Morris County, NJ
New Issue - Moody's Assigns Aaa to Morris County, NJ's $34.9M GO Bonds; Outlook Stable

Summary Rating Rationale
Moody's Investors Service has assigned a Aaa rating to Morris County, NJ's $34.9 million General Obligation Bonds, Series 2017 consisting of $29.8 million General Improvement Bonds, $1.6 million Park Bonds, $600,000 County College Bonds, and $3 million County College Bonds (Chapter 12 enhanced). Moody's maintains Aaa rating on the county's existing GO and GO-secured debt. The outlook remains stable.

The highest quality Aaa rating reflects the county's substantial tax base, strong and diverse economy, well managed financial operations, healthy reserve levels, and modest debt burden. The rating also incorporates notable yet manageable, enterprise risk arising from $41.8 million of guaranteed debt on two renewable energy projects that are currently challenged by on-going financial difficulties.

Credit Strengths
» Substantial tax base and diverse economy
» Strong wealth and income levels
» Additional financial flexibility provided by reserves outside the Current Fund
» Conservative financial management practices

Credit Challenges
» Notable, yet manageable, enterprise risk from solar energy projects

Rating Outlook
The stable outlook reflects our expectation that the county's financial position will remain strong over the near term and that the county will continue to benefit from its substantial and diverse tax base and above-average wealth levels.

Factors that Could Lead to an Upgrade
» Not applicable

Factors that Could Lead to a Downgrade
» Unanticipated difficulties in receiving lease payments or paying guaranteed debt service
» Protracted structural budget imbalance
Weakening of reserves and liquidity

### Key Indicators

**Exhibit 1**

<table>
<thead>
<tr>
<th>Morris (County of) NJ</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Economy/Tax Base</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Full Value ($000)</td>
<td>$95,105,783</td>
<td>$90,882,566</td>
<td>$88,929,779</td>
<td>$90,306,904</td>
<td>$90,973,340</td>
</tr>
<tr>
<td>Full Value Per Capita</td>
<td>$190,976</td>
<td>$181,884</td>
<td>$177,957</td>
<td>$180,791</td>
<td>$182,522</td>
</tr>
<tr>
<td>Median Family Income (% of US Median)</td>
<td>181.6%</td>
<td>181.8%</td>
<td>180.8%</td>
<td>182.0%</td>
<td>182.0%</td>
</tr>
<tr>
<td><strong>Finances</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating Revenue ($000)</td>
<td>$348,804</td>
<td>$346,564</td>
<td>$349,838</td>
<td>$338,254</td>
<td>$362,995</td>
</tr>
<tr>
<td>Fund Balance as a % of Revenues</td>
<td>23.9%</td>
<td>24.7%</td>
<td>25.5%</td>
<td>25.1%</td>
<td>24.9%</td>
</tr>
<tr>
<td>Cash Balance as a % of Revenues</td>
<td>26.6%</td>
<td>27.6%</td>
<td>28.7%</td>
<td>26.5%</td>
<td>26.7%</td>
</tr>
<tr>
<td><strong>Debt/Pensions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net Direct Debt ($000)</td>
<td>$277,467</td>
<td>$277,120</td>
<td>$260,643</td>
<td>$222,049</td>
<td>$251,375</td>
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<tr>
<td>Net Direct Debt / Operating Revenues (x)</td>
<td>0.8x</td>
<td>0.8x</td>
<td>0.7x</td>
<td>0.7x</td>
<td>0.7x</td>
</tr>
<tr>
<td>Net Direct Debt / Full Value (%)</td>
<td>0.3%</td>
<td>0.3%</td>
<td>0.3%</td>
<td>0.2%</td>
<td>0.3%</td>
</tr>
<tr>
<td>Moody's - adjusted Net Pension Liability (3-yr average) to Revenues (x)</td>
<td>0.8x</td>
<td>0.9x</td>
<td>1.1x</td>
<td>1.3x</td>
<td>1.3x</td>
</tr>
<tr>
<td>Moody's - adjusted Net Pension Liability (3-yr average) to Full Value (%)</td>
<td>0.3%</td>
<td>0.4%</td>
<td>0.4%</td>
<td>0.5%</td>
<td>0.5%</td>
</tr>
</tbody>
</table>

**Sources:** Moody's Investors Service, Morris County audited financial statements

### Detailed Rating Considerations

**Economy and Tax Base: Substantial Tax Base with High Wealth and Strong Corporate Presence**

The county's large and diverse $92.5 billion tax base will remain stable given its advantageous location in northern New Jersey (A3 stable) about 25 miles from New York City (Aa2 stable), its highly skilled and well-educated labor force and the potential for additional tax base growth. While the tax base declined by a 5 year compound annual average of 0.5%, it has actually grown in 3 straight years. The county is among the wealthiest in the state and nation, with a median family income of 136% and 182% of state and national averages, and equalized full value per capita is strong at $185,671. Unemployment rates have historically been low, as reflected in the March 2017 rate of 3.4%, compared with 4.3% and 4.6% for the state and nation, respectively. The county has 7.2% of vacant land, 33.5% residential, 4.9% commercial, 2.5% industrial, 28.6% is used for Parks and Open Space, and the remaining land is used for various other purposes.

The county also has a significant retail and corporate presence, including many Fortune 500 companies. The largest taxpayers include major pharmaceutical, retail, and financial firms. The top 10 taxpayers together represent only 2% of the county's total assessed valuation.

In addition, the county plans to expand the Central Park of Morris County. The county has executed a Land Management Agreement with the state for over 100 additional acres of property on this site, the former Greystone State Psychiatric Hospital property, which was converted to the Central Park of Morris County in 2001.

**Financial Operations and Reserves: Stable Financial Position Supported by Conservative Fiscal Management**

The county's financial position should remain strong in the medium term as management continues to budget conservatively. Current Fund balance increased slightly to $53.3 million or 14.7% of revenues in 2016 from $53 million, or 15.7% of Current Fund revenues in 2015. The 2016 fund balance is in line with the 5-year average of $54.2 million, or 15.5% of revenues. Moody's makes **certain adjustments** to New Jersey local governments' fund balances to include receivables and reserves that would be eligible to be included in fund balance under GAAP accounting but are excluded as a result of state statutory accounting regulations. The county's Moody's-
The county’s revenue streams are highly dependable with property taxes represented more than 62.1% of 2016 revenues. These revenues are guaranteed to be paid in full by the county’s underlying municipalities.

Management is constantly looking at initiatives to help improve the financial position of the county. An important initiative is the lease arrangement for the Morris View Healthcare Center. The lease will materially reduce the 2017 estimated tax effort subsidy of $11 million by between $4 million and $6 million a year for the next several years. The amount of savings is projected to increase further over the life of the lease, reaching $8.2 million per annum by 2020. The plan to lease the facility to an experienced Health Care Provider will maintain the quality of the facility while also relieving the county of all or a portion of the expense. The county is considering using the savings to increase funding to community-based human services programs.

LIQUIDITY
In fiscal 2016, the county had a Current Fund net cash position of about $96.9 million, or a strong 26.7% of revenues. The county’s financial position is bolstered by significant cash ($107 million) held in trust funds outside of the Current Fund, as well as $38.2 million in the capital fund, which could be borrowed upon in a liquidity crunch. The majority of these funds are restricted for specific purposes and would need to be repaid.

Debt and Pensions: Minimal Direct Debt; Modest Enterprise Risk Related to Guaranteed Solar Energy Bonds
The county’s debt will remain modest in the near to medium term as the county intends to issue only small amounts of debt. Post-sale, the county’s net direct debt will be 0.3% of equalized value. Principal amortization is above-average at 95.2% over the next 10 years.

DEBT STRUCTURE
All of the county’s bonds are fixed rate and the county has no variable rate exposure. The county guarantees approximately $114 million of Morris County Improvement Authority (MCIA) issued debt. Approximately $41.8 million of the guaranteed MCIA debt was issued to finance two solar panel projects for a number of participating municipalities and school districts. Both projects have faced significant financial and legal challenges.

The project developer for Solar 1, Tioga Union, filed an assignment for the benefit of creditors in April 2013, largely due to a substantial decline in the solar renewable energy credit (SREC) market. Although the project is complete and is generating revenues, the developer has been unable to make its full lease payments requiring the county to step in and honor its guarantee by making up the missing debt service. The second project, Solar 2, was stalled due to disputes between the developer and contractor. A settlement was reached in March 2015 with the contractor and developer bringing an end to several years of legal challenges.

Despite this heightened enterprise risk, we believe that the potential liability to the county is modest and manageable. The maximum annual debt service for all outstanding solar-related debt of $5.6 million represents a limited 5.8% of 2016 Current Fund cash. The county budgets the full amount of the guaranteed solar project debt service annually and has articulated its intention to make any guaranteed debt service payments necessary. In addition, the county reports that Solar 2 is now complete and running.

DEBT-RELATED DERIVATIVES
The county has no derivative exposure.

PENSIONS AND OPEB
The county participates in the New Jersey Police and Firemen’s Retirement System and the Public Employees’ Retirement System, two multi-employer, defined benefit retirement plans sponsored by the State of New Jersey. The county’s adjusted net pension liability (ANPL), under Moody’s methodology for adjusting reported pension data, as of December 31, 2016, is $528.8 million, or an average 1.5 times revenues. Moody’s ANPL reflects certain adjustments we make to improve comparability of reported pension liabilities. The adjustments are not intended to replace the county’s reported liability information, but to improve comparability with other rated entities.

The county’s fiscal 2016 fixed costs, inclusive of debt service and annual contributions to pensions and OPEB, were manageable at $71.4 million, or 19.7% of revenues.
Management and Governance
Management has a history of budgeting conservatively and maintaining sufficient level of fund balance. Moody's expects the county’s economic tax base and finances to remain stable going forward.

New Jersey Counties have an Institutional Framework score of Aa, which is high compared to the nation. Institutional Framework scores measure a sector’s legal ability to increase revenues and decrease expenditures. The sector’s major revenue sources are subject to a cap which can be overridden with voter approval only. However, the cap of 2% still allows for moderate revenue-raising ability and excludes debt service, pensions, and certain health care costs. Unpredictable revenue fluctuations tend to be minor, or under 5% annually. Across the sector, fixed and mandated costs are generally greater than 25% of expenditures. Unpredictable expenditure fluctuations tend to be minor, under 5% annually. The State has public sector unions, which can limit the ability to cut expenditures, however, police and fire raises are bound by a 2% arbitration cap.

Legal Security
Debt service on the bonds is secured by the county’s general obligation unlimited ad valorem tax pledge. The $3 million County College Bonds are additionally secured by the NJ Chapter 12 enhancement program. It is expected that the state will pay 50% of the debt service.

Use of Proceeds
Proceeds will be used for various general improvement capital projects in the county, as well as in the parks and county colleges.

Obligor Profile
Morris County is located in northern New Jersey about 25 miles west of New York City. It is one of the wealthiest counties in the country.

Methodology
The principal methodology used in this rating was US Local Government General Obligation Debt published in December 2016. Please see the Rating Methodologies page on www.moodys.com for a copy of this methodology.

Ratings

Exhibit 2
Morris (County of) NJ

<table>
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<tr>
<th>Issue</th>
<th>Rating</th>
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<tbody>
<tr>
<td>General Obligation Bonds, Series 2017</td>
<td>Aaa</td>
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<tr>
<td>Rating Type</td>
<td>Underlying LT</td>
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<td>Sale Amount</td>
<td>$34,943,000</td>
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<tr>
<td>Expected Sale Date</td>
<td>06/20/2017</td>
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<tr>
<td>Rating Description</td>
<td>General Obligation</td>
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Source: Moody’s Investors Service
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