Rutgers, The State Univ. of New Jersey
Update to credit analysis

Summary
Our credit view of Rutgers, the State University of New Jersey, (Aa3 stable) positively incorporates the university’s large scale of operations and critical role in the State of New Jersey’s (A3 stable) educational framework as its flagship and land grant university. Favorably, university leadership continues to successfully plan and execute complex strategic change, including an affiliation with RWJ Barnabas Health (A1 positive). Financial benefits from this affiliation and university-wide fundraising will increase already sizable financial reserves, providing a growing cushion to adjust to moderate revenue volatility. Due largely to over $1.5 billion of capital investment over the past five years, cash and investment levels have remained flat. Offsetting characteristics include thin flexible financial reserves relative to operating expenses and high leverage as well as a pressured state environment and large long-term pension liability. In addition, Rutgers’ ambitious, multi-campus capital plan requires significant, ongoing capital investment.

Exhibit 1
Financial reserves provide a solid cushion to fluctuating operating performance even absent growth in reserves

Source: Moody’s Investors Service
Credit strengths

» Substantial scale with close to $4 billion of operating revenue and over $2 billion of total cash and investments

» Effective management continues to demonstrate success in planning and execution of major strategic and operational changes

» Solid growth in enrollment and net tuition revenue and brand strengthening through medical and research profile

» Diversified revenue, including student charges, state appropriations, research grants, and patient service revenue

» Completion of Master Affiliation Agreement with RWJ Barnabas Health will contribute to flexible reserve growth and increase pace of healthcare-related revenue growth

Credit challenges

» Thin unrestricted operating reserves relative to peers, with spendable cash and investments to operating expenses of a low 0.3x and limited liquidity with 93 monthly days cash on hand

» Pressure across multiple revenue streams including state and federal funding

» Poor funding of state-sponsored pension funds could result in higher fringe benefit costs for the university

» Aspirational, multi-campus capital plan to improve competitive position requires ongoing capital investment with already high financial leverage

» Increasing exposure to healthcare-driven revenue adds to risk profile given higher overall volatility in the healthcare sector

Rating outlook

The stable outlook is based on expectations of continued generally breakeven operations. The outlook also incorporates our belief that the university's financial reserves will not deteriorate, that it will maintain the ability to absorb some reductions in state and federal funding or fluctuation in healthcare-related revenue, and that debt will not increase materially without offsetting operating cash flow and financial reserve growth.

Factors that could lead to an upgrade

» Sustained, material improvement in operating performance resulting in strengthened cash flow and debt service coverage

» Significant growth of available reserves and liquidity to cushion operations and reduce financial leverage

» Reduction of dependence on the state for financial support

Factors that could lead to a downgrade

» Prolonged contraction of already slim operating margins

» Decline in cash and investments or weakening of liquidity

» Further pressure on the State of New Jersey's (A3 stable) credit quality or material reduction of financial support

» Material additional debt without compensating growth in cash and investments and operating cash flow
Key indicators

Exhibit 2
RUTGERS, THE STATE UNIVERSITY OF NEW JERSEY, NJ

<table>
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<tbody>
<tr>
<td>Total FTE Enrollment</td>
<td>57,531</td>
<td>59,066</td>
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<td>60,608</td>
<td>62,105</td>
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<td>Operating Revenue ($000)</td>
<td>3,429,611</td>
<td>3,574,970</td>
<td>3,675,775</td>
<td>3,868,259</td>
<td>3,941,580</td>
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<tr>
<td>Annual Change in Operating Revenue (%)</td>
<td>69.6</td>
<td>4.2</td>
<td>2.8</td>
<td>5.2</td>
<td>1.9</td>
<td>1.9</td>
<td>3.2</td>
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<tr>
<td>Total Cash &amp; Investments ($000)</td>
<td>2,050,455</td>
<td>2,063,038</td>
<td>2,095,952</td>
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<td>2,058,633</td>
<td>2,058,633</td>
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<td>Total Debt ($000)</td>
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<td>Spendable Cash &amp; Investments to Total Debt (x)</td>
<td>0.7</td>
<td>0.8</td>
<td>0.8</td>
<td>0.7</td>
<td>0.6</td>
<td>0.6</td>
<td>1.4</td>
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<tr>
<td>Spendable Cash &amp; Investments to Operating Expenses (x)</td>
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<td>0.4</td>
<td>0.4</td>
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<td>0.3</td>
<td>0.3</td>
<td>0.7</td>
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<tr>
<td>Monthly Days Cash on Hand (x)</td>
<td>82</td>
<td>96</td>
<td>91</td>
<td>106</td>
<td>93</td>
<td>93</td>
<td>169</td>
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<tr>
<td>Operating Cash Flow Margin (%)</td>
<td>6.1</td>
<td>9.1</td>
<td>9.5</td>
<td>8.6</td>
<td>5.8</td>
<td>5.8</td>
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<tr>
<td>Total Debt to Cash Flow (x)</td>
<td>10.1</td>
<td>6.1</td>
<td>5.6</td>
<td>5.8</td>
<td>9.1</td>
<td>10.0</td>
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<tr>
<td>Annual Debt Service Coverage (x)</td>
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<td>2.3</td>
<td>1.6</td>
<td>1.5</td>
<td>2.9</td>
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</tbody>
</table>

Pro forma includes $230 million of proposed new debt in fiscal 2020 and estimated fiscal 2020 debt service.
Source: Moody’s Investors Service

Profile
Rutgers, the State University of New Jersey, is the State of New Jersey’s flagship and land grant university as well as a comprehensive research institution. With campuses strategically located throughout the state in New Brunswick, Newark, and Camden, the university’s full-time equivalent enrollment is over 62,000. Annual operating revenue is almost $4 billion.

Detailed credit considerations
Market profile: strategic initiatives attract students, resulting in healthy demand
Student demand will remain healthy given a number of strategic initiatives to attract and retain students including joining the Big Ten Athletic Conference, adoption of a comprehensive physical master plan and recruiting in select markets outside of New Jersey. The university’s academic reputation continues to improve as enrollment grows, benefitting from honors programs, increased accessibility and research growth. The 2017 establishment of Rutgers Health (the clinical arm of the university and the state’s academic health center) and finalization of a partnership with RWJ Barnabas Health in 2018 will result in growth of Rutgers’ healthcare enterprise, revenue, and financial reserves.

Rutgers benefits from its position as the state’s flagship and land grant university, with multiple campuses enhancing demand and political support. The university’s large scale and diversity as a public comprehensive research university with over $650 million in research awards, the state’s only nationally designated comprehensive cancer center and 60,000 full-time equivalent students are credit positives.

Despite strong demand, net tuition per student will experience some pressure resulting from the university’s emphasis on affordability, with below inflationary increases in sticker price and growing financial aid support. With the New Brunswick campus near capacity, the ability to attract students and faculty to the Newark and Camden campuses will impact how large the university can grow.
Operating performance: near break-even operations to continue, weaker fiscal 2018 performance expected to moderately improve in fiscal 2019

Operating margins will continue to be near breakeven given the university’s continued focus on affordability. However, Moody’s-adjusted operating performance for fiscal 2018 was slightly weaker than anticipated, impacted by delays in approximately $60 million in state funding, increased pension and other post-retirement benefit expenses, and continued expense clean up relating to a new financial reporting system, including close out of sponsored program awards. The operating cash flow margin declined to 5.8% in fiscal 2018 from 8.5% in fiscal 2017, well below the peer median of 10.5%. While operating performance is expected to improve in fiscal 2019 and 2020, benefitting from growing patient care revenue and enrollment, continued weak operating cash flow margins could negatively impact credit quality. Favorably, sizeable financial reserves provide a cushion to manage fluctuations in timing of revenue.

Rutgers benefits from diverse revenue streams, though some are vulnerable to declines, particularly government sources. Student charges revenue growth will remain solid, representing the largest component of operating revenue, at 34% for fiscal 2018. While low tuition increases will continue in the near term, Rutgers could leverage its pricing power and tuition-setting authority to grow net tuition revenue in order to counter declines in other revenue streams if needed.

While state support is expected to increase slightly in fiscal 2020, a slightly larger portion continues to be devoted to fringe benefits rather than operations each year. With the creation of Rutgers Health and the affiliation with RWJ Barnabas Health, healthcare-related revenue will rise at a higher rate than in the past.

Wealth and liquidity: strong overall wealth with very good liquidity

Rutgers' strong financial reserves will continue to provide a good financial cushion for operations. Fiscal 2018 spendable cash and investments of $1.3 billion covered 34% of annual operating expenses. Though fundraising has been healthy, with three-year average gifts per student of $2,744 well above the Aa3 median of $904, total cash and investment growth lags peers, with no growth over the past five years compared to a peer median growth rate of 19%, impacted by a high level of capital investment. Fiscal 2018 cash levels were moderately depressed due to delay in receipt of some state funding. Cash and investment growth is expected in the near term, with a $100 million cash infusion from RWJ Barnabas Health in fiscal 2019 as quasi-endowment funds dedicated to support the healthcare enterprise, and an upcoming capital campaign.

Exhibit 4

High level of capital investment contributes to lagging cash and investment growth

The $1.3 billion endowment (estimated fiscal 2019) is managed internally and reported a 9.3% return for fiscal 2018 and an estimated 4.3% return for fiscal 2019, consistent with sector-wide returns. The university is implementing some changes to its asset allocation targets, including reducing hedge fund exposure in favor of private equity investments.

Liquidity

Rutgers’ monthly liquidity is thin relative to Aa3 peers but is adequate given the limited near term potential calls on liquidity. Approximately $969 million of monthly liquidity translates into just 93 days cash on hand, a more modest cushion post-absorption of the legacy UMDNJ units. The university does not own a hospital, does not provide its own liquidity for demand debt, and currently
has $19 million collateral posting on swaps and unfunded capital commitments of $215 million. Favorably, the university’s overall $1.3 billion of spendable cash and investments and positive fundraising momentum provide alternate liquidity sources that could be accessed if needed. The university has liquidity agreements with a diversified set of banks for its variable rate debt and commercial paper (CP) program.

To support its CP program, Rutgers has a $100 million facility with Bank of America (expiration July 2020) and a $200 million facility with Wells Fargo Bank, N.A (expiration April 2021). Series 2009 variable rate debt is supported by a facility from TD Bank, N.A. (expiration July 2023).

**Leverage: high leverage with stable overall position despite ambitious capital plan**

Careful capital planning and debt management will contribute to a relatively stable leverage position. The university has a large pipeline of aspirational capital projects as part of its Rutgers 2030 plan but is taking a disciplined approach to moving forward with specific projects. While no total price tag has been associated with this 15-year plan, a complex multi-campus system and high level of capital investment highlight a capital intensive organization with significant capital needs. Capital spending has been well in excess of depreciation and peers over the past five years, contributing to an age of plant of approximately 16 years, just slightly higher than peers. Spending of approximately $500 million is expected for fiscal 2012 through fiscal 2022, funded through a combination of new and existing debt, gifts, cash flow and reserves. New long term debt planned for fiscal 2020 includes internal bank capitalization to fund deferred maintenance and capital projects related to individual programs.

With the planned debt issuance, Rutgers has limited additional debt capacity at its current rating level absent a return to higher operating cash flow margins. Debt to cash flow deteriorated to a weak 9.1x in fiscal 2018 from 5.8x for fiscal 2017, which was in line with peers. Financial leverage is also weak when measured against spendable cash and investments, at 0.6x compared to a 1.3x median for peers. After the planned fiscal 2019 issuance, the university does not expect additional new debt for several years and limited new commercial paper use over the next year. Given these plans, overall additional debt is largely offset by principal payments on outstanding bonds.

**Debt structure**

Almost all of the university’s outstanding pro forma debt of $2.3 billion is fixed rate, providing stability for planning purposes. Variable rate debt includes $63 million of variable rate demand bonds supported by an SPBA and pro forma commercial paper of approximately $70 million. Estimated new debt of $330 million will be structured as century bonds, with a bullet payment planned for 2119. Excluding the century bond issue, debt service is in the $150 - $170 million range through fiscal 2033 after which it gradually declines through fiscal 2048.

**Legal security**

Rutgers’ general obligation bonds, lease revenue bonds, and commercial paper are payable from all legally available revenue and fund balances. In addition, Rutgers guarantees debt service on certain bonds of the LEAP Academy University Charter School, Inc. The university has covenanted that it will charge and collect tuition, fees, rents, charges and other revenues which, together with other legally available funds, will be sufficient to make all debt service payments on time and to meet all other obligations of the university.

**Debt-related derivatives**

Two fixed payer interest rate swaps with a total notational amount of $110 million are used as a hedge against the variable rate bonds. The university currently posts approximately $19 million in collateral on a liability of $39 million.

**Pensions and OPEB**

Rutgers’ pension liability is manageable given its scope of operations and financial resources. Total adjusted debt for fiscal 2018, including $2 billion of total debt and $2.1 billion of Moody’s Adjusted Net Pension Liability and operating leases is generally equivalent to operating revenue and in line with other Aa-rated public universities. However, spendable cash and investments only cover total adjusted debt by 0.3x compared to the fiscal 2018 median of 0.6x for Aa3-rated public universities.

Rutgers participates in three pension plans administered by the State of New Jersey, two of which are defined benefit plans. For all plans, the state pays 100% of employer contributions, but the university is responsible for reimbursing the state for the pension contributions based on salaries and number of employees that exceed the state-determined levels. The university also participates in two defined benefit and two defined contribution federal retirement plans.
Governance and management: Strong leadership with demonstrated ability to plan and execute strategic change

Rutgers’ strategic positioning is very good, supported by senior leadership’s ability to plan and execute significant strategic changes. Leadership has completed a 5-year comprehensive strategic plan and a 15-year comprehensive physical master plan that is guided by strategic plan priorities and has successfully established Rutgers Biomedical and Health Sciences as a major division of the university, consolidated two nursing schools and two law schools, as well as the creation of Rutgers Health and a partnership with RWJ Barnabas.

The university has successfully merged two payroll systems and consolidated other financial and information systems that will facilitate multi-year financial and capital planning. In addition, it has built out senior staff to include a chief enterprise risk, ethics, and compliance officer and chief investment officer for its endowment in recognition of its growing enterprise. Rutgers president has agreed to continue his term through fiscal 2020 to coincide with the first years of the partnership with RWJ Barnabas Health, and a search for his replacement is currently underway. Favorably, the university has completed almost all union agreements, which will remain in place for several more years, providing additional stability. The university continues to work closely with the state on access and affordability for higher education.

Rating methodology and scorecard factors

The Higher Education Methodology includes a scorecard that summarizes the factors that are generally most important to higher education credit profiles. Because the scorecard is a summary and may not include every consideration in the credit analysis for a specific issuer, a scorecard-indicated outcome may or may not match an assigned rating. We assess strategic positioning on a qualitative basis, as described in the methodology.

Exhibit 5
Rutgers, The State University of New Jersey, NJ

<table>
<thead>
<tr>
<th>Rating Factors</th>
<th>Value</th>
<th>Score</th>
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<tbody>
<tr>
<td>Factor 1: Market Profile (30%)</td>
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<tr>
<td>Scope of Operations (Operating Revenue) ($)</td>
<td>3,941,580</td>
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</tr>
<tr>
<td>Reputation and Pricing Power (Annual Change in Operating Revenue) (%)</td>
<td>1.9</td>
<td>Ba1</td>
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<tr>
<td>Strategic Positioning</td>
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<td>A</td>
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<tr>
<td>Factor 2: Operating Performance (25%)</td>
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<tr>
<td>Operating Results (Operating Cash Flow Margin) (%)</td>
<td>5.8</td>
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</tr>
<tr>
<td>Revenue Diversity (Maximum Single Contribution) (%)</td>
<td>33.8</td>
<td>Aaa</td>
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<tr>
<td>Factor 3: Wealth &amp; Liquidity (25%)</td>
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<td></td>
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<tr>
<td>Total Wealth (Total Cash &amp; Investments) ($)</td>
<td>2,058,633</td>
<td>Aa1</td>
</tr>
<tr>
<td>Operating Reserve (Spendable Cash &amp; Investments to Operating Expenses) (x)</td>
<td>0.3</td>
<td>A1</td>
</tr>
<tr>
<td>Liquidity (Monthly Days Cash on Hand)</td>
<td>93</td>
<td>A1</td>
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<td>Factor 4: Leverage (20%)</td>
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<tr>
<td>Financial Leverage (Spendable Cash &amp; Investments to Total Debt) (x)</td>
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<td>Debt Affordability (Total Debt to Cash Flow) (x)</td>
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<td>Scorecard-Indicated Outcome</td>
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Data is based on most recent fiscal year available. Debt may include pro forma data for new debt issued or proposed to be issued after the close of the fiscal year.

For non-US issuers, nominal figures are in US dollars consistent with the Higher Education Methodology.

Source: Moody’s Investors Service