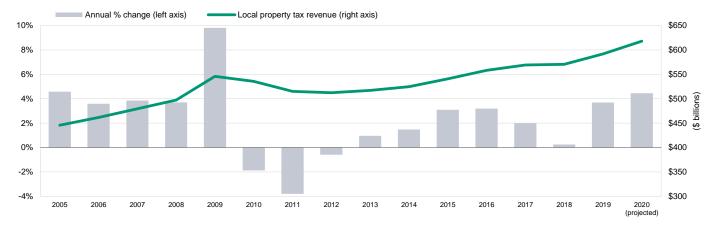


Source: Moody's Investors Service

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moodys.com for the most updated credit rating action information and rating history.

The timing and scale of changes in individual local government property tax revenues will vary according to state-specific factors, including the degree of lag in property reassessments, differences in taxable versus market value of properties, the size and scope of tax deferrals, whether taxes are paid ahead or in arrears, and delinquency rates. During the last recession and the associated decline in property values, many localities saw rapid growth in property tax revenue in 2009 even as the downturn gathered pace, only to see a reversal of those gains beginning in 2010 (see Exhibit 2).

Exhibit 2
Declines in local government property tax revenue lag declines in property values



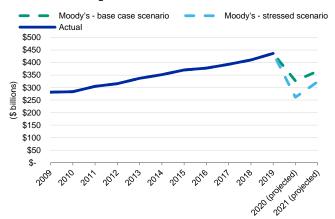
Based on calendar year.
Sources: Moody's Investors Service, US Census Bureau

Other revenue declines will vary based on economic sensitivity and state action. Local governments heavily reliant on economically sensitive revenue such as sales and income taxes are already feeling the impact of the coronavirus outbreak. Local governments with strong liquidity will be able to absorb financial shocks over the next 12-18 months, though economically sensitive revenue streams will take longer to recover (see Exhibits 3 and 4). Across the sector, local governments began fiscal 2020 with liquidity, as measured by median cash and investments as a percent of operating revenues, at a five-year high. Strong liquidity will serve as a mitigant and allow some local governments to better withstand the economic slowdown and avoid immediate distress as the recession deepens. On the whole, local governments with more exposure to economically sensitive revenue bases tend to maintain higher reserves to avoid immediate distress in the event of a recession. Still, these levels will be difficult to maintain in light of slower growth.

Exhibit 3

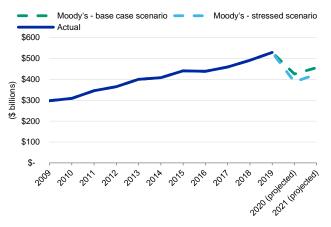
Sales tax revenue will have a steeper decline under both base-case and stressed scenarios...

Total state and local government sales tax revenue



Based on calendar year.
Sources: Moody's Investors Service, US Census Bureau

...while income tax revenue will rebound slightly quicker.
Total state and local government income tax revenue



Based on calendar year.
Sources: Moody's Investors Service, US Census Bureau

Travel restrictions and shutdown orders are severely impacting the <u>lodging</u> and <u>gaming</u> industries with corresponding declines in revenue generated from hotel stays, car rentals and gambling. Local governments that are disproportionally reliant on these types of revenues are especially vulnerable given the unknown duration of closures and social distancing measures.

Actions taken by state government will also affect the severity and duration of local governments' budget pressures. Local governments dependent on state aid are not immune to the effects of coronavirus on revenue, but reductions in state aid will occur over the next year or two, as opposed to the immediate drop in local governments' sales and income taxes. School districts, by far the most state dependent sector, generally benefit from strong state support for education, however it is possible that states will reduce funding next fiscal year if the crisis lasts. In states where districts cannot raise revenue locally, such as Michigan (Aa1 stable) and New Mexico (Aa2 stable), a reduction in state aid could result in near-term narrowing of operating reserves as expenditure cuts often take time to materialize. As states respond to their own budget deficits through reductions in aid to local governments, the strain on municipalities with already weak credit fundamentals will increase. Given the states' own circumstances, states are unlikely to increase support to help local governments through their own fiscal challenges, expect perhaps for those in the most acute distress.

Federal government responses provides some relief to local governments

Actions taken by the federal government to ameliorate revenue declines and offset increased expenses will alleviate stress on local governments to a limited extent. Nearly all federal aid distributed to date has been for reimbursement of coronavirus-related expenses, which eases the impact on local governments' bottom line. Much of this aid has gone directly to state and large local governments, rather than smaller local governments. Of each state's allocation, the state government will receive at least 55% while cities and counties will receive no more than 45%, which will help local governments absorb some extraordinary expenditures, but will likely not cover entire budget shortfalls.

Additional aid designed to replace revenue lost because of the crisis is under discussion in Congress, however the amount, timing and distribution are currently unknown. To help mitigate cash flow concerns, the Federal Reserve announced it will purchase up to \$500 billion in short-term notes issued by state and local governments. Eligibility is limited to cities with a population over 250,000 and counties over 500,000 that have investment-grade ratings, however the program allows borrowers to re-lend funds to smaller local governments within their jurisdictions, indirectly benefitting smaller municipalities.

Significant budget adjustments will be necessary for local governments with high fixed costs and healthcare facilities. Given our forecast declines in revenue, fixed costs for debt and retirement obligations will consume a higher proportion of local government revenue over the 12-18 months of our outlook period. Further, recent pension fund investment losses stand to severely compound the pension liability challenges already facing many local governments. These losses will require many local governments to increase pension contributions in order to maintain funding ratios for defined benefit plans, although the increased contribution requirements will not take effect immediately.³

The ability and willingness to adjust spending to match revenue declines will need to be balanced against the need to provide essential services. Costs will also increase as local governments take extraordinary measures to prevent the spread of the virus, and local governments that provide healthcare services, such as those that own hospitals or nursing homes, will face particular pressure. Areas where government-owned facilities are the only option for care could become overburdened in the event of a second wave of infection.

Social challenges will persist because of differing coronavirus containment measures. The crisis has already massively affected everyday life. A number of states have begun reopening their economies and loosening restrictions on certain activities. Other states have signaled that significant restrictions will remain in place for several more weeks. Regional differences in containment approaches increase the likelihood of the virus reinfecting previously cleared areas, prolonging the duration of the pandemic.

Inconsistent access to healthcare services across geographical and income groups – a social risk under our ESG framework – will exacerbate the impact of this patchwork of approaches. Further, local government efforts to contain new outbreaks will be constrained by continuing limitations in the capacity to implement mass testing or institute more stringent quarantine measures.

A piecemeal reintroduction of containment measures has the potential to cause more severe fiscal distress for some local governments. Containment of the virus will be more difficult if a good portion of the population is unwilling or unable to seek medical care or take appropriate safety precautions, such as self-isolation when sick.

What could change the outlook. A change in outlook will primarily depend on the severity and length of the downturn and its impact on revenues and fund balances beyond 2020. A stable outlook will require a robust and sustained economic rebound, including stronger-than-forecasted sales and income receipts resulting in a quicker rebound that restores the economy to pre-coronavirus levels.

This outlook represents our forward-looking view on credit conditions in the sector over the next 12 to 18 months. This sectorwide outlook, however, does not imply the likelihood or direction of rating actions for individual issuers.

Moody's related publications

State outlook revised to negative as coronavirus impact deepens, May 1, 2020

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

Endnotes

- 1 Global Marco Outlook 2020-21 (April Update)
- 2 CARES Act offers welcome but limited relief from coronavirus' state and local fiscal challenges
- 3 2020 pension investment losses poised to inflict material credit damage

© 2020 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

CREDIT RATINGS ISSUED BY MOODY'S INVESTORS SERVICE, INC. AND/OR ITS CREDIT RATINGS AFFILIATES ARE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE
CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MATERIALS, PRODUCTS, SERVICES AND INFORMATION PUBLISHED BY MOODY'S
(COLLECTIVELY, "PUBLICATIONS") MAY INCLUDE SUCH CURRENT OPINIONS. MOODY'S INVESTORS SERVICE 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 OR IMPAIRMENT. SEE
MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S
INVESTORS SERVICE CREDIT RATINGS. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR
PRICE VOLATILITY. CREDIT RATINGS, NON-CREDIT ASSESSMENTS ("ASSESSMENTS"), AND OTHER OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS
OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR
COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. AND/OR ITS AFFILIATES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT
AND DO NOT PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT
AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND
PUBLICATIONS DO NOT COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR FLOAT HAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY
AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE. HOLDING. OR SALE.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS, AND PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS OR PUBLICATIONS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER. 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 WHATSOFVER BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

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 or in preparing its Publications.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

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

Moody's Investors Service, Inc., 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 Moody's Investors Service, Inc. have, prior to assignment of any credit rating, agreed to pay to Moody's Investors Service, Inc. for credit ratings opinions and services rendered by it fees ranging from \$1,000 to approximately \$2,700,000. MCO and Moody's investors Service also maintain policies and procedures to address the independence of Moody's Investors Service credit ratings and credit rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold credit ratings from Moody's Investors Service and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moodys.com under the heading "Investor Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

Additional terms 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 investors.

Additional terms for Japan only: Moody's Japan K.K. ("MJKK") is a wholly-owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly-owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly-owned credit rating agency subsidiary of MJKK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJKK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3 respectively.

MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any credit rating, agreed to pay to MJKK or MSFJ (as applicable) for credit ratings opinions and services rendered by it fees ranging from JPY125,000 to approximately JPY250,000,000.

MJKK and MSFJ also maintain policies and procedures to address Japanese regulatory requirements.

REPORT NUMBER 1226660

CLIENT SERVICES

 Americas
 1-212-553-1653

 Asia Pacific
 852-3551-3077

 Japan
 81-3-5408-4100

 EMEA
 44-20-7772-5454

