STATE OF COLORADO
OFFICE OF THE TREASURER
Dave Young

COLORADO TREASURER'S 5TH ANNUAL REPORT

STATE INSTITUTIONS OF HIGHER EDUCATION

FISCAL YEAR 2020/2021

September 1, 2020

STATE OF COLORADO
DEPARTMENT OF THE TREASURY

Dave Young
State Treasurer

Eric Rothaus
Deputy Treasurer

September 1, 2020

Colorado Capital Development Committee
Colorado Commission on Higher Education
Colorado Joint Budget Committee
Colorado Office of State Planning and Budgeting

200 East Colfax Ave.
Denver, CO 80203

Colleagues:

The Colorado Department of the Treasury ("Treasury" or the "Department") submits this report pursuant to Section 23-5-139 of the Colorado Revised Statutes. The report addresses the fiscal health of Colorado's Higher Education Institutions ("institution(s)") as it relates to outstanding debt and debt service costs. Specifically, the report presents:

1. The most recent credit rating of each institution that has issued either intercept or stand-alone bonds,
2. The debt service coverage ratio for each institution that has issued either intercept or stand-alone bonds,
3. The total amount of all intercept and stand-alone bonds issued by each institution.

Additionally, this report also serves as the communication mechanism to show which institutions qualify for pre-approval to participate in the State of Colorado's intercept program. Colorado law directs Treasury to calculate a pre-approval amount for qualifying institutions using the two different methods outlined in statute and then establishing the pre-approved amount at the "lesser of" the two methods.

The first calculation is the difference between seventy-five percent of the most recent fiscal year's general fund appropriations for stipends and fee-for-service contracts that are re-appropriated to such governing board and the total annual debt service payments for intercept bonds of such governing board.

The second method allows for "the total amount of additional revenue bonds a governing board could issue while maintaining the requirements set forth in subparagraph (II) of paragraph (b) of this subsection (1)", a reference to debt service coverage of not less than 1.5x. Pre-approvals within the

report have been calculated assuming a thirty-year amortization at an interest rate of 1.38%, the “AA” rated Municipal Market Data tax-exempt index rate as of August 3, 2020.

This is the fifth such report Treasury has prepared. We welcome input regarding previous reports and do our best to make changes in accordance with that feedback.

As we noted in last year’s report, due to statutory requirements, the timing of this document does not align with when higher education institutions have received their audited financial statements. One effect of this misalignment is that this report communicates the outstanding debt profile from one year and revenue available for debt service from a different year. This may result in understating or overstating a higher education institution’s debt coverage ratio. For this year’s report, we recognize this misalignment may be more pronounced when calculating a higher education institution’s debt coverage ratio given the potential revenue and expense impacts an institution may be facing related to the global pandemic and resulting economic contraction. To rectify this issue, the legislature could consider changing the due date of this report to a time after audited financial figures are available from each higher education institution.

The information presented in this report is believed to be accurate and up to date. However, some of the rating data for a few of institutions is older than that of other institutions. New ratings are typically updated when an institution seeks a new borrowing.

This report represents much time and effort among the contributors. The Department thanks Amanda Bickel of the Joint Budget Committee Staff, Bo Pogue of the Capital Development Committee Staff, Steph Chichester, Nick Taylor, and Meredith Clinkinbeard of North Slope Capital Advisors, and Lori Ann Knutson from the Attorney General’s Office for their help and guidance. We’d also like to thank the Chief Financial Officers, and their staff, from the higher education institutions who helped edit and refine the figures used in this report. Specifically, we would like to thank Brad Baca, Chuck Cook, Laura Glatt, Heather Heersink, Margaret Henry, Lynn Johnson, George Middlemist, Michelle Quinn, Todd Saliman, Steve Schwartz, Mark Superka, Kirsten Volpi and Dan Wilson.

Sincerely,

David L. Young
State Treasurer

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Executive Summary

The following institutions are measured as to whether they met the statutory requirements to participate in the intercept program. If all requirements are met, the pre-approval amount is included as well.

Institution:	Adams State University Colorado	Colorado Community College System	Colorado Mesa University	Colorado School of Mines	Colorado State University
Ratings Requirement Met	✓	✓	✓	✓	✓
Coverage Ratio Requirement Met	✓	✓	✓	✓	✓
State Funding % Requirement Met	✓	✓	✓	✓	✓
Pre-Approval Amount	$116,814,310	$921,312,491	$260,863,783	$179,918,648	$1,666,964,118

Institution:	Fort Lewis College	MSU Denver	CU	University of Northern Colorado	Western Colorado University
Ratings Requirement Met	✓	✓	✓	✓	✗
Coverage Ratio Requirement Met	✓	✓	✓	✓	✓
State Funding % Requirement Met	✓	✓	✓	✓	✓
Pre-Approval Amount	$165,476,591	$1,003,777,503	$4,487,983,684	$593,512,050	$3,393,252*

*Pre-approved amount if the University were to receive a rating in the "A" category.

Ratings

Section 23-5-139(1)(b)(II)(A), C.R.S., requires the Department to confirm that an institution's governing board participating in the state higher education intercept program carries a "credit rating *in one of the three highest categories* from at least one nationally recognized statistical rating organization [NRSRO]." (emphasis added).

There are three NRSRO's from which a credit rating may be obtained: Moody's, Standard and Poor's, and Fitch. Below are the most recent ratings available for each institution. **However, not each institution has been rated recently and their financial situation may have changed since their last rating.**

The three highest categories for Moody's, S&P, and Fitch are Aaa/Aa/A, AAA/AA/A, and AAA/AA/A, respectively.

Institution	Moody's	S&P	Fitch	Most Recent Agency Rating
Adams State College	A3 (Negative)	N/A	N/A	April 2019
Colorado Community College System	Aa3 (Stable)	N/A	N/A	August 2019
Colorado Mesa University	A2 (Stable)	N/A	N/A	September 2019
Colorado School of Mines	A1 (Stable)	A+ (Negative)	N/A	September 2019
Colorado State University	Aa3 (Stable)	A+ (Stable)	N/A	September 2019
Fort Lewis College	A3 (Stable)	N/A	N/A	August 2020
Metropolitan State University	A1 (Stable)	A (Negative)	N/A	January 2020
University of Colorado	Aa1 (Stable)	N/A	AA+ (Stable)	June 2020
University of Northern Colorado	A3 (Stable)	A- (Stable)	N/A	July 2019
Western Colorado University	Baa1 (Stable)	N/A	N/A	March 2019

Institutions Meeting the Rating Requirement	Institutions Not Meeting the Rating Requirement
Adams State University Colorado; Colorado Community College System; Colorado Mesa University; Colorado School of Mines; Colorado State University; Fort Lewis College; MSU Denver; University of Colorado; University of Northern Colorado	Western Colorado University

Debt Service Coverage Ratio and Outstanding Debt

The debt service coverage ratio is measured by "dividing the governing board's net revenue available for annual debt service over such governing board's total amount of annual debt service." § 23-5-139(1)(b)(II)(B), C.R.S. The statute requires a coverage ratio of at least one and one-half times to be eligible for the intercept program.

The following is the calculated outstanding debt, service coverage, and their respective ratios.

Institution	Adams State University	Colorado Community College System	Colorado Mesa University	Colorado School of Mines	Colorado State University
FY2020 Debt Service-All Outstanding Bonds	$3,565,733	$7,866,869	$14,250,834	$19,203,076	$75,164,657
FY2020 Debt Service-Intercept Bonds	$3,275,983	$2,588,659	$12,472,925	$11,067,074	$56,109,387
Debt Service Coverage Ratio ("DSCR"): FY 2019 Net Pledged Revenues	$7,732,857	$30,604,902	$28,635,000	$51,857,000	$192,672,000
DSCR-All	**2.17x**	**3.89x**	**2.01x**	**2.70x**	**2.56x**
DSCR-Intercept	**2.36x**	**11.82x**	**2.30x**	**4.69x**	**3.43x**

Institution	Fort Lewis College	Metropolitan State University	University of Colorado	University of Northern Colorado	Western Colorado University
FY2020 Debt Service-All Outstanding Bonds	$3,235,415	$8,340,599	$133,504,848	$10,507,291	$7,229,944
FY2020 Debt Service-Intercept Bonds	$2,774,736	$7,001,328	$0	$9,750,503	$6,823,744
Debt Service Coverage Ratio ("DSCR"): FY 2019 Net Pledged Revenues	$8,230,610	$38,237,607	$1,310,062,000	$43,430,049	$10,914,175
DSCR-All	**2.54x**	**4.58x**	**9.81x**	**4.13x**	**1.51x**
DSCR-Intercept	**2.97x**	**5.46x**	**N/A**	**4.45x**	**1.60x**

Institutions Meeting the Ratio Requirement	Institutions Not Meeting the Ratio Requirement
Adams State University Colorado Colorado Community College System Colorado Mesa University Colorado School of Mines Colorado State University Fort Lewis College MSU Denver University of Colorado University of Northern Colorado Western Colorado University	

Debt Service as a Percentage of State Funding

Higher education institutions receive State funding through various mechanisms. The State supplies funding to institutions directly through the Colorado Opportunity Fund ("COF") and fee for service contracts. The maximum amount of intercept debt service owed by any institution in any year *must equal 75% or less* of the combined amount of the COF and fee for service. § 23-5-139(1)(b)(I), C.R.S.

Below is each institution's intercept debt service amount as a percentage of state funding.

Institution	State Funding Amount	Maximum Intercept Debt Service Amount	Percentage of Intercept Debt Service Amount to State Funding
Adams State College	$17,280,257	$4,504,380	26.07%
Colorado Community College System	$190,327,695	$2,588,659	1.36%
Colorado Mesa University	$32,484,959	$13,714,914	42.22%
Colorado School of Mines	$25,371,265	$11,411,721	44.98%
Colorado State University	$172,028,219	$60,973,479	35.44%
Fort Lewis College	$14,136,437	$3,405,169	24.09%
Metropolitan State University	$63,969,142	$7,001,328	10.94%
University of Colorado	$244,273,926	$0	0.00%
University of Northern Colorado	$47,079,464	$11,081,649	23.54%
Western Colorado University	$15,235,379	$6,823,744	44.79%

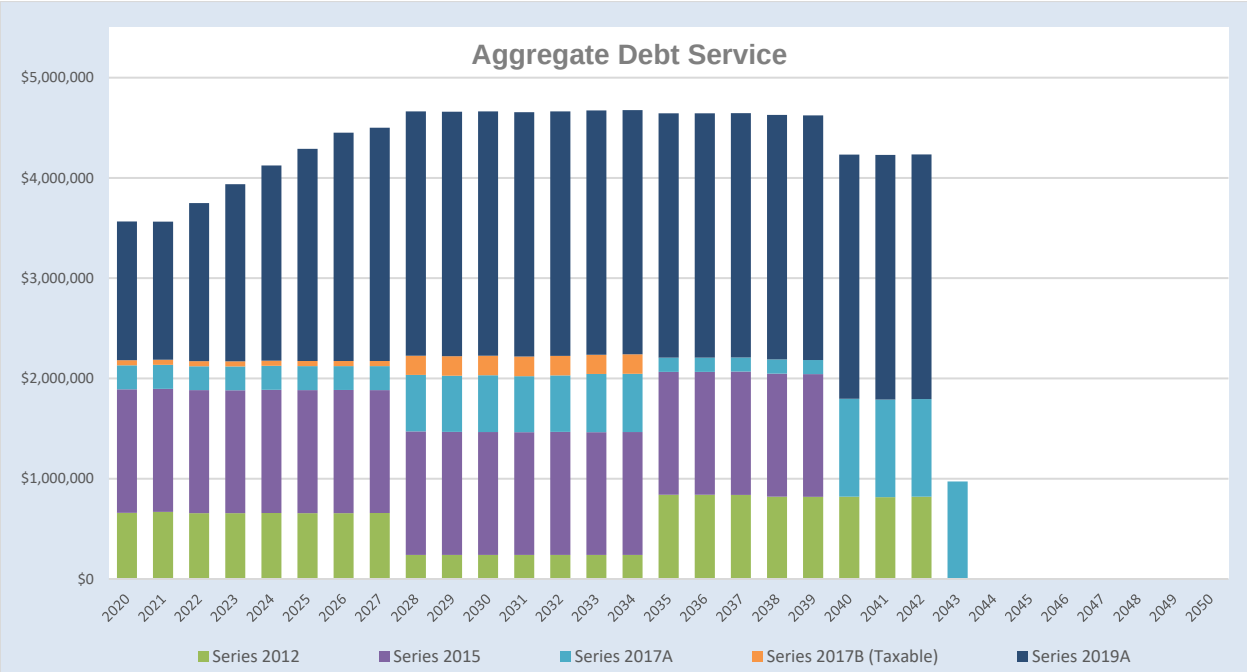
Institutions Meeting the Percentage Requirement	Institutions Not Meeting the Percentage Requirement
Adams State University Colorado; Colorado Community College System; Colorado Mesa University; Colorado School of Mines; Colorado State University; Fort Lewis College; MSU Denver; University of Colorado; University of Northern Colorado; Western Colorado University	

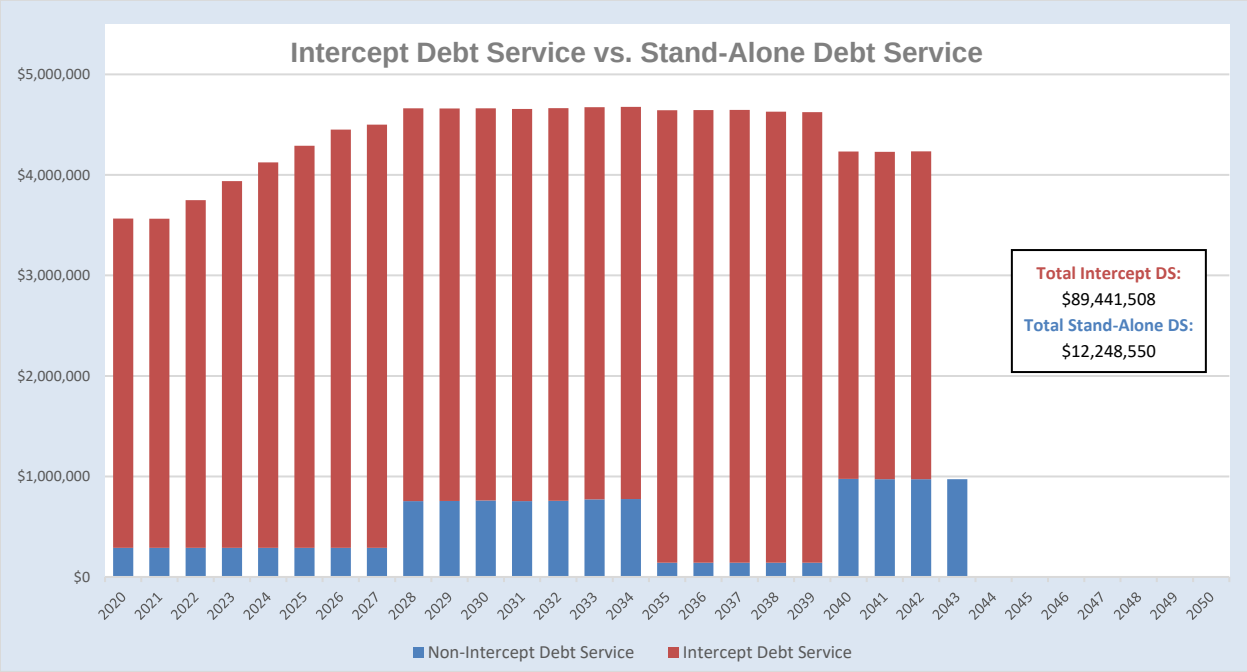
Institution Profiles

Click the logo to view the profile.

Adams State College

Location:	Alamosa
Agency Ratings:	A3, N/A, N/A*
State Intercept Enhanced Ratings:	Aa2, N/A, N/A*
Most Recent Agency Rating:	April 2019
Pre-Approved for Intercept?	Yes
Pre-Approval Amount:	$116,814,310

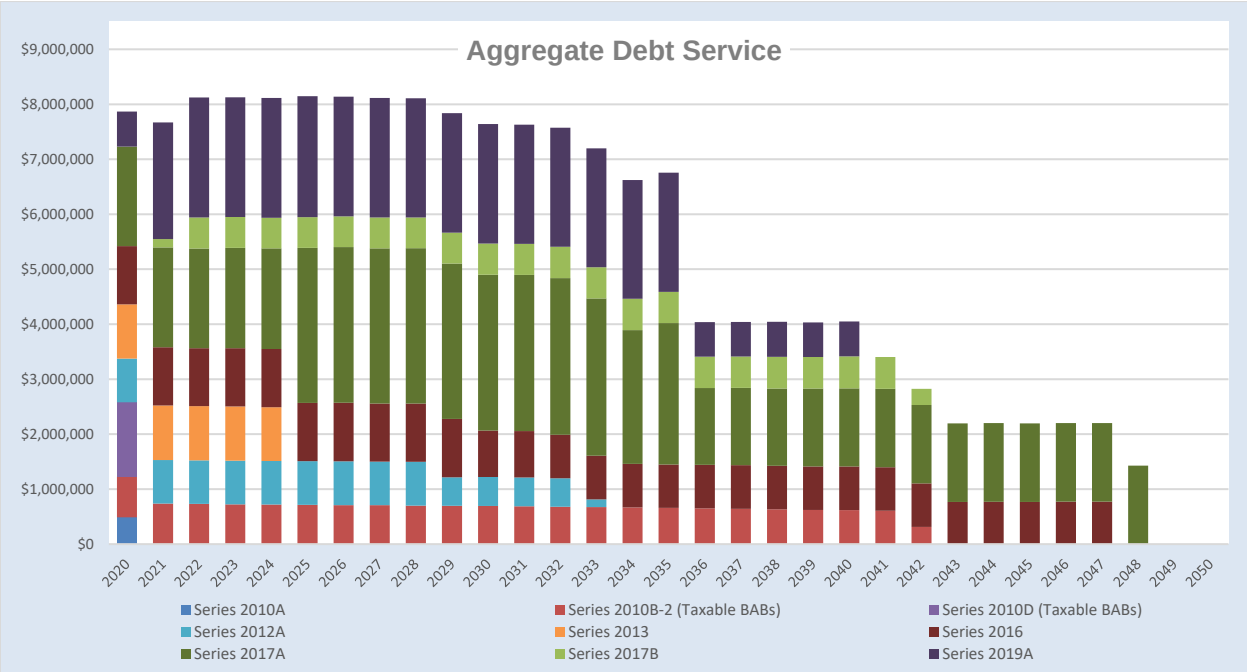


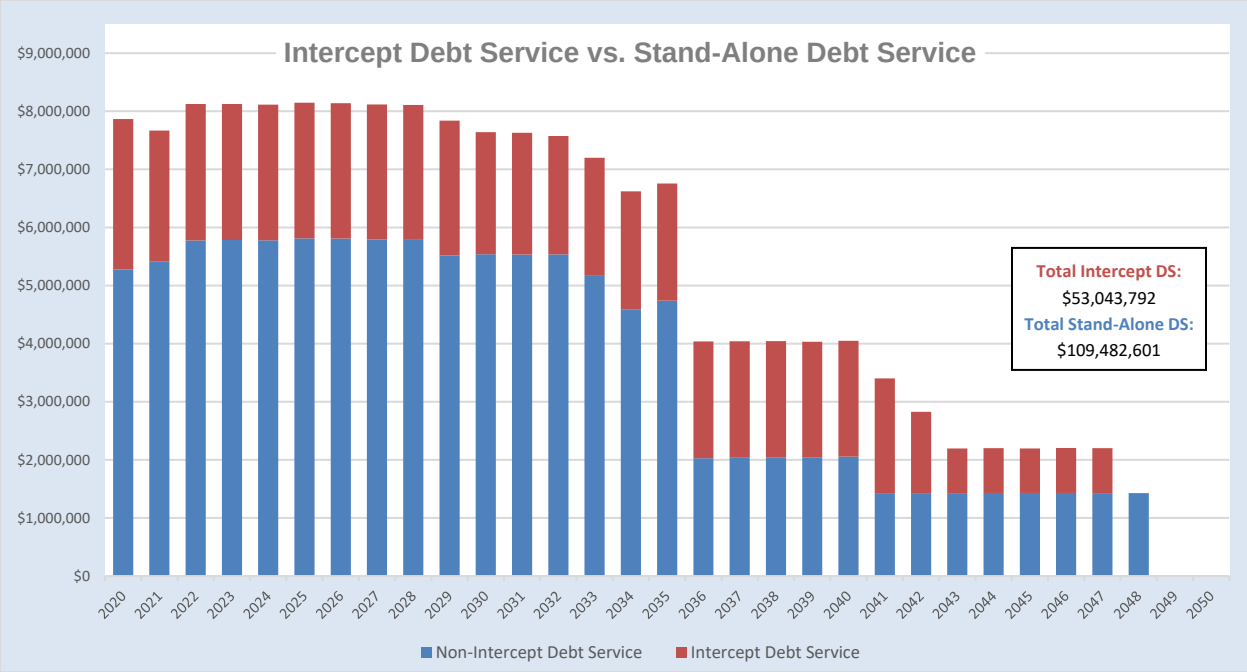


**Ratings are displayed in order of Moody's, S&P, and Fitch*

Colorado Community College System

Location:	Various
Agency Ratings:	Aa3, N/A, N/A*
State Intercept Enhanced Ratings:	Aa2, N/A, N/A*
Most Recent Agency Rating:	August 2019
Pre-Approved for Intercept?	Yes
Pre-Approval Amount:	$921,312,491

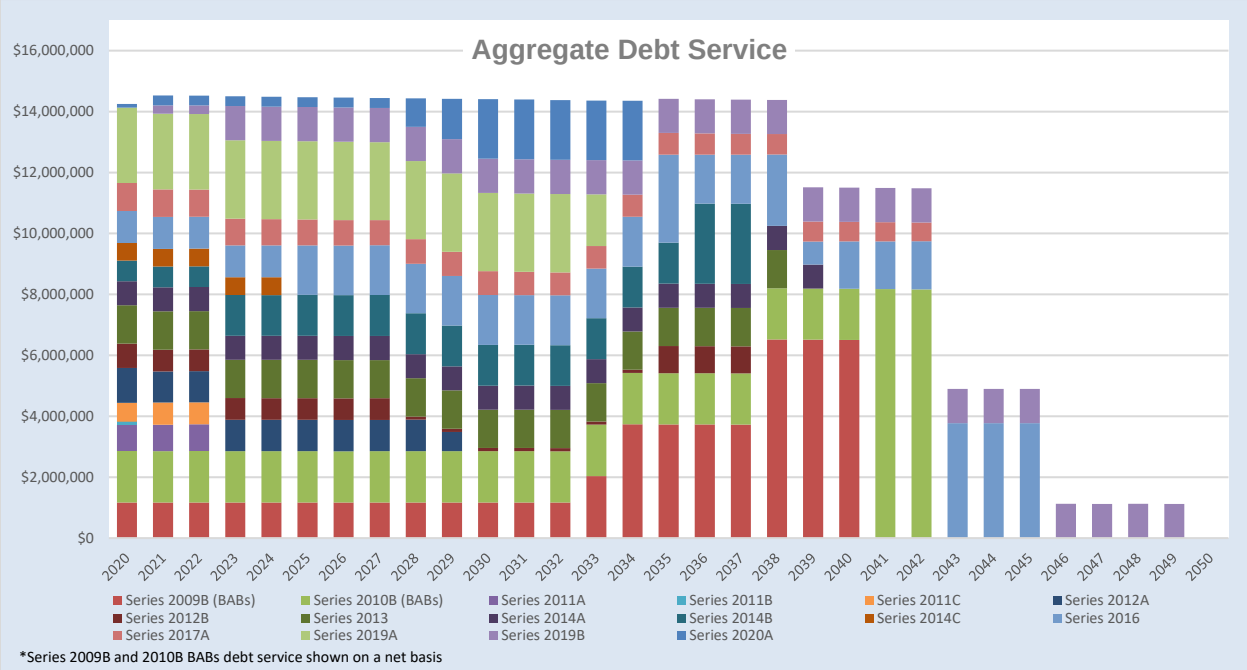


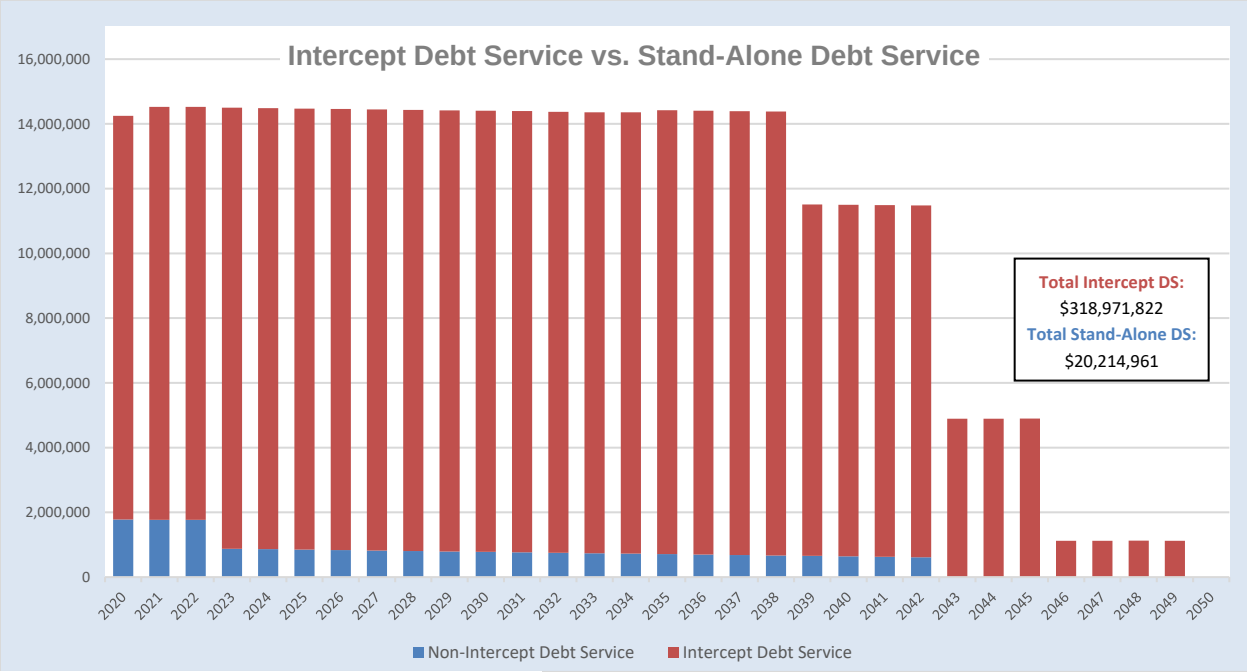


**Ratings are displayed in order of Moody's, S&P, and Fitch*

Colorado Mesa University

Location:	Grand Junction
Agency Ratings:	A2, N/A, N/A*
State Intercept Enhanced Ratings:	Aa2, N/A, N/A*
Most Recent Agency Rating:	September 2019
Pre-Approved for Intercept?	Yes
Pre-Approval Amount:	$260,863,783

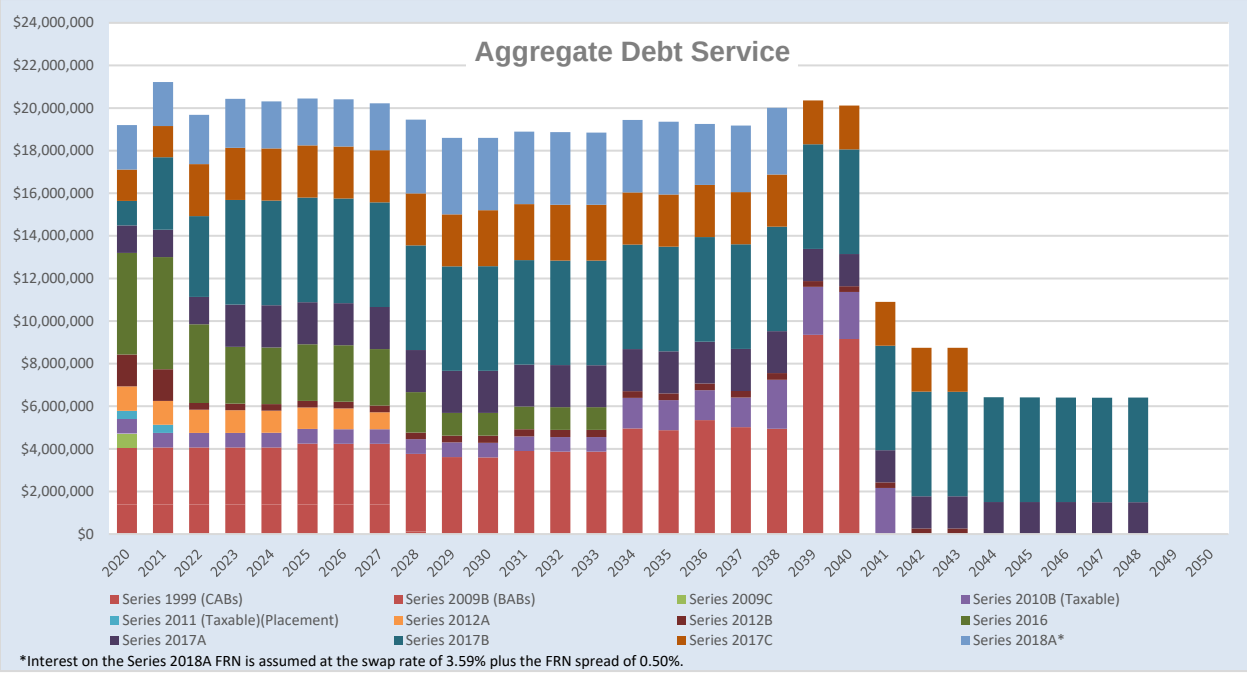




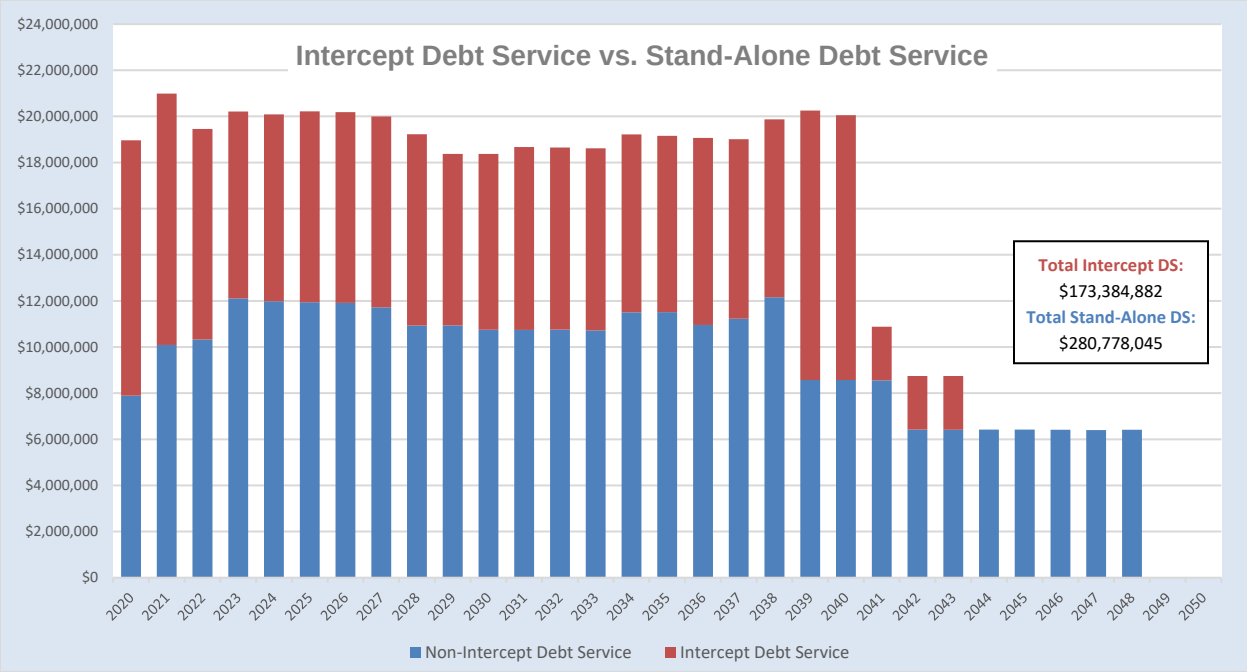
**Ratings are displayed in order of Moody's, S&P, and Fitch*

Colorado School of Mines

Location:	Golden
Agency Ratings:	A1, A+, N/A*
State Intercept Enhanced Ratings:	Aa2, AA-, N/A*
Most Recent Agency Rating:	September 2019
Pre-Approved for Intercept?	Yes
Pre-Approval Amount:	$179,918,648



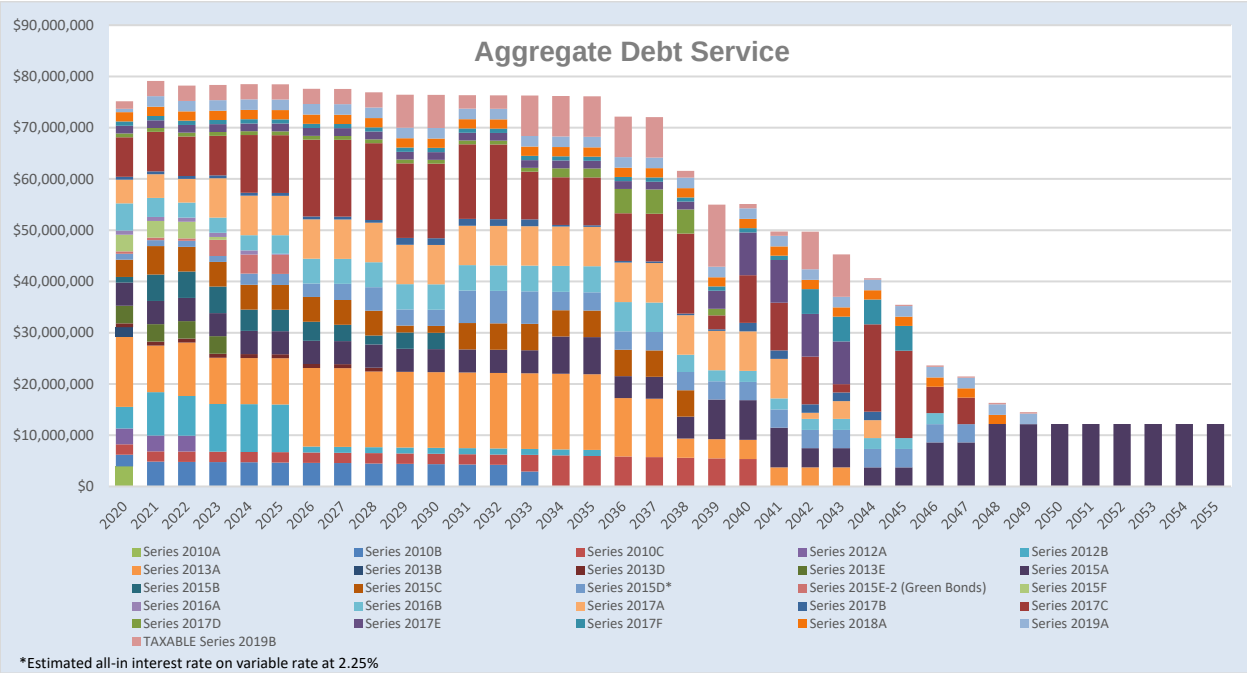
*Interest on the Series 2018A FRN is assumed at the swap rate of 3.59% plus the FRN spread of 0.50%.

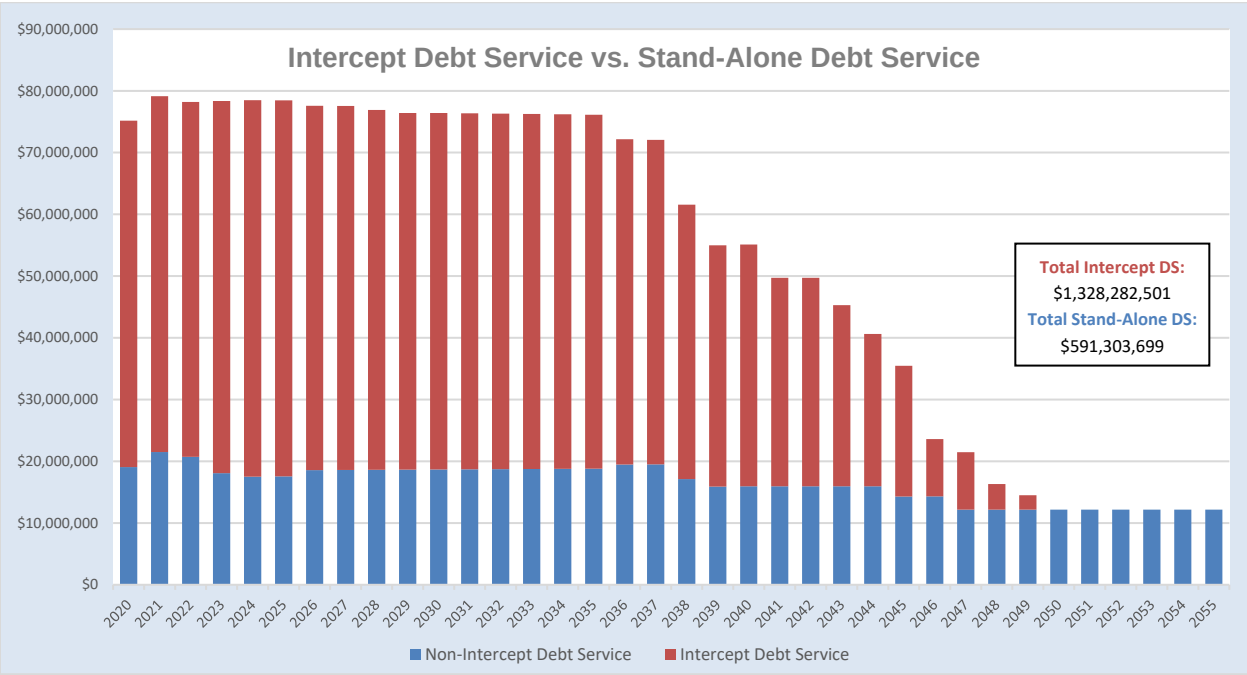


**Ratings are displayed in order of Moody's, S&P, and Fitch*

Colorado State University

Location:	Fort Collins
Agency Ratings:	Aa3, A+, N/A*
State Intercept Enhanced Ratings:	Aa2, AA-, N/A*
Most Recent Agency Rating:	September 2019
Pre-Approved for Intercept?	Yes
Pre-Approval Amount:	$1,666,964,118

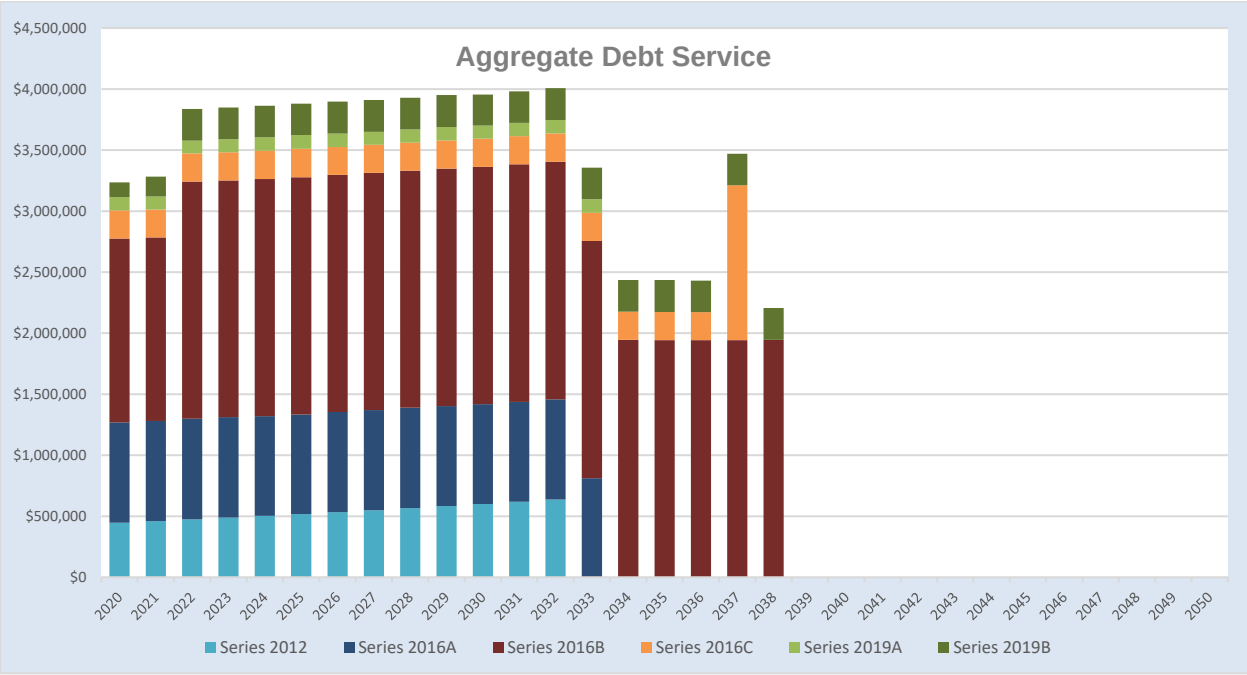


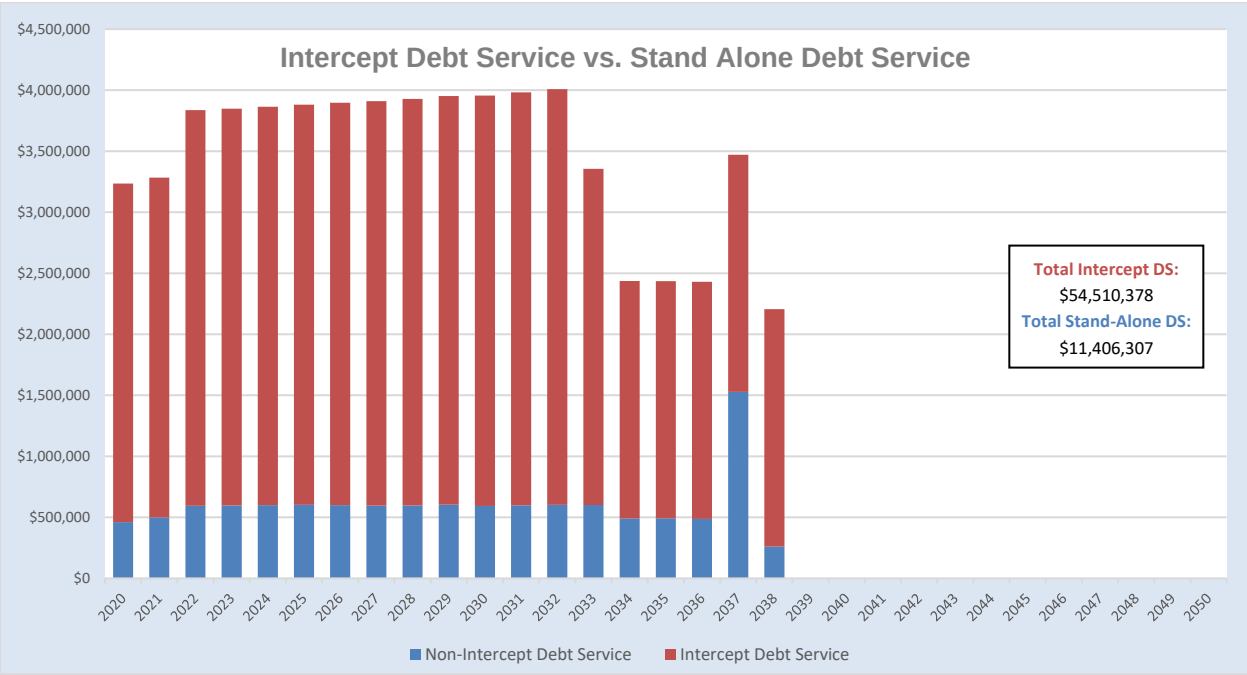


**Ratings are displayed in order of Moody's, S&P, and Fitch*

Fort Lewis College

Location:	Durango
Agency Ratings:	A3, N/A, N/A*
State Intercept Enhanced Ratings:	Aa2, N/A, N/A*
Most Recent Agency Rating:	August 2020
Pre-Approved for Intercept?	Yes
Pre-Approval Amount:	$165,476,591

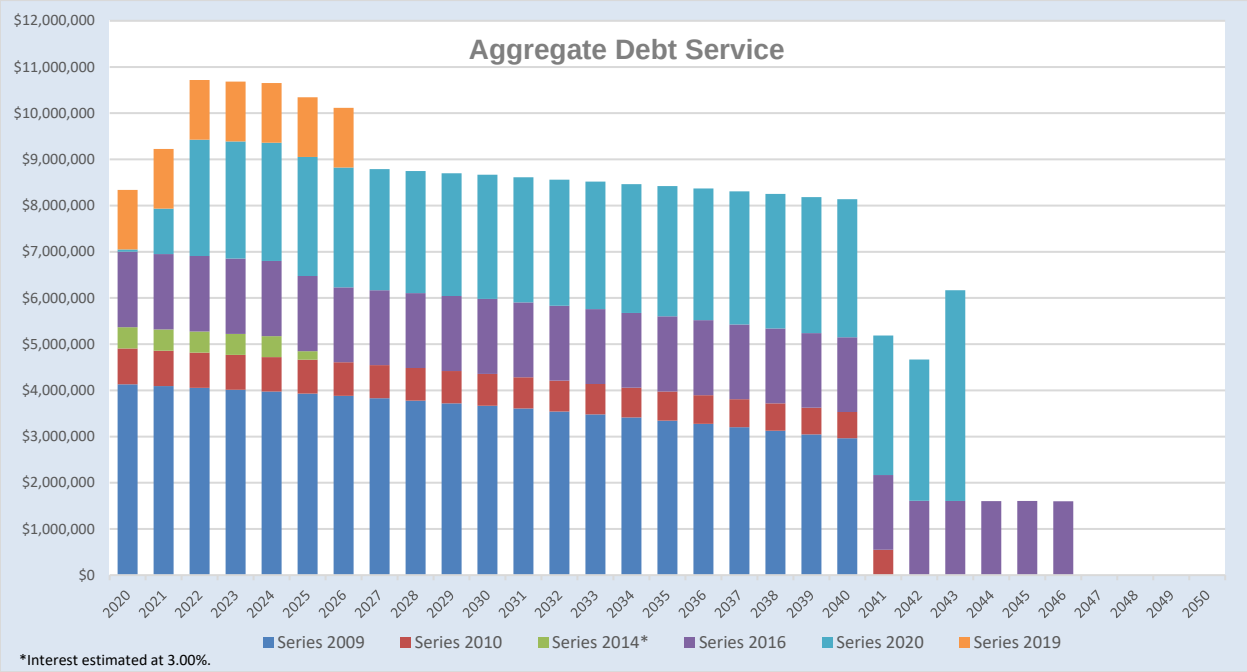


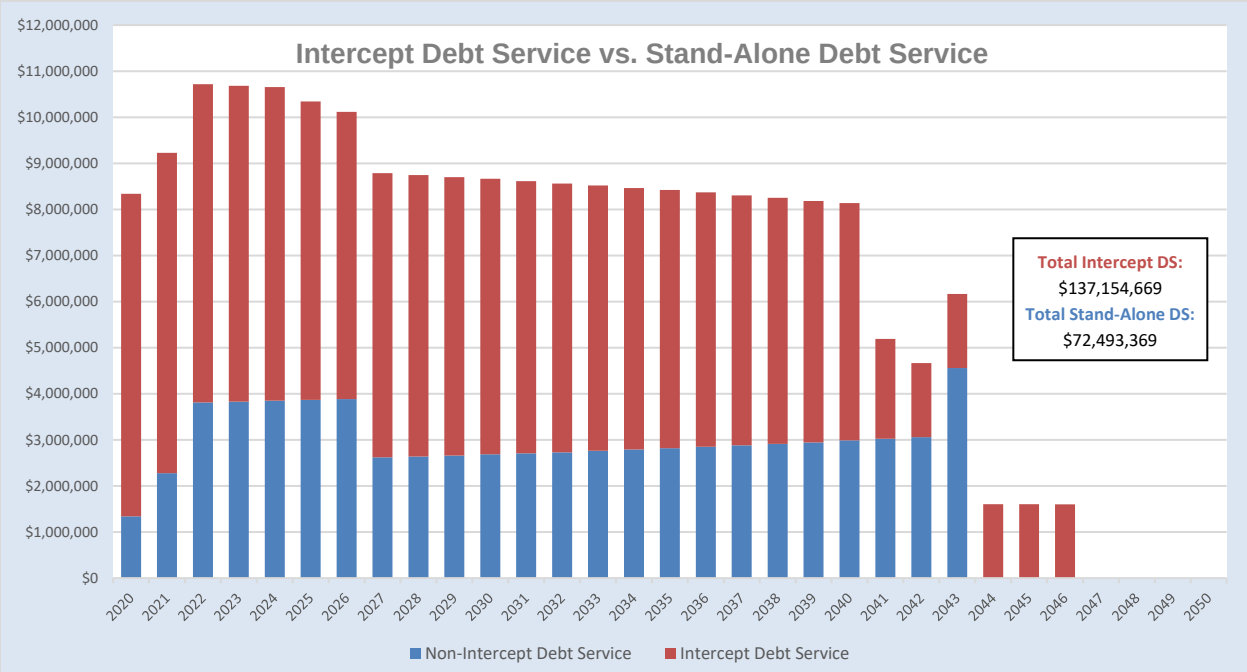


**Ratings are displayed in order of Moody's, S&P, and Fitch*

Metropolitan State University

Location:	Denver
Agency Ratings:	A1, A, N/A*
State Intercept Enhanced Ratings:	Aa2, N/A, N/A*
Most Recent Agency Rating:	January 2020
Pre-Approved for Intercept?	Yes
Pre-Approval Amount:	$1,003,777,503



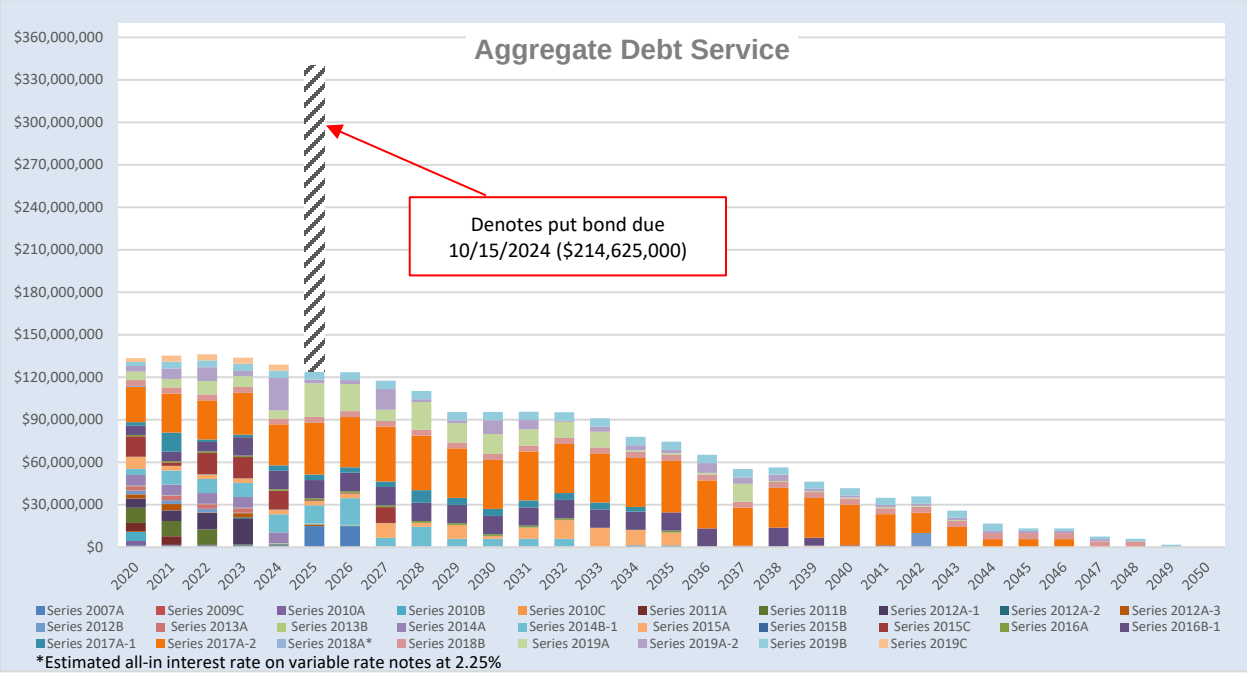


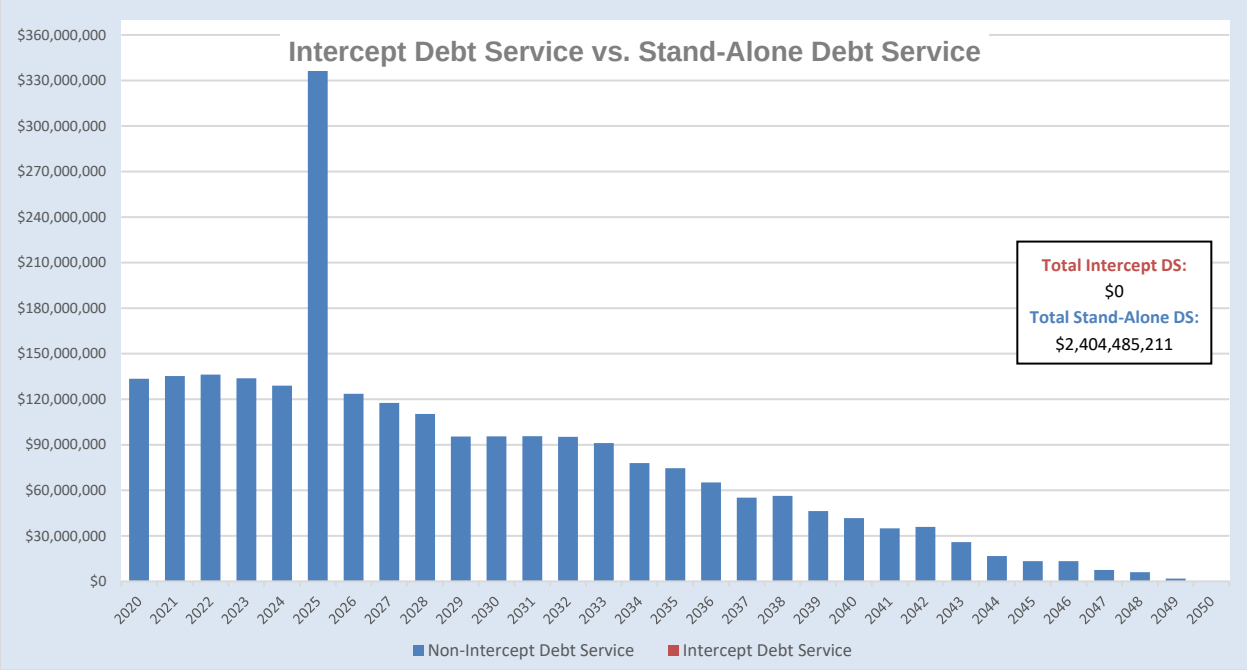
**Ratings are displayed in order of Moody's, S&P, and Fitch*

University of Colorado

University of Colorado
Boulder | Colorado Springs | Denver | Anschutz Medical Campus

Location:	Various
Agency Ratings:	Aa1, N/A, AA+*
State Intercept Enhanced Ratings:	N/A, N/A, N/A*
Most Recent Agency Rating:	June 2020
Pre-Approved for Intercept?	Yes
Pre-Approval Amount:	$4,487,983,684

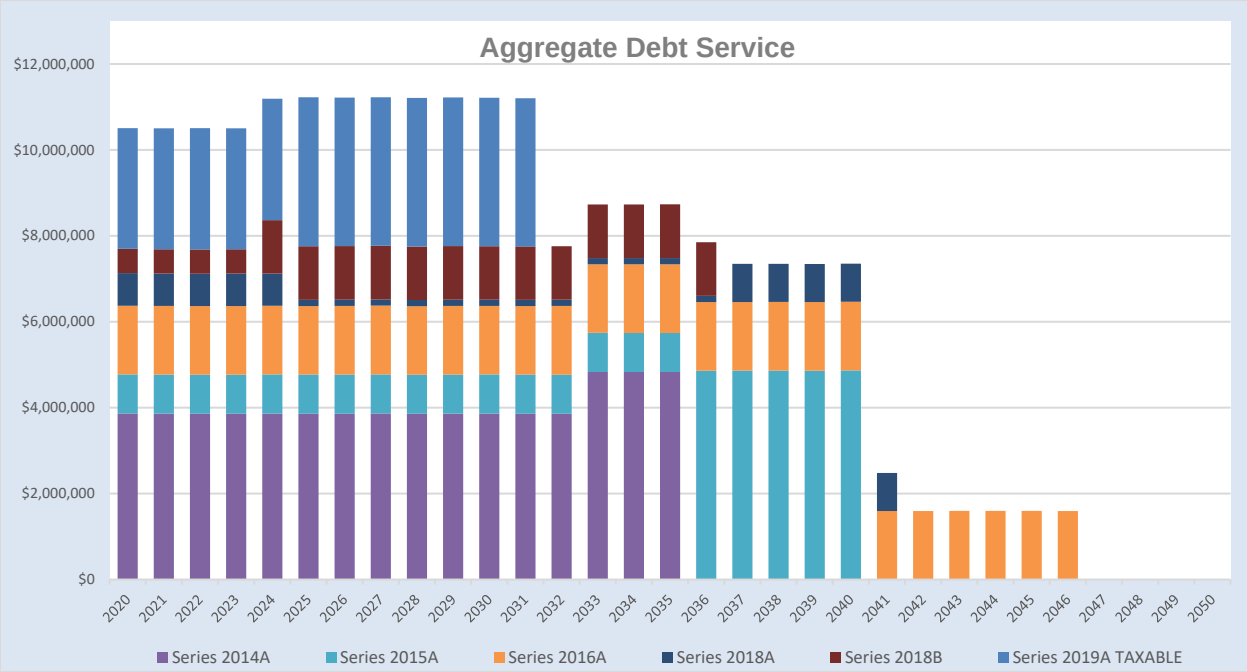


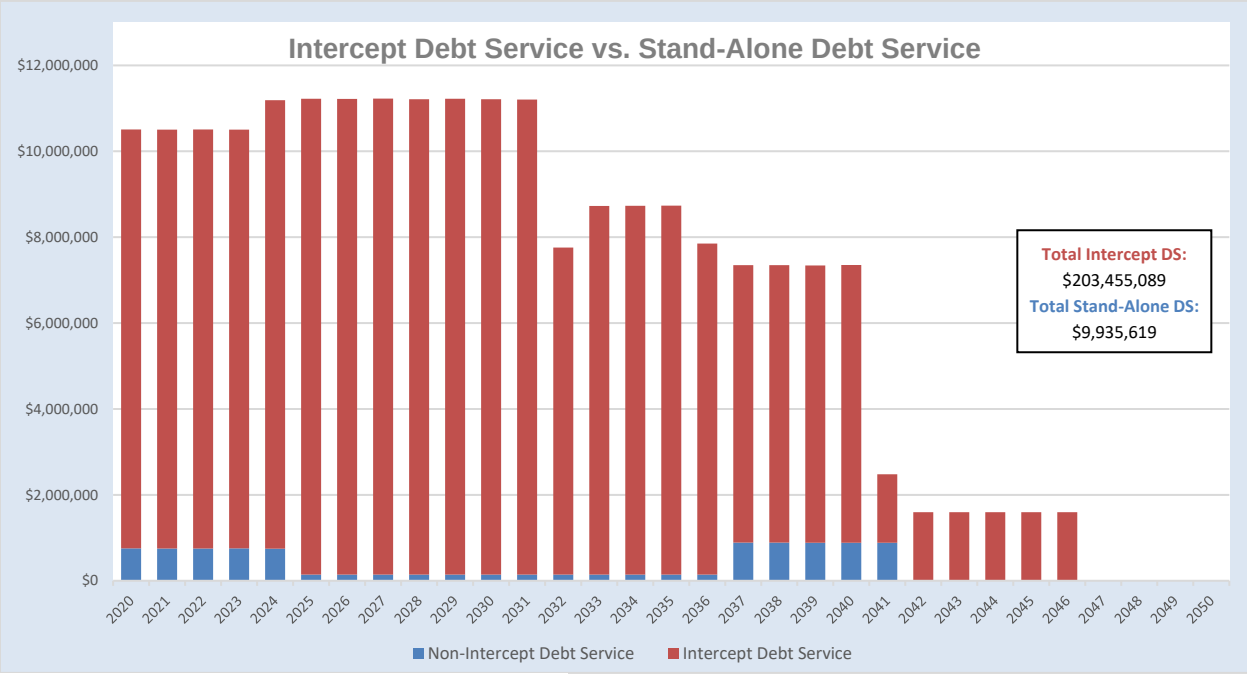


**Ratings are displayed in order of Moody's, S&P, and Fitch*

University of Northern Colorado

Location:	Greeley
Agency Ratings:	A3, A-, N/A*
State Intercept Enhanced Ratings:	Aa2, AA-, N/A*
Most Recent Agency Rating:	July 2019
Pre-Approved for Intercept?	Yes
Pre-Approval Amount:	$593,512,050

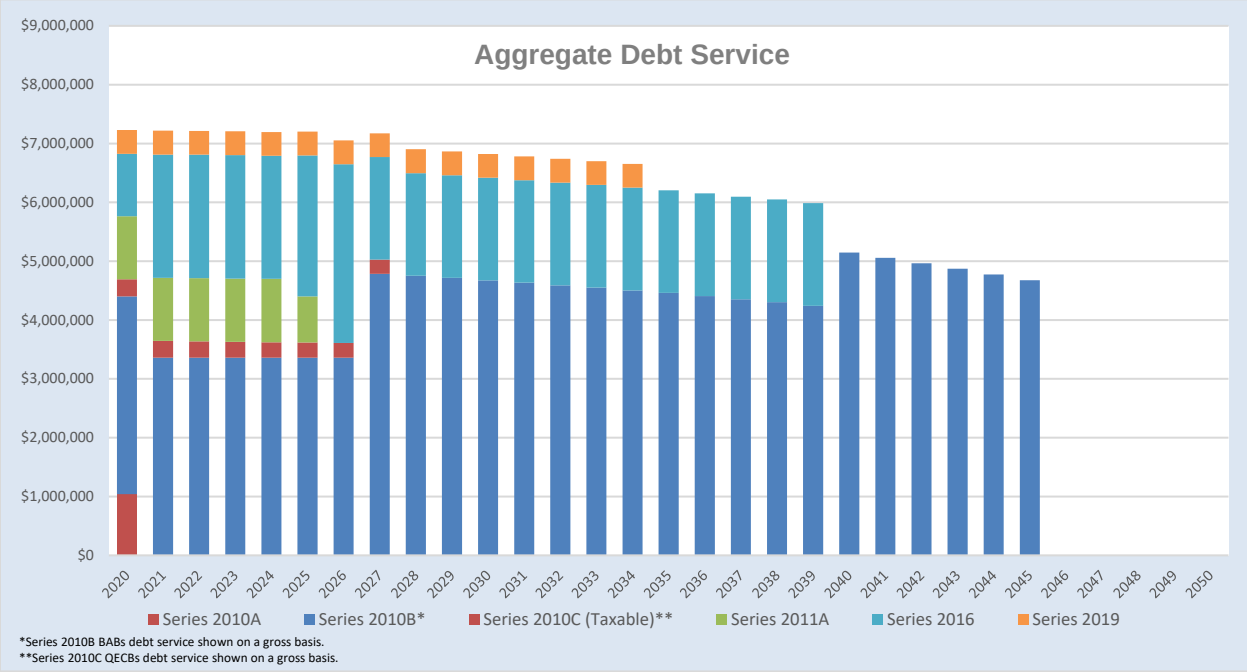


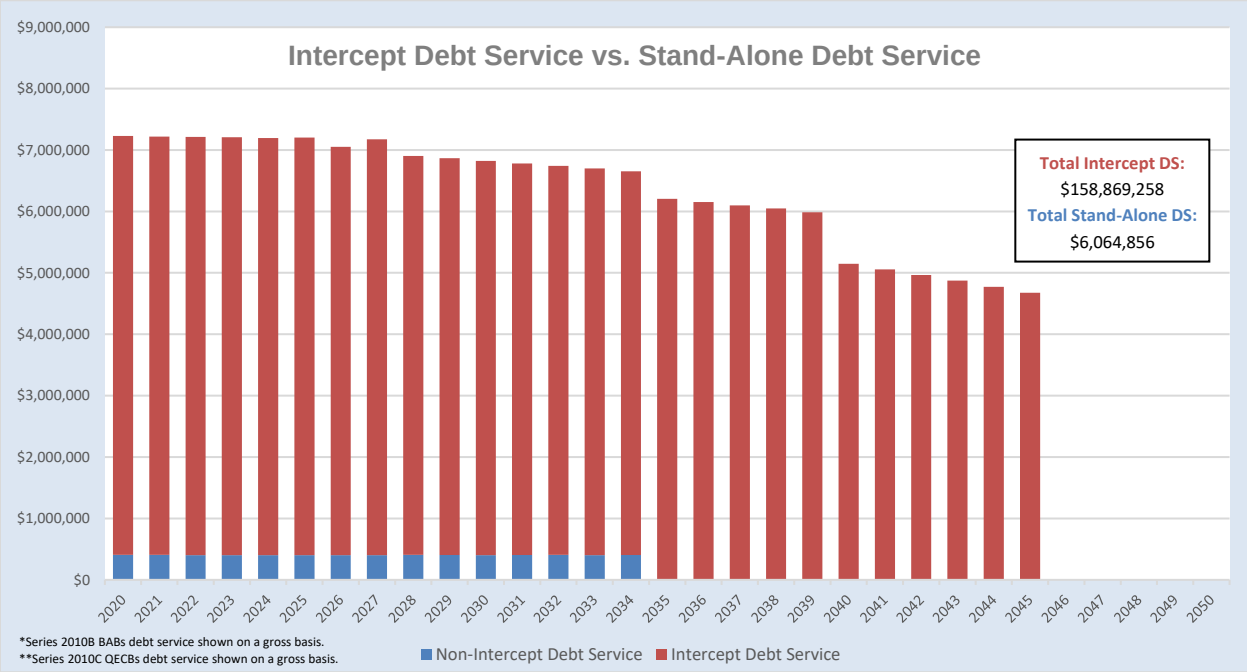


**Ratings are displayed in order of Moody's, S&P, and Fitch*

Western Colorado University

Location:	Gunnison
Agency Ratings:	Baa1, N/A, N/A*
State Intercept Enhanced Ratings:	Aa2, N/A, N/A*
Most Recent Agency Rating:	March 2019
Pre-Approved for Intercept?	No
Pre-Approval Amount:	$3,393,252**





**Ratings are displayed in order of Moody's, S&P, and Fitch*

**Pre-approved amount if the University were to receive a rating in the "A" category.

Appendix: Credit Reports

MOODY'S
INVESTORS SERVICE

Rating Action: Moody's assigns A3 to Adams State University, CO's Series 2019A&B, and Aa2 enhanced to 2019A; underlying outlook negative

04 Apr 2019

New York, April 04, 2019 -- Moody's Investors Service has assigned an A3 underlying and Aa2 enhanced rating to Adams State University, CO's proposed Institutional Enterprise Revenue Refunding Bonds, Series 2019A and an A3 underlying rating to the proposed Institutional Enterprise Revenue Refunding Bonds, Series 2019B bonds. The total par amount of the proposed bonds is $32 million with a final maturity in fiscal 2042. The bonds will be issued by the Board of Trustees of Adams State University. The outlook on the underlying rating is negative and the outlook on the enhanced rating is stable. Moody's maintains underlying and enhanced ratings on approximately $50 million of debt.

RATINGS RATIONALE

The A3 rating reflects the university's important role as a regional higher education provider for the State of Colorado (Aa1 stable issuer rating) and surrounding region, with a focus on Hispanic students, demonstrated by its designation as a Hispanic Serving Institution (HSI). The university's scale is comparatively small, but operating performance has remained resilient despite enrollment challenges due to management's sharp focus on expense reductions. Management expects modestly strengthened operating performance in fiscal years 2019 and 2020, driven by the impact of continued expense reductions. Although improving, the State of Colorado's funding for higher education has historically lagged peers.

Low overall wealth compared to peers will remain a credit negative, as the university has limited opportunities to meaningfully grow financial resources. Favorably, the university's available unrestricted liquidity affords a solid cushion to operating expenses, with 124 monthly days cash.

Fair strategic positioning has potential to strengthen if recent appointments, including a new president, result in a more stable leadership team and ability to sustainably execute on strategic initiatives. Further, recently enacted pension reform, despite modestly increasing future pension contributions, will be credit positive over time but the large unfunded pension liability and increased pension costs will be constraining credit factors for the foreseeable future.

The Aa2 enhanced rating and stable outlook are derived from the structure and mechanics of the Colorado Higher Education Enhancement Program, which is based on the State of Colorado's current rating and outlook.

RATING OUTLOOK

The negative outlook reflects uncertainty regarding the university's ability to continue to successfully balance operating performance due to enrollment challenges and limited state support. Net tuition revenue faces pressure from enrollment declines, a high-need student population, and recently enacted guaranteed tuition programs and tuition freezes.

The stable outlook for the enhanced rating is based on the state's current stable long-term outlook.

FACTORS THAT COULD LEAD TO AN UPGRADE

- Significant strengthening of student demand, reflected in higher enrollment and growing net tuition revenue

- Material increase in total cash and investments

- Substantially stronger operating support from the State of Colorado

- For the enhanced rating, upgrade of the State of Colorado rating

FACTORS THAT COULD LEAD TO A DOWNGRADE

- Inability to maintain operating cash flow margins at or above 12-14%

- Material enrollment declines further pressuring net tuition revenue

- Reduction in operating support from the State of Colorado

- Material increase in debt given already comparatively high leverage inclusive of unfunded pension liability

- For the enhanced rating, deterioration in credit quality of the State of Colorado rating

LEGAL SECURITY

Outstanding bonds are secured by pledged revenues, which include net revenues (gross revenue less maintenance and operation expenses) from facilities, including substantially all auxiliary facilities. The pledge also includes 10% of the university's tuition revenues as long as it maintains enterprise status. The bonds are further secured by a pledge of a portion of student fees. The university reported debt service coverage of 2.0x in fiscal 2018.

USE OF PROCEEDS

Proceeds from the Series 2019A and Series 2019B bonds will go towards refunding outstanding Series 2009B and Series 2009C bonds and pay costs of issuance.

PROFILE

Adams State University is a small regional public university located in Alamosa, Colorado, serving students of the San Luis Valley and designated as a Hispanic Serving Institution. The university was founded in 1921 as a normal school and has grown to serve a mix of undergraduate, graduate and distance learning programs. In fiscal 2018, the Adams State recorded operating revenue of $54 million and served a fall FTE enrollment of 3,018 students.

METHODOLOGY

The principal methodology used in the underlying ratings was Higher Education published in December 2017. The principal methodology used in the enhanced rating was State Aid Intercept Programs and Financings published in December 2017. Please see the Rating Methodologies page on www.moodys.com for a copy of these methodologies.

REGULATORY DISCLOSURES

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MOODY'S
INVESTORS SERVICE

Rating Action: Moody's assigns Aa3 rating to Colorado Community College System, CO's Series 2019A refunding bonds; outlook is stable

22 Aug 2019

New York, August 22, 2019 -- Moody's Investors Service has assigned an Aa3 underlying rating to Colorado Community College System's (CCCS) proposed $25 million Systemwide Revenue Refunding Bonds, Series 2019A to be issued by the Colorado State Board for Community Colleges and Occupational Education. We maintain Aa3 underlying ratings on approximately $122 million of outstanding debt and Aa2 enhanced ratings on approximately $37 million of that debt. The outlook is stable.

RATINGS RATIONALE

Colorado Community College System's Aa3 rating is supported by its very large scope of operations (fiscal 2018 operating revenue totaled $643 million, as calculated by Moody's) and importance to the State of Colorado (Aa1 stable) as an education provider with large geographic reach, delivered by its 13 colleges throughout the state. Operating cash flow margins remain sound, but have softened recently due to strategic investments in programs. Fiscal 2019 and fiscal 2020 projections point towards improved operating performance, stemming from increased state funding and more modest expense increases. Unlike many other community colleges, CCCS has sizeable cash and investments, as well as solid liquid reserves, supporting fairly low direct debt financial leverage. A sizeable pension liability remains a credit challenge with total adjusted debt to operating revenue of 3.5x in fiscal 2018. Favorably, recent pension reforms are expected to bring down the liability materially. Other credit factors considered include enrollment pressures stemming from a strong economic cycle and a heavy reliance on student charges to fund operations.

RATING OUTLOOK

The stable outlook on the underlying rating reflects expectations of improved operating performance in fiscal 2019 and fiscal 2020 driven by improved state funding and more modest expense increases. It also incorporates expectations of no new debt in the near-term and no material spend down of reserves.

The stable outlook for the enhanced rating is based on the state's current stable long-term outlook.

FACTORS THAT COULD LEAD TO AN UPGRADE

- Sustained improvement in operating performance

- Improved student market position with consistent net tuition revenue growth

- Substantial increase in cash and investments relative to debt and operations

- For the enhanced rating, upgrade of the Colorado Higher Education Enhancement Program rating

FACTORS THAT COULD LEAD TO A DOWNGRADE

- Further deterioration in operating cash flows resulting in weakened debt service coverage

- Material increase in leverage or further reduction of liquidity

- For the enhanced rating, downgrade of the Colorado Higher Education Enhancement Program rating

LEGAL SECURITY

Outstanding bonds, including the proposed Series 2019A bonds, are secured by net revenues, which include gross revenues less operations and maintenance expenses. Net revenues totaled $29.2 million in fiscal 2018 and include 10% of tuition revenues, revenues derived from facilities construction fees, special fees (assessed to students with respect to any facility) and any other fee assessed to employees or other persons for use of any facility, all mandatory student and faculty services fees, federal direct payments and any other incomes, and any fees and revenues that the board may determine to include in gross revenues. Net revenues provided

1.27x maximum annual debt service coverage in fiscal 2018.

USE OF PROCEEDS

Proceeds from the Series 2019A bonds will be used to refund outstanding Series 2010D bonds and pay cost of issuance.

PROFILE

The Colorado Community College System is the largest higher education provider in the State of Colorado serving over 77,000 full-time equivalent students in fall 2018 and recording over $643 million in operating revenue for fiscal 2018, as calculated by Moody's. The system offers a full range of educational options towards its goal of educating the regional population. The system consists of 13 colleges throughout the State of Colorado.

METHODOLOGY

The principal methodology used in this rating was Community College Revenue-Backed Debt published in June 2018. Please see the Rating Methodologies page on www.moodys.com for a copy of this methodology.

REGULATORY DISCLOSURES

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MOODY'S
INVESTORS SERVICE

Rating Action: Moody's assigns A2 underlying rating and Aa2 enhanced rating on Colorado Mesa University's Series 2019C revenue bonds; outlook stable

03 Sep 2019

New York, September 03, 2019 -- Moody's Investors Service has assigned an A2 underlying and a Aa2 enhanced rating to Colorado Mesa University's (CMU) proposed up to $50 million Enterprise Revenue Refunding Bonds, Taxable Series 2019C to be issued through the Board of Trustees for Colorado Mesa University. The enhanced rating is based on expectations that the State Treasurer will approve the intercept backing. We maintain the university's A2 underlying and Aa2 enhanced ratings on previously rated debt. The outlooks on the underlying and enhanced ratings are stable.

RATINGS RATIONALE

The Aa2 enhanced rating and stable outlook are derived from the structure and mechanics of the Colorado Higher Education Enhancement Program, which is based on the State of Colorado's current rating and outlook.

CMU's A2 underlying rating reflects its very good strategic positioning and importance as a provider of higher education in the western portion of the State of Colorado. The university has consistently produced very strong operating cash flow margins, averaging 22% over the past five years, with expectations of continued healthy operations. CMU went through a rapid growth phase over the past decade and invested heavily in campus facilities, averaging approximately $30 million of capital spending annually, resulting in low deferred maintenance and average age of plant. Management's preliminary guidance for fall 2019 enrollment shows the number of student continuing to edge upward. The rating also benefits from sound unrestricted liquidity. Offsetting challenges include a heavy reliance on tuition and fees to fund operations (over 80%) and limited, albeit improving, operating support from the state. The university's debt affordability is sound, but financial leverage is elevated compared to A2-rated peers. Favorably, CMU's debt amortizes more rapidly than the useful life of the improvements financed over the last decade. Additional credit considerations include increasing competition for students and an outsized pension liability, though the liability is expected to decline for fiscal 2019 due to recent pension reforms.

RATING OUTLOOK

The stable outlook on the underlying rating reflects expectations of continued strong operating cash flow margins, modest net tuition revenue growth, and limited use of financial reserves for capital spending.

The stable outlook for the enhanced rating is based on the state's current stable long-term outlook.

FACTORS THAT COULD LEAD TO AN UPGRADE

- Improvement in operating reserves with little to no additional debt leading to sustained spendable cash and investments to debt of over 0.5x

- Sustained improvement in operating funding from the Aa1-rated State of Colorado resulting in improved revenue diversity

- For the enhanced rating, upgrade of the Colorado Higher Education Enhancement Program rating

FACTORS THAT COULD LEAD TO A DOWNGRADE

- Weakening of operating performance leading to deterioration in debt service coverage or significant contraction of financial resources

- Material debt issuance resulting in sustained debt to revenue of greater than 2x

- Softening of student demand evidenced by continued decline in matriculation or significant deterioration of retention rate

- For the enhanced rating, downgrade of the Colorado Higher Education Enhancement Program rating

LEGAL SECURITY

CMU's bonds, including the expected Series 2019C bonds, are payable from net system revenues, which include net revenues of the auxiliary facility system (including housing, food and beverage sales and services, parking facilities, recreation center, bookstore, indirect cost recovery, Math and Science Center payments, hotel revenues) as well as mandatory student auxiliary fees. The pledge also includes 10% of the Tuition Revenues received by the university, all revenues derived from Facility Construction Fees, all earnings on all funds and accounts created under various Bond Resolutions and other fees and revenues that the Board determines. All of the university's outstanding bonds are on parity.

The majority of CMU's bonds, including the expected Series 2019C bonds, are secured by the state intercept program. Colorado's higher education intercept program is categorized as an unlimited advance. Should the university fail to provide sufficient funds for debt service, the trustee is required to notify the state treasurer on the business day immediately prior to the debt service payment date. The treasurer is required to remit funds to the trustee in immediately available funds of the state. The treasurer recovers the debt service payment from the university's fee-for-service funds, as well as from unpledged tuition revenue.

USE OF PROCEEDS

Proceeds from the Series 2019C bonds will go towards refunding various outstanding bonds and pay cost of issuance.

PROFILE

Colorado Mesa University is a regional public university, serving as an important education provider in western Colorado, further evidenced by its unique funding support from the Cities of Grand Junction and Montrose, and Mesa County. In addition to its undergraduate and graduate programs, the university owns and operates a community college. Annual operating revenue of the university was over $126 million in fiscal 2018 and full-time equivalent (FTE) students totaled 7,653 in fall 2019

METHODOLOGY

The principal methodology used in the underlying rating was Higher Education published in May 2019. The principal methodology used in the enhanced rating was State Aid Intercept Programs and Financings published in December 2017. Please see the Rating Methodologies page on www.moodys.com for a copy of these methodologies.

REGULATORY DISCLOSURES

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Jared Brewster

MOODY'S
INVESTORS SERVICE

Rating Action: Moody's assigns A1 to Colorado School of Mines' (CO) Series 2019A&B; outlook stable

29 Aug 2019

New York, August 29, 2019 -- Moody's Investors Service has assigned an A1 underlying rating to the Colorado School of Mines (Mines) planned approximately $10 million Institutional Enterprise Revenue Refunding Bonds, Series 2019A (fixed rate, maturing in 2040) and $45 million Institutional Enterprise Revenue Refunding Bonds, Taxable Series 2019B (fixed rate, maturing in 2048). The Series 2019A and 2019B bonds will be issued by the Board of Trustees of the Colorado School of Mines. Concurrently we affirmed the A1 underlying ratings on $267 million of outstanding parity revenue bonds and the Aa2 enhanced ratings on $118 million of outstanding revenue bonds qualified for the state intercept program. The outlook on the underlying rating is stable. The outlook for the enhanced rating is stable, reflecting the programmatic rating outlook which currently mirrors the outlook of the State of Colorado.

RATINGS RATIONALE

The assignment of the A1 underlying rating reflects Mines' very good strategic positioning based on its established niche in earth sciences, energy and the environment, drawing steady increases in enrollment, net tuition revenue growth and substantial research activity. In addition, Mines' solid wealth and liquidity levels relative to rated peers, as well as historically strong donor support are favorable credit factors.

Offsetting challenges include the school's comparatively high leverage, weakening operating performance exacerbated by flat in-state undergraduate pricing for fiscal 2020, and historically limited operating and capital support from State of Colorado (Aa1 stable issuer rating) relative to peers. Mines has an elevated underfunded pension liability, though state-enacted pension reforms during fiscal 2018 will decreased the magnitude of future potential expense pressure. The school continues to execute an ambitious strategic plan with multiple yet-to-be finalized funding sources, and in the interim, expenses will continue to grow.

Mines is currently planning a fiscal 2020 new issue of up to $149 million for several new facilities, including a building to be shared with the USGS (United States Geological Survey). If executed, this will substantially increase already high debt levels. The school has some ability to absorb the planned increase in leverage based on current cash flow, although pro-forma maximum annual debt service coverage would be very thin. However, Mines expects to receive new facility use revenues under a new Cooperative Agreement with the USGS that will offset a significant portion of new debt service.

The Aa2 enhanced rating incorporates the program-level Aa2 rating of the Colorado Higher Education Enhancement Program, which is notched off of the State of Colorado's Aa1 issuer rating, as well as financing-level attributes related to sufficiency of the financing structure.

RATING OUTLOOK

The stable outlook on the A1 underlying rating reflects our expectations that Mines will successfully manage the funding support risks of the multiple existing and planned fiscal 2020 projects, including strengthening cash flow to support the planned increase in leverage.

The stable outlook for the enhanced rating reflects the outlook for the programmatic level rating which currently mirrors the outlook for the State of Colorado.

FACTORS THAT COULD LEAD TO AN UPGRADE

Underlying rating

-Substantial improvement in flexible financial resources combined with a material reduction in financial leverage

-Further strengthening of brand, demonstrated by increased student demand and revenue growth

Enhanced rating

-Upgrade in the State of Colorado rating

FACTORS THAT COULD LEAD TO A DOWNGRADE

Underlying rating

-Inability to strengthen operating cash flow to improve coverage of maximum annual debt service

-Any increase in leverage beyond the planned 2020 borrowing absent offsetting revenue, cash flow, or reserve growth

-Reduction in liquidity given significantly constrained financial flexibility due to degree of leverage

Enhanced rating

-Deterioration in credit quality of the State of Colorado rating or observation that the program does not function as contemplated

LEGAL SECURITY

The planned series 2019A and 2019B bonds, together with parity outstanding revenue bonds, are secured by net revenues calculated as the prior bond net pledged revenues less debt service, plus certain academic facility fees, indirect cost recoveries related to research contracts and grants received by the school and performed within the school's facilities, federal interest subsidies, and certain gifts, as well as 10% of net tuition revenue. The fiscal 2018 net pledged revenues of $47.8 million covered outstanding debt service, inclusive of prior obligations (Series 1999 bonds) debt service, by 2.56x.

The Series 1999 auxiliary facility bonds (prior bonds) have a superior lien on net pledged revenues of certain facilities and student fees (student center and recreation center). Net pledged revenues for the prior bonds totaled $15.9 million in fiscal 2018, providing 17.4x coverage.

The Series 2012A institutional enterprise revenue bonds (not rated) are subordinate obligations.

USE OF PROCEEDS

Proceeds of the Series 2019A and 2019B bonds will be used to refund all or portions of the Series 2010B, 2012B, 2016, 2017A and 2017B bonds per market conditions and pay costs of issuance.

PROFILE

The Colorado School of Mines, located west of Denver in Golden, was originally established in 1874. Mines offers undergraduate and graduate degrees, including doctoral, and has been dedicated to education in mineral engineering and earth sciences. In fiscal year 2018, Mines recorded $269 million in operating revenue and in fall 2018 served a full-time equivalent enrollment (FTE) of 5,961 students.

METHODOLOGY

The principal methodology used in the underlying ratings was Higher Education published in May 2019. The principal methodology used in the enhanced ratings was State Aid Intercept Programs and Financings published in December 2017. Please see the Rating Methodologies page on www.moodys.com for a copy of these methodologies.

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S&P Global
Ratings

RatingsDirect®

Colorado School of Mines Board of Trustees; Auxiliary - System; Public Coll/Univ - Unlimited Student Fees; School State Program

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Colorado School of Mines Board of Trustees; Auxiliary - System; Public Coll/Univ - Unlimited Student Fees; School State Program

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US$44.445 mil instl enterprise rev rfdg bnds ser 2019B dtd 10/16/2019 due 12/01/2049		
Long Term Rating	A+/Negative	New
US$10.43 mil inst enterprise rev rfdg bnds ser 2019A dtd 10/16/2019 due 12/01/2052		
Long Term Rating	A+/Negative	New
Colorado Sch of Mines Brd of Trustees aux fac ent rev bnds series 1999		
Unenhanced Rating	A+(SPUR)/Negative	Affirmed

Rationale

S&P Global Ratings assigned its 'A+' rating to the Colorado School of Mines Board of Trustees' (Mines) series 2019A and 2019B institutional enterprise revenue refunding bonds. In addition, S&P Global Ratings affirmed its 'A+' rating on the university's outstanding rated institutional enterprise revenue debt. The outlook is negative.

The negative outlook reflects our opinion of the university's significant debt plans, for a facility that would support a strategic collaboration between Mines and the U.S. Geological Survey (USGS). While we have some clarity regarding the planned size of the potential issuance, there remains some uncertainty regarding the amount of lease payments from USGS, as these amounts have not been finalized. Mines' enterprise profile remains very strong and the potential issuance, potentially in early 2020, will likely result in balance sheet weakening and an elevated maximum annual debt service burden (MADS). We will determine at the time of issuance whether the university's enterprise strength is sufficient to offset the additional debt in light of other credit factors, including possible supporting lease payments, the pro-forma balance sheet position, and additional operating and enrollment information.

In our analysis, pro forma debt ratios include the potential for an additional $149 million (par) issuance as well as an anticipated $44 million liability related to a capital lease for a residence facility that will come online in fiscal 2020, but is not yet reflected in fiscal 2018's audit, which is the most recent audit available.

We assess Mines' enterprise profile as very strong, with low industry risk, excellent selectivity, steady growth in full-time enrollment, and sound governance and management. We assess the school's financial profile as strong, with solid financial management policies but softening financial performance, and a very high pro forma MADS burden and below average available resources relative to pro forma debt, as well as long-term contingent liabilities related to pension obligations. Mines has also consistently received stable operating support from the state of Colorado and robust research funding from federal grants. Combined, we believe these credit factors lead to an indicative and final stand-alone credit profile of 'a+' and an 'A+' long-term rating.

Factors supporting the rating include our view of Mines':

- Rising enrollment, excellent student quality, and solid academic demand niche in engineering and science;
- Good revenue diversity and flexibility; and
- Good management team that is forward-looking and maintains robust financial policies and practices.

Offsetting credit factors include:

- Mines' very high pro forma MADS burden of approximately 8% of fiscal 2018 adjusted operating expenses, if potential USGS lease payments are included to offset debt service payments (9.9% if excluded);
- Below-average available resource ratios relative to debt on a pro forma basis;
- Continued capital needs; and
- Softening full accrual operating performance in recent years, which is expected to continue.

Proceeds from the series 2019A ($10.43 million) and 2019B ($44.45 million) institutional enterprise revenue refunding bonds are being issued to advance refund a portion of the university's series 2010B, 2012B, 2016, and 2017A/B bonds for interest rate savings and pay for costs of issuance.

The university anticipates issuing approximately $149 million (par) in early 2020 as new money to fund its new Subsurface Frontiers Building and related capital projects. The Subsurface Frontiers Building--a key strategic initiative for the university--is expected to be an 180,000-square foot building that will be partly occupied by the United States Geological Survey (USGS) with shared research space that Mines believes will enhance recruiting of leading researchers, students, and research sponsors. Construction of the building is expected to begin in the winter of 2020, with completion anticipated for spring 2022. Mines anticipates that the USGS will pay lease payments for use of the space to offset a significant portion of new debt service, but those amounts have not been finalized. We will review the details of the new lease agreement when it becomes available. We note that the university has a long-standing relationship with USGS as they have collaborated with and served as landlord for the USGS National Earthquake Information Center. The Center has been located on campus for more than 40 years, lending some historical precedent to the anticipated new lease agreement.

In 2018, Mines and USGS signed a Cooperative Agreement that outlined the development of the new building and move of about 155 USGS scientists from their existing facilities in Lakewood, CO to the Mines campus in Golden. We understand Mines and USGS anticipate signing an updated Cooperative Agreement in 2021, prior to completion of the building that will stipulate the annual amounts USGS will pay annual facility use payments and a portion of the building's operating expenses. We anticipate these facility use payments will help to offset a portion of Mines' very high MADS burden, but even when taking this potential support into account, we believe Mines other debt obligations including debt service on other long-term debt and capital lease payments will remain very high.

Total pro forma debt (inclusive of this transaction plus the present value of capital leases expected in 2021) equals approximately $480 million. Pro forma MADS equals a very high 9.9% of adjusted operating expenses, although we note this equals a lessor, but still high, 8.0% when we exclude potential lease payments of around $6.0 million from USGS. Also included in pro forma debt service is approximately $2.7 million in capital lease payments that Mines will begin paying in fiscal 2020 for an off-campus residence hall that is currently under construction by a private developer.

A senior lien on the net revenue of the auxiliary facility enterprise system, including a broad mix of revenue from various auxiliary facilities and unlimited student fees, secures approximately $10 million in prior obligations (series 1999). The prior obligation lien is closed. The school's other enterprise revenue bonds (series 2009B, 2009C, 2010B, 2011, 2012B, 2016A, 2016B, 2017A, 2017B, 2017C, and 2018A parity obligations) are secured by a subordinate lien on these net revenue. The bonds also benefit from a pledge of additional revenue, including a pledge of 10% of student tuition revenue and indirect cost recoveries that were not available to the prior obligations. We do not differentiate between the rating on the new issues and the prior obligations because of the closed prior lien and what we consider the small amount of debt outstanding, as well as the additional security pledged to the parity obligations. Both security pledges are, in our opinion, equivalent to a broad unlimited student fee. The university also has about $7 million in subordinate institutional enterprise revenue bonds, issued to finance athletic facilities, which we do not rate.

The School of Mines is located in Golden, Colo., and has 17 academic departments at the graduate and undergraduate level, with a focus on engineering and science, primarily related to the earth, energy, and the environment. The single campus encompasses 474 acres and an off-campus experimental mine. The university has been active in the previous decade, renewing and building capital infrastructure, using funding sources, including bonds, fundraising, student fees, and grants.

Outlook

The negative outlook continues to reflect our opinion of Mines' potential debt issuance and expected weakening in balance sheet ratios and debt burden. In our opinion, Mines' financial resources compared with debt will diminish upon the issuance of approximately $149 million of new money debt likely in early 2020 and the maximum annual debt service burden will increase materially. Operating margins have weakened from a few years ago, and further pressured operations combined with a significantly weaker balance sheet could lead to a lower rating. S&P Global Ratings expects that the university will maintain its strong enrollment and demand profile, and continue to produce positive cash operating results.

Downside scenario

A lower rating is possible within the two-year outlook period with a significant decrease in financial resources related to debt and financial operations that continue to deteriorate from fiscal 2018 levels.

Upside scenario

During the outlook period, we could revise the outlook back to stable depending on ultimate debt issuance details and USGS support of the project, continued improvement in enrollment and demand metrics with final fall 2019 enrollment information, and fiscal 2019 audited results; or if available resource ratios expand commensurate with the debt issuance. We would also view improvement in operations for fiscal 2019 and expected 2020 operating results positively.

Enterprise Profile

Market position and demand

In our view, the university is geographically diverse; 46% of its total full-time equivalent (FTE) students come from outside Colorado, just within the state's thresholds for proportion of nonresident-to-resident students. Therefore, the national GDP per capita anchors our assessment of Mines' economic fundamentals.

We view student demand as solid with exceptional student quality and a healthy academic niche in engineering and science. FTE enrollment has increased steadily in previous years from 5,653 in fall 2015, and to 5,961 in fall 2018. Preliminarily, management anticipates another increase in enrollment for fall 2019, driven by a larger than expected freshman class and continued growth in online graduate programs. The majority of students are undergraduate students (80%). Mines expects total enrollment to grow over the next several years, primarily from growth in online graduate programs with incremental increases in undergraduate enrollment. Given the school's specialized nature and strong demand for its programs, we anticipate Mines will be successful in meeting its enrollment projections.

Management reports that enrollment in petroleum engineering fell in recent years because of declining oil prices and softening demand in the commodities and energy markets--although freshmen enrolled in this program increased notably in fall 2018. Officials report increased demand for degrees in computer science, and biochemical and mechanical engineering, since recent freshmen classes have grown. While the acceptance rate ticked up from fall 2015-2018, selectivity remains good and student quality is exceptional with an average ACT score of 31 for incoming freshman in fall 2018. The retention rate of 92% is very good and six-year graduation rate of almost 81% is well above category medians. While census enrollment information is not yet available, management anticipates an acceptance rate around 53% in fall 2019, which we view as quite good for the rating category.

In 2016, the university completed a capital campaign, Transforming Lives. It raised well over its $350 million goal, with $452.5 million in total commitments. Among the gifts was $27 million from CoorsTek and the Coors family, along with $14.6 million from the state to help fund the CoorsTek Center for Applied Science and Engineering, a multipurpose academic and research building on campus. We believe fundraising is good, given the size of the school, with approximately $46.1 million raised in fiscal 2019 and $29 million in fiscal 2018. The Colorado School of Mines Foundation raised $25.9 million in fiscal 2017 and $28.7 million in fiscal 2018, and reports a goal of $33 million for fiscal 2019. (For more information on the foundation, see the analysis published Sept. 25, 2018, on RatingsDirect.)

Management and governance

The board of trustees has nine members. The state governor, with the consent of the state senate, appoints seven voting members who serve two staggered four-year terms. Nonvoting members include one elected student representative and one elected academic faculty member. There have been no major shifts in the board aside from regular member rotations.

The current president took office in July 2015 after the retirement of the former president. Mines recently named a new provost, who joined in June 2019. The rest of the senior management team remains stable, which we believe lends stability to the overall credit profile.

In 2018, the university launched its next strategic plan "Mines @150". This plan sets forth the imperatives for Mines as it approaches its 150th anniversary in 2024. The goal is to remain a specialized engineering and science and research university, with an emphasis on producing distinctive graduates, creating transformative and enduring value, and being

a pioneer at the frontiers of science and engineering. The strategic plan outlines the university's imperatives to success: being a top of mind and first-choice institution, expanding offerings and diversifying delivery, increasing the scale and impact of research, strengthening affinity to Mines, and embodying innovation and entrepreneurship. The university is working on quantifiable and achievable demand metrics for graduation rates, retention, and student selectivity and quality. Mines continues to generate significant research dollars, particularly from private industry, which represents about 25% of total grants. Although the budget does not incorporate a line item for depreciation, management includes expenditures for capital renewal as well as an operating reserve that has contributed to a positive record of full-accrual operating surpluses.

Financial Profile

Financial management policies

Our analysis of financial policies includes a review of the organization's financial reporting and disclosure, investment allocation and liquidity, debt management guidelines, and long-term planning, as well as a comparison of these policies with those of similar providers. The school meets standard annual disclosure requirements and provides regular financial reports to the board's finance committee on an accrual basis. The management team is forward-looking and maintains a five-year long-term budgeting model, which we consider a credit strength. A formal debt policy includes targeted median balance-sheet and capital ratios that provide guidelines for debt issuance, although not limits. The foundation manages investments, and it has its own investment policy. The financial policies assessment reflects our opinion that Mines has relatively good and proactive management practices and policies.

Financial performance

Historically, Mines has posted positive full-accrual financial operations, when adjusted for support provided by endowment spending by the foundation. However, in fiscal 2017 and fiscal 2018, operations weakened to a deficit for full-accrual operations after adjusting for non-cash pension and OPEB expenses. In fiscal 2017, based on audited results, the adjusted operating margin weakened to negative 1.0%, given increased hiring costs and depreciation expenses. In fiscal 2018, adjusted operations were slightly weaker, at a negative 2.3% margin. Management reports that on a non-GAAP basis, fiscal 2019 projections reflect slightly softer results compared to fiscal 2018. Though early in the fiscal year, the fiscal 2020 budget anticipates results similar to fiscal 2019.

Management does not budget for estimated depreciation expense, which has averaged almost $19 million annually in the previous three years, but includes about $2 million annually for capital renewal; additionally each year, building of the operating reserve is included in the budget. We expect adjusted full accrual operations to remain close to break-even or slightly negative in the near term. While revenue is projected to increase in fiscal 2020 with increases in tuition revenue, growing research funds, and higher state funding, operating expenses are also expected to increase with salary increases, investments in programming and increased depreciation expense, which could continue to stress operating margins on a generally accepted accounting principles basis.

Mines' revenue base is relatively diverse, coming from several primary sources, including state funding, student-generated revenue, federal research grants, private grants, and auxiliary operations. Mines receives money from the state in two ways: from fee-for-service contracts with the state department of higher education, and tuition

stipends through the Colorado Opportunity Fund to qualified undergraduate students. The state legislature sets the amount of the stipend to each student for tuition at any public, nonvocational Colorado institution and some private colleges in the state. For fiscal 2019, Mines will receive $6.7 million in stipend money through the College Opportunity Fund. The fee-for-service contract specifies that the university will provide specialized engineering and graduate services to the state; fee-for-service contract revenue will account for $16.1 million in fiscal 2019 and approximately $17.5 million in fiscal 2020, which has increased over the past several years.

In fiscal 2018, Mines' total research revenue was solid at about $60 million. Historically, the university has received about 25% of research funding from private industry, with the majority of the balance coming from federal grants.

Mines was designated an institutional enterprise under Colorado law in 2004. This permits the school to pledge up to 10% of tuition revenue for enterprise and improvement revenue bonds. Its overall relationship with the state is good, according to management, and the school has secured "exemplary status" (designated by the state legislature and written into the Colorado statutes), which means, among other things, that it has tuition-raising flexibility. Mines increased resident tuition by 3% in fiscal 2019 to $16,650 million and nonresident tuition by about 3% to $36,270. Tuition for fiscal 2020 was held flat for instate students, in conjunction with a 13.3% increase in state funding, but was increased by 3% for nonresident students. Including room and board and other fees and charges of about $15,480, total costs rise to levels we consider high for a state institution but competitive with those of peer colleges and universities, many of which are private universities. Despite the higher costs, tuition discounting has remained low, although it has risen slightly during the past few years.

Available resources

Available resources for fiscal 2018, as measured by adjusted unrestricted net assets (UNA), remain consistent for the rating category, in our view. Adjusted UNAs totaled $132.1 million in fiscal 2018, or an exceptional 41.7% of operating expense. Relative to outstanding debt as of fiscal 2018, adjusted UNA equaled a fair 46% of total debt, in our opinion, and on a pro forma basis, a weaker 28%, when assuming total pro forma debt of $480 million of bonds and capital leases. Adjustments to UNA include $31.2 million from the foundation's UNA, about $465 million for Governmental Accounting Standards Board (GASB) 68 adjustments, and about $12 million for GASB 75 adjustments. In our view, the financial resource ratio to operations remains very strong, but the ratio to pro forma debt has weakened considerably.

Mines Foundation holds the bulk of the school's endowment. In our view, the endowment asset allocation is somewhat concentrated in equity, but comparable with that of peers, with 70% equities--about 18.8% in private equity and nontraditional assets, about 9.1% fixed income, and 1.3% money market. The authorized annual spending draw from the endowment is 4.25% of the rolling three-year average market value, which we consider sustainable. The endowment's net investment return was 18.2% for fiscal 2017, 7.9% for fiscal 2018, and 0.43% for fiscal 2019. Management closely tracks liquidity, liquidity needs, and capital calls and distributions, and we consider this a credit strength. As of June 30, 2019, the long-term investment pool asset market value, which largely constitutes the endowment, totaled $303.8 million, of which about 39% was available in less than six days; 49% in less than a month; and 77% in a year. We consider this fairly liquid. The investment pool assets are invested with 30 investment managers in various diversified asset classes. The foundation's investment consulting firm recommends investment management firms and meets with the foundation investment committee quarterly.

Debt and contingent liabilities

As of June 30, 2018 (the last available audit), Mines had approximately $286 million of debt outstanding, including revenue bonds and capital leases. On a pro forma basis, total debt equals about $480 million and includes the university's anticipated debt issuance in early 2020 and an anticipated capital lease liability related to a student housing project (discussed below) not yet reflected in the audit.

In June 2018, Mines entered an agreement with a private developer (Confluence Co.) to build student housing on a parcel of land adjacent to campus. The university bought the land for approximately $3 million, and will lease it to Confluence, who will own the building and lease it to Mines under a 30-year lease agreement for about $2.7 million a year. We have included this capital lease payment in our calculation of pro forma MADS. Ownership reverts to the university at the end of the lease. Mines will operate and maintain the building. Occupancy is anticipated for August 2020.

The university has one floating-to-fixed rate swap contract outstanding with Morgan Stanley Capital Services Inc. associated with the series 2018A floating rate note. The mark-to-market on the swap as of June 30, 2018, was negative $6.8 million. Interest on the bonds accrues at an index interest rate extending through February 2023.

We believe Mines has contingent liability risk exposure associated with pension obligations due to the low 56% funded ratio of the state division trust, as of Dec. 31, 2018. The SDTF is a cost-sharing multiple-employer defined benefit pension plan administered by the Public Employees' Retirement Association of Colorado (PERA). The university's required annual contribution totaled $14.8 million in fiscal 2018, or a manageable 5% of operations. However, given the potential for growth in required contributions, officials reported that, in January 2017, Mines implemented a defined contribution retirement plan for all newly hired academic and administrative faculty.

Total pension expense and OPEB expense for fiscal 2018 was $104.9 million and $22,000, respectively. We understand the state recently adopted pension reform in its 2018 legislation session, which, in our view, should be sufficient to prevent further decline of the funded ratios within the current outlook period. For more information on the plan, please see the debt and contingent liabilities section in the state report (published July 4, 2019) on RatingsDirect). For more information on Colorado SB 18-200, please see the report published May 21, 2018 on RatingsDirect.

Table 1

Colorado School of Mines Board of Trustees, Colo.: Enterprise And Financial Statistics

	--Fiscal year ended June 30--					--Medians for 'A' rated Public Colleges & Universities--
Enrollment and demand	**2019**	**2018**	**2017**	**2016**	**2015**	**2018**
Headcount	6,268	6,117	5,876	5,924	5,794	MNR
Full-time equivalent	5,961	5,818	5,824	5,809	5,529	12,854
Freshman acceptance rate (%)	49.20	55.70	45.60	37.70	36.50	74.30
Freshman matriculation rate (%)	19.30	19.20	18.10	22.70	22.20	MNR
Undergraduates as a % of total enrollment (%)	78.30	77.80	77.70	76.50	75.60	83.30
Freshman retention (%)	92.00	93.00	92.00	94.00	94.00	77.30
Graduation rates (six years) (%)	80.50	78.50	76.80	76.50	75.90	MNR
Income statement						
Adjusted operating revenue ($000s)	N.A.	309,817	290,937	283,227	268,225	MNR
Adjusted operating expense ($000s)	N.A.	317,266	293,826	275,476	257,999	MNR
Net adjusted operating income ($000s)	N.A.	(7,449)	(2,889)	7,751	10,226	MNR
Net adjusted operating margin (%)	N.A.	(2.35)	(0.98)	2.81	3.96	(1.00)
Estimated operating gain/loss before depreciation ($000s)	N.A.	12,298	15,693	25,922	27,004	MNR
Change in unrestricted net assets (UNA; $000s)	N.A.	(123,933)	(101,181)	(13,353)	(244,316)	MNR
State operating appropriations ($000s)	N.A.	18,702	18,057	17,288	14,333	MNR
State appropriations to revenue (%)	N.A.	6.00	6.20	6.10	5.30	21.00
Student dependence (%)	N.A.	61.20	61.40	59.90	60.40	52.40
Health care operations dependence (%)	N.A.	N.A.	N.A.	N.A.	N.A.	MNR
Research dependence (%)	N.A.	18.90	19.30	21.20	20.90	MNR
Endowment and investment income dependence (%)	N.A.	4.10	3.50	3.10	3.10	0.70
Debt						
Outstanding debt ($000s)	N.A.	286,170	193,543	200,799	194,032	169,922
Proposed debt ($000s)	N.A.	248,015	N.A.	N.A.	N.A.	MNR
Total pro forma debt ($000s)	N.A.	479,812	N.A.	N.A.	N.A.	MNR
Pro forma MADS	N.A.	31,253	N.A.	N.A.	N.A.	MNR
Current debt service burden (%)	N.A.	6.18	5.33	4.38	6.06	MNR
Current MADS burden (%)	N.A.	6.34	5.81	6.20	N.A.	4.50
Pro forma MADS burden (%)	N.A.	9.85	N.A.	N.A.	N.A.	MNR
Financial resource ratios						
Endowment market value ($000s)	N.A.	258,135	246,148	212,303	234,190	115,187
Related foundation market value ($000s)	N.A.	322,559	312,813	283,644	307,770	138,714
Cash and investments ($000s)	N.A.	264,026	165,675	174,207	180,083	MNR

Table 1

Colorado School of Mines Board of Trustees, Colo.: Enterprise And Financial Statistics (cont.)						
UNA ($000s)	N.A.	(377,795)	(253,862)	(152,681)	(139,328)	MNR
Adjusted UNA ($000s)	N.A.	132,140	134,942	127,548	128,571	MNR
Cash and investments to operations (%)	N.A.	83.20	56.40	63.20	69.80	46.30
Cash and investments to debt (%)	N.A.	92.30	85.60	86.80	92.80	100.60
Cash and investments to pro forma debt (%)	N.A.	55.00	N.A.	N.A.	N.A.	MNR
Adjusted UNA to operations (%)	N.A.	41.60	45.90	46.30	49.80	31.30
Adjusted UNA plus debt service reserve to debt (%)	N.A.	46.20	69.70	63.50	66.30	57.30
Adjusted UNA plus debt service reserve to pro forma debt (%)	N.A.	27.50	N.A.	N.A.	N.A.	MNR
Average age of plant (years)	N.A.	12.20	12.10	11.50	11.50	14.60
OPEB liability to total liabilities (%)	N.A.	1.30	N.A.	N.A.	N.A.	MNR

N.A.--Not available. MNR--Median not reported. MADS--Maximum annual debt service. Total adjusted operating revenue = unrestricted revenue less realized and unrealized gains/losses and financial aid. Total adjusted operating expense = unrestricted expense

Ratings Detail (As Of September 11, 2019)		
Colorado Sch of Mines Brd of Trustees institutional enterprise rev bnds		
Long Term Rating	A+/Negative	Affirmed
Colorado Sch of Mines Brd of Trustees institutional enterprise rev rfdg bnds		
Long Term Rating	AA/Stable	Current
Underlying Rating for Credit Program	A+/Negative	Affirmed
Colorado Sch of Mines Brd of Trustees inst enterprise rev bnds ser 2017B dtd 11/16/2017 due 12/01/2047		
Long Term Rating	A+/Negative	Affirmed
Enterprise rfdg & Improv rev bnds ser 2009A		
Underlying Rating for Credit Program	A+/Negative	Affirmed
Long Term Rating	AA/Stable	Current
Enterprise rfdg & Improv rev bnds ser 2009B-C-D		
Underlying Rating for Credit Program	A+/Negative	Affirmed
Long Term Rating	AA/Stable	Current
Series 2012B		
Underlying Rating for Credit Program	A+/Negative	Affirmed
Long Term Rating	AA/Stable	Current

Many issues are enhanced by bond insurance.

MOODY'S
INVESTORS SERVICE

Rating Action: Moody's assigns Aa3 underlying and Aa2 enhanced ratings to Colorado State University System's (CO) Series 2019A&B, Aa3 underlying to 2019C; outlook stable

11 Sep 2019

New York, September 11, 2019 -- Moody's Investors Service has assigned Aa3 underlying ratings to Colorado State University System's (CO) planned approximately $32 million of System Enterprise Revenue and Refunding Bonds, Series 2019A (fixed rate, maturing 2049), $104 million System Enterprise Revenue Refunding Bonds, Taxable Series 2019B (fixed rate, maturing 2049) and $13 million System Enterprise Revenue Refunding Bonds, Taxable Series 2019C (fixed rate, maturing 2041) to be issued by the Board of Governors of the Colorado State University System. We have also assigned Aa2 enhanced ratings to only the Series 2019A and 2019B bonds. We maintain underlying Aa3 ratings on approximately $1.0 billion of outstanding parity system enterprise revenue bonds, enhanced Aa2 ratings on approximately $758 million of bonds qualified by the state intercept program, and a P-1 rating on a Commercial Paper (CP) program authorized at $50 million based on the system's internal liquidity. The outlook on the underlying ratings is stable. The outlook for the enhanced ratings is stable, reflecting the programmatic rating outlook which currently mirrors the outlook of the State of Colorado.

RATINGS RATIONALE

The assignment of the Aa3 underlying rating reflects the system's excellent strategic positioning based on its role as the land grant institution for the State of Colorado (Aa1 stable issuer rating), with a sizeable $1.4 billion scope of operations and significant research enterprise. The system's growing national brand is reflected in its steady student demand, strong growth of net tuition revenue, and robust donor support. Strong fiscal stewardship and strategic oversight is also demonstrated by a substantial $1 billion in capital investment over the fiscal 2014-18 period concurrent with a 53% increase in total cash and investments to $1.1 billion. Offsetting challenges include high debt relative to financial reserves and operations and historically limited state operating and capital support relative to highly rated universities. The system also has an elevated underfunded pension liability, though state-enacted pension reforms during fiscal 2018 will decrease the magnitude of future potential expense pressure.

The Aa2 enhanced rating incorporates the program-level Aa2 rating of the Colorado Higher Education Enhancement Program, which is notched off of the State of Colorado's Aa1 issuer rating, as well as financing-level attributes related to sufficiency of the financing structure.

RATING OUTLOOK

The stable outlook on the system's Aa3 underlying ratings reflects our expectation of continued stable student demand, ongoing operational adjustments and strategic prioritizations to maintain balanced operating performance and solid debt service coverage.

The stable outlook for the enhanced ratings reflects the outlook for the programmatic level rating which currently mirrors the outlook for the State of Colorado.

FACTORS THAT COULD LEAD TO AN UPGRADE

Underlying rating

-Sizeable improvement in spendable cash and investments relative to debt

-Sustained strong cash flow margins

-Limited debt increases

Enhanced rating

-Upgrade in the State of Colorado rating

FACTORS THAT COULD LEAD TO A DOWNGRADE

Underlying rating

-Sustained deterioration of cash flow margins and debt service coverage

-Erosion of liquidity

-Significant increase in leverage beyond what is currently planned

Enhanced rating

-Deterioration in credit quality of the State of Colorado rating or observation that the program does not function as contemplated

LEGAL SECURITY

The planned Series 2019A, 2019B and 2019C bonds, together with parity outstanding system enterprise revenue bonds and the parity rated CP program are secured by a pledge of revenues at both CSU and CSU-Pueblo (Global Campus revenues are not pledged). These include: net revenues of certain auxiliary enterprise facilities (housing, dining, parking, and certain student recreational facilities), certain mandatory student fees collected at both campuses, indirect cost recoveries (overhead received for research grants and contracts), as well as 10% of net tuition revenue. In addition, the federal subsidies expected to be received in connection with the Series 2010B and 2010C bonds are pledged to the payment of the revenue bonds. The revenue pledge is net of operating and maintenance expenses of auxiliary facilities.

The fiscal 2018 net pledged revenue was $172 million, which is a limited 12% of the system's operating revenues. Maximum annual debt service coverage of the $77 million payment due in 2021 is 2.2x. Pledged revenue coverage is narrower compared to debt of rated peers due to the limited 10% pledge of tuition monies.

Certain of the system's bonds, including the planned Series 2019A and 2019B bonds, are further secured by the state intercept. Colorado's higher education intercept program is categorized as an unlimited advance. Should the system fail to provide sufficient funds for debt service, the trustee is required to notify the state treasurer on the business day immediately prior to the debt service payment date. The treasurer is required to remit funds to the trustee in immediately available funds of the state. The treasurer recovers the debt service payment from the system's fee-for-service funds, as well as from unpledged tuition revenue. Please see our report dated October 22, 2008 for more detail on this program rating.

The intercept program currently covers the Series 2009A, 2010A 2010B, 2010C, 2012A, 2012B, 2013A, 2013B, 2013E, 2015C, 2015E, 2017A, 2017C, 2017E and 2018A bonds.

USE OF PROCEEDS

Proceeds of the Series 2019A, 2019B and 2019C bonds are expected to be used for identified capital projects at the Fort Collins campus; refund all or portions of the Series 2015A, 2015E-1, 2015E-2, 2017C and 2018A bonds (based on market conditions); and pay costs of issuance.

PROFILE

The Colorado State University System includes the system administration, which oversees three component institutions: the state's land grant institution, Colorado State University in Fort Collins; Colorado State University-Pueblo; and Colorado State University-Global Campus, a fully online public university. CSU also manages extension offices in 60 of the 64 counties in Colorado. In fiscal 2018, the system's operating revenue totaled $1.4 billion and in fall 2018 served a full-time equivalent (FTE) of 39,644 students.

METHODOLOGY

The principal methodology used in the underlying ratings was Higher Education published in May 2019. The principal methodology used in the enhanced ratings was State Aid Intercept Programs and Financings published in December 2017. Please see the Rating Methodologies page on www.moodys.com for a copy of these methodologies.

REGULATORY DISCLOSURES

For ratings issued on a program, series, category/class of debt or security this announcement provides certain regulatory disclosures in relation to each rating of a subsequently issued bond or note of the same series, category/class of debt, security or pursuant to a program for which the ratings are derived exclusively from existing ratings in accordance with Moody's rating practices. For ratings issued on a support provider, this announcement provides certain regulatory disclosures in relation to the credit rating action on the support provider and in relation to each particular credit rating action for securities that derive their credit ratings from the support provider's credit rating. For provisional ratings, this announcement provides certain regulatory disclosures in relation to the provisional rating assigned, and in relation to a definitive rating that may be assigned subsequent to the final issuance of the debt, in each case where the transaction structure and terms have not changed prior to the assignment of the definitive rating in a manner that would have affected the rating. For further information please see the ratings tab on the issuer/entity page for the respective issuer on www.moodys.com.

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MOODY'S
INVESTORS SERVICE

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S&P Global
Ratings

RatingsDirect®

Colorado State University System Board of Governors; CP; Public Coll/Univ - Unlimited Student Fees; School State Program

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Colorado State University System Board of Governors; CP; Public Coll/Univ - Unlimited Student Fees; School State Program

Credit Profile		
US$98.365 mil sys enterprise rev rfdg bnds (taxable intercept) ser 2019B dtd 10/01/2019 due 03/01/2049		
Long Term Rating	A+/Stable	New
US$32.175 mil sys enterprise rev & rfdg bnds (exempt intercept) ser 2019A dtd 10/01/2019 due 03/01/2049		
Long Term Rating	A+/Stable	New
US$13.025 mil sys enterprise rev rfdg bnds (taxable non-intercept) ser 2019C dtd 10/01/2019 due 03/01/2049		
Long Term Rating	A+/Stable	New
US$5.28 mil sys enterprise rev bnds (taxable intercept) ser 2019B dtd 10/01/2019 due 03/01/2049		
Long Term Rating	A+/Stable	New
Colorado St Univ Sys Brd of Governors PCU_USF		
Long Term Rating	A+/Stable	Affirmed

Rationale

S&P Global Ratings assigned its 'A+' long-term rating to the Colorado State University System Board of Governors' (CSU, or the system) series 2019A (tax exempt), series 2019B (taxable), and series 2019C (taxable) system enterprise revenue and refunding bonds. At the same time, S&P Global Ratings affirmed its 'A+' long-term rating and underlying rating on CSU's enterprise revenue bonds outstanding. S&P Global Ratings also affirmed its 'A-1' short term rating on the CSU's commercial paper (CP) notes, series A (tax exempt) and series B (taxable). The outlook is stable.

In addition, S&P Global Ratings affirmed its 'AA' long-term rating on certain series of system enterprise revenue bonds based on their participation in the Colorado Higher Education State Aid Intercept Program.

We assess the system's enterprise profile as very strong, reflecting steady enrollment growth and solid demand metrics as well as the system's solid research presence. We assess CSU's financial profile as strong, reflecting positive financial operations on an adjusted full-accrual basis, offset by an above-average debt burden and low financial resource ratios relative to debt for the rating, as well as measurable long-term contingent liabilities related to pension obligations. Combined, these factors lead to an indicative credit rating of 'a+' and a long-term bond rating of 'A+'.

The 'A+' long-term rating reflects our view of CSU's:

- Comprehensive program and degree offerings on its three campuses and its status as the land grant institution in Colorado;
- Broad pledge of net revenue, including tuition, fees, research, indirect cost recovery, and auxiliary revenue;
- Increasing enrollment, with a combined 33,273 headcount as of fall 2018; and
- Positive adjusted, full-accrual financial operations in both fiscal years 2017 and 2018, with expectation for positive

results again in fiscal 2019.

Partially offsetting the above strengths, in our view, are the system's:

- Significant increase in debt during the past few years as the system has invested in its main campus, with an above-average, but manageable, pro forma maximum annual debt service burden of 5.5% of fiscal 2018 operating expenses, and additional capital plans over the near term;
- Low financial resources relative to debt for the rating, with adjusted unrestricted net assets (UNA) equal to 36% of pro forma debt; and
- Relatively small, but increasing, endowment for the rating.

The series 2019A (tax-exempt) revenue bonds and series B (taxable) revenue bonds will be used to finance or refinance various capital projects. The series 2019B (taxable) revenue refunding bonds will be used to advance refund a portion of CSU's series 2015E-1 bonds, a portion of the 2015E-2 (Green Bonds), a portion of the series 2017C bonds, and a portion of the series 2018A enterprise revenue bonds. The series 2019B bonds qualify for the State Intercept program. The series 2019C bonds (taxable) will be used to advance refund a portion of the series 2015A bonds. Total par is approximately $32.175 million for the series 2019A bonds, $98.365 for the series 2019B revenue refunding bonds, $5.28 million for the series 2019B revenue bonds, and $13.025 million for the 2019C revenue refunding bonds. Total pro forma debt is approximately $1.4 billion including capitalized leases and an expected $180 million in potential new debt over the next two years for additional capital projects. The pro forma debt burden is above average but manageable at 5.5% of fiscal 2018 adjusted operating expenses. CSU will amortize approximately $61 million in principal payments over the next two years, which is not reflected in pro forma debt. Net revenue from CSU's Fort Collins and CSU-Pueblo campuses-- which includes a variety of student fees, indirect cost recovery, and 10% of tuition--secures the system enterprise revenue bonds. Therefore, the security, in our view, is equivalent to an unlimited student fee pledge. CSU-Global revenue is not pledged. Net revenue was approximately $172 in fiscal 2018, a 5.6% increase compared with $163 million in fiscal 2017. In addition, in fiscal 2018, stadium revenue of approximately $10 million was also available for debt service.

The 'A-1' CP rating reflects our view of the system's overall credit quality, including its authorized $50 million CP program (of which $49.2 million was outstand as of August 2019). The CP program is used to fund various capital projects, and a portion of the new-money issuance associated with the series 2019 transaction will be applied toward paying down the CP. The CP rating reflects CSU's ability to cover any failed rollovers on its CP from unrestricted liquid funds that totaled over $105 million as of July 31, 2019, as the CP has no other dedicated credit or liquidity support. These assets provide ample coverage for the maximum authorized $50 million CP program. The system has historically held its operating portfolio invested in the Colorado State Treasury Pool, but within the past year has been transitioning management of these funds to its own System Treasury. S&P Global Ratings will monitor the sufficiency and the liquidity of assets identified for self-liquidity monthly.

The CSU system is the second largest of 10 public four-year institutions in the state. Founded in 1870, the university is the state's land-grant institution and has greater than 7,000 acres of land. The system comprises two campus universities at opposite ends of the state: one in Fort Collins, with a full-time-equivalent enrollment (FTE) in fall 2018

of 27,928, and the other in Pueblo, with total FTE in fall 2018 of 4,366. The system opened a third, virtual campus in 2008 called CSU-Global; the FTE in fall 2018 was 7,615. At the Fort Collins campus, about 69% of undergraduate students are state residents, and approximately 84% are undergraduates. It is a comprehensive university and is particularly known for its veterinary medicine and infectious diseases programs.

Outlook

The stable outlook reflects our expectation that CSU will maintain its robust demand and enrollment profile and continue to produce positive full-accrual results. We also expect the system will maintain or improve its financial resource ratios.

Upside scenario

Given additional debt and capital plans over the near term, we do not anticipate a positive rating action over our two-year outlook period. However, we could take a positive rating action over time if CSU continues to improve financial operations while boosting its financial resource ratios, maintaining its enrollment profile, and limiting additional debt issuance.

Downside scenario

We could lower the ratings during our two-year outlook period if the system issues material debt without a commensurate buildup in financial resources, or if financial operations weaken significantly.

Enterprise Profile

Industry outlook

Industry risk addresses the higher education sector's overall cyclicality and competitive risk and growth by applying various stress scenarios and evaluating barriers to entry, levels and trends of profitability, substitution risk, and growth trends observed in the industry. We believe the higher education sector represents a low credit risk when compared to other industries and sectors.

Economic outlook

About 69% of total CSU students are from the state of Colorado. As a result, we anchor our assessment of CSU's economic fundamentals with the state GDP per capita.

Management and governance

A board of nine governor-appointed and six nonvoting members governs the system. Members serve four-year terms. On July 1, 2019, Joyce McConnell became CSU's 15th president. Prior to her appointment, Dr. Tony Frank held the role of president since 2008 and was appointed as CSU System chancellor in June 2015. Dr. Frank will continue as the chancellor of the CSU system on a full-time basis. We anticipate a smooth transition at the presidential level. We view senior staff as stable, with normal turnover of deans and senior staff members. In our opinion, the university follows conservative governance and financial management practices.

Market position and demand

Total combined enrollment has increased during the past few years but particularly at its main campus in Fort Collins and CSU-Global. Fort Collins' demand profile is consistent with that of peer institutions, with an acceptance rate of 83.5% for freshmen and a matriculation rate of 26% for fall 2018, which we believe demonstrate some self-selectivity among applicants and a strong academic niche. The Fort Collins campus' FTE enrollment has steadily increased the past several years, with total FTE again increasing about 1% in fall 2018 to 27,928. While the system anticipates growth will continue, it may be at a more modest rate than historically. Enrollment indicators for fall 2019 indicate another increase in overall enrollment, while the freshman class may be slightly less when compared to fall 2018's class, which was at an all-time high. CSU-Global's headcount also continues to increase.

Enrollment at the Pueblo campus continues to face challenges. In fall 2018, the campus had a total FTE of about 4,366, which is up about 3.9% from the year before, but follows a 14% decline in fall 2016. The freshmen class was smaller in fall 2018 at 702, compared with 730 in fall 2017 and 836 in fall 2016. Transfer enrollment has been variable, with the transfer class increasing to 378 in fall 2018 from 307 in fall 2017, which saw a decline from 358 in fall 2016. We anticipate it may take time to turn around enrollment at the Pueblo campus, but understand the system remains committed to supporting the campus and continues to rightsize expenses.

Fundraising for CSU-Fort Collins and CSU-Pueblo is done by their respective foundations. For the campaign ended in 2012, the system exceeded its $500 million goal--six months ahead of schedule--raising $537.3 million. Fundraising and overall donors have increased during the past few years. The system's current $1 billion campaign, called "State Your Purpose," has met its goal and is now raising funds to go "Beyond the Billion." The campaign is expected to conclude in 2020, which coincides with CSU's 150th anniversary.

In fiscal 2017, the university received the largest gift in its history. The $53.3 million gift was for the engineering college for scholarships, faculty, and research. It came from Walter Scott Jr. of Omaha, Neb., a former chairman of Colorado-based Level 3 Communications. The engineering college was renamed the Walter Scott, Jr. College of Engineering.

Financial Profile

Financial management policies

CSU has formal policies for endowment, investments, and debt. It operates according to a five-year strategic plan, and has a formal reserve liquidity policy. The university meets standard annual disclosure requirements. The financial policies assessment is neutral, reflecting our opinion that while there may be some areas of risk, CSU's overall financial policies are not likely to negatively affect its ability to pay debt service. Our analysis of financial policies includes a review of the university's financial reporting and disclosure, investment allocation and liquidity, debt profile, contingent liabilities, and legal structure, and a comparison of these policies with those of comparable institutions.

Financial operations

As with many other parts of the country, Colorado has experienced budgetary stress, which strained the state's financial support for higher education for a number of years. However, state funding has improved in recent years. In fiscal years 2017 and 2018, CSU received $134.5 million and $139.3 million, respectively, in state funding, which

includes fee for service and college opportunity funds. This number increased by over $15 million in fiscal 2019 to approximately $154.9 million. Management anticipates a healthy increase in state funding in fiscal 2020, but anticipates that increases will be more modest going forward. The system also expects to receive capital support for a couple of projects on the Fort Collins and Pueblo campuses.

The system has a history of mixed full-accrual operating performance, although cash operations have always been positive. After three consecutive years of adjusted, full-accrual deficit margins (0.9% in fiscal 2013, 1.3% in fiscal 2014, and 2.2% in fiscal 2015), the system generated an adjusted, full-accrual surplus in fiscal 2016, 2017, and 2018. ($35.2 million, a 2.7% margin, in fiscal 2016; $40.7 million, a 3.0% margin, in fiscal 2017; and $28.6 million, a 1.9% margin, in fiscal 2018). Before depreciation of about $91 million in fiscal 2018, cash operations were solidly positive at approximately $119 million. We view the system's financial performance favorably and expect full-accrual surpluses on an adjusted basis will continue. Management anticipates another surplus in fiscal 2019, though it may be a slightly softer than in fiscal 2018.

Available resources

Fiscal 2018's adjusted UNA of $501.5 million (including UNA of the foundation and an adjustment for Governmental Accounting Standards Board Statement No. 68 and 75 pension and other postemployment benefit liabilities) covered 34% of operations, which we consider sufficient for the rating, and 36% of total pro forma debt, which we consider low for the rating. Cash and investments are stronger at $584.5 million, which cover operating expenses by 40% and pro forma debt by 52%.

CSU's estimated endowment market value--held by the foundation--was about $401.6 million as of June 30, 2018. The CSU Pueblo Foundation also holds about $22 million. The university's reliance on annual support from the endowment for operations is minimal, with it contributing less than 2% of CSU's operating budget. The system's annual spending policy is 4.25% of the average balance, which we view as standard.

Debt and contingent liabilities

The system had $1.1 billion in outstanding bonds, CP, and capital leases as of fiscal year-end 2018. Total pro forma debt equals approximately $1.4 billion and includes approximately $180 million in additional debt over the near term for capital projects, including a new residence hall. We note that the board has not approved all of these plans. We anticipate this debt can be absorbed at the current rating; however, we will be able to fully factor it into CSU's credit profile once the debt structure has been finalized. Not included in pro forma debt are the system's anticipated principal payments of about $61 million over the near two fiscal years. We understand the system has other capital plans beyond our two-year outlook period, but details have not been solidified.

All long-term debt is fixed rate, with the exception of the series 2015D bonds, which were issued with a variable interest rate. However, in 2018, the university entered into a floating to fixed swap to hedge against the potential for increasing interest rates. The mark-to- market value as of June 30, 2018, was approximately $654,000. The swap agreements include provisions for collateral posting requirements, including a rating trigger if the CSU credit rating falls to 'A'.

The system holds pension liabilities on its balance sheet that pertain to its participation in the State Division Trust Fund (SDTF), a defined-benefit pension fund administered by the Public Employees' Retirement Assn. for the State of

Colorado (PERA). CSU also sponsors the optional defined-contribution plan for retirement. We believe CSU has contingent liability risk exposure associated with future pension obligations due to the low 56% funded ratio of the SDTF based on the Dec. 31, 2018, measurement date. In our opinion, the state's overall pension funded ratio is weak. The university's required annual contribution totaled $30.5 million in fiscal 2018. We understand the state recently adopted pension reform in its 2018 legislation session, which, in our view, should be sufficient to prevent further decline of the funded ratios within the current outlook period. Management continues to make 100% of its statutorily determined pension contributions.

The system also participates in the Health Care Trust Fund, which is a cost-sharing multiple–employer defined benefit other postemployment benefit (OPEB) plan administered by PERA. In 2014, CSU established its Other Post-Employment Benefits Trust, a single employer OPEB plan, for the purpose of accumulating and investing assets to fund certain postretirement medical benefits. As of fiscal year-end 2018, the trust had net assets of approximately $81.3 million. We view favorably the establishment and funding of this trust.

CSU's net pension liability and OPEB liabilities as of fiscal year-end 2018 were $1.1 billion and $50.6 million, respectively. Total pension expense and OPEB expense for fiscal 2018 were $243.8 million and $6.1 million, respectively. CSU's contributions for the defined benefit pension plan and OPEB plan in fiscal 2018 were approximately $31 million and $6.6 million, respectively. The university's defined benefit, defined contribution, and OPEB contributions equaled approximately 5.8% of adjusted operating expenses in fiscal 2018, which we view as manageable. For additional information on the plan, please see the debt and other long-term liabilities section in the state of Colorado report (published July 4, 2019, on RatingsDirect).

Colorado State University System Board of Governors

Enterprise And Financial Statistics

	--Fiscal year ended June 30--					Medians for 'A' rated public colleges & universities
	2019	**2018**	**2017**	**2016**	**2015**	**2018**
Enrollment and demand						
Headcount	33,273	32,716	32,936	31,843	31,725	MNR
Full-time equivalent	27,928	27,593	27,753	26,668	23,843	12,854
Freshman acceptance rate (%)	83.5	82.6	77.9	80.8	80.5	74.3
Freshman matriculation rate (%)	26.0	26.5	29.2	31.6	32.5	MNR
Undergraduates as a % of total enrollment (%)	78.1	77.6	78.0	76.7	70.9	83.3
Freshman retention (%)	83.0	83.0	86.1	86.6	86.0	77.3
Graduation rates (six years) (%)	71.0	68.0	67.1	67.6	66.6	MNR
Income statement						
Adjusted operating revenue ($000s)	N.A.	1,508,740	1,401,282	1,330,134	1,228,311	MNR
Adjusted operating expense ($000s)	N.A.	1,480,124	1,357,715	1,294,895	1,230,875	MNR
Net adjusted operating income ($000s)	N.A.	28,616	43,567	35,239	(2,564)	MNR

Colorado State University System Board of Governors (cont.)

Enterprise And Financial Statistics

	--Fiscal year ended June 30--					Medians for 'A' rated public colleges & universities
	2019	**2018**	**2017**	**2016**	**2015**	**2018**
Net adjusted operating margin (%)	N.A.	1.93	3.21	2.72	(0.21)	(1)
Estimated operating gain/loss before depreciation ($000s)	N.A.	119,442	133,174	130,197	86,974	MNR
Change in unrestricted net assets (UNA; $000s)	N.A.	(186,125)	(113,906)	113,279	(480,242)	MNR
State operating appropriations ($000s)	N.A.	4,568	899	2,144	2,355	MNR
State appropriations to revenue (%)	N.A.	0.3	0.1	0.2	0.2	21.0
Student dependence (%)	N.A.	58.9	59.8	59.7	59.3	52.4
Health care operations dependence (%)	N.A.	N.A.	N.A.	N.A.	N.A.	MNR
Research dependence (%)	N.A.	22.1	21.8	21.9	22.3	MNR
Endowment and investment income dependence (%)	N.A.	0.3	0.1	0.5	0.3	0.7
Debt						
Outstanding debt ($000s)	N.A.	1,135,503	1,135,765	1,117,414	982,394	169,922
Proposed debt ($000s)	N.A.	398,465	N.A.	N.A.	N.A.	MNR
Total pro forma debt ($000s)	N.A.	1,396,806	N.A.	N.A.	N.A.	MNR
Pro forma MADS	N.A.	81,409	N.A.	N.A.	N.A.	MNR
Current debt service burden (%)	N.A.	5.36	5.78	5.39	4.69	MNR
Current MADS burden (%)	N.A.	5.26	5.50	5.73	6.03	4.50
Pro forma MADS burden (%)	N.A.	5.50	N.A.	N.A.	N.A.	MNR
Financial resource ratios						
Endowment market value ($000s)	N.A.	401,599	377,536	307,267	297,137	115,187
Related foundation market value ($000s)	N.A.	574,981	601,005	456,591	408,777	138,714
Cash and investments ($000s)	N.A.	584,494	642,500	796,198	771,496	MNR
UNA ($000s)	N.A.	(497,245)	(311,120)	(197,214)	(310,493)	MNR
Adjusted UNA ($000s)	N.A.	501,489	420,531	351,413	225,635	MNR
Cash and investments to operations (%)	N.A.	39.5	47.3	61.5	62.7	46.3
Cash and investments to debt (%)	N.A.	51.5	56.6	71.3	78.5	100.6
Cash and investments to pro forma debt (%)	N.A.	41.8	N.A.	N.A.	N.A.	MNR
Adjusted UNA to operations (%)	N.A.	33.9	31.0	27.1	18.3	31.3
Adjusted UNA plus debt service reserve to debt (%)	N.A.	44.2	37.0	31.4	23.0	57.3
Adjusted UNA plus debt service reserve to pro forma debt (%)	N.A.	35.9	N.A.	N.A.	N.A.	MNR
Average age of plant (years)	N.A.	11.7	11.4	10.0	9.7	14.6

Colorado State University System Board of Governors (cont.)

Enterprise And Financial Statistics

	--Fiscal year ended June 30--					Medians for 'A' rated public colleges & universities
	2019	2018	2017	2016	2015	2018
OPEB liability to total liabilities (%)	N.A.	1.9	1.0	1.4	2.1	MNR

N.A.--Not available. MNR--Median not reported. MADS--Maximum annual debt service. Total adjusted operating revenue = unrestricted revenue less realized and unrealized gains/losses and financial aid. Total adjusted operating expense = unrestricted expense plus financial aid expense. Net operating margin = 100*(net adjusted operating income/adjusted operating expense). Student dependence = 100*(gross tuition revenue + auxiliary revenue) / adjusted operating revenue. Current debt service burden = 100*(current debt service expense/adjusted operating expenses). Current MADS burden = 100*(maximum annual debt service expense/adjusted operating expenses). Cash and investments = cash + short-term and long-term investments. Adjusted UNA = Unrestricted net assets + unrestricted net assets of the foundation. Average age of plant = accumulated depreciation/depreciation and amortization expense.

Ratings Detail (As Of September 10, 2019)

Colorado St Univ Sys Brd of Governors CP		
Short Term Rating	A-1	Affirmed
Colorado St Univ Sys Brd of Governors CP		
Short Term Rating	A-1	Affirmed
Colorado St Univ Sys Brd of Governors PCU_USF		
Long Term Rating	AA/Stable	Affirmed
Unenhanced Rating	NR(SPUR)	Current
Underlying Rating for Credit Program	A+/Stable	Affirmed
Colorado St Univ Sys Brd of Governors PCU_USF		
Long Term Rating	AA/Stable	Affirmed
Unenhanced Rating	NR(SPUR)	Current
Underlying Rating for Credit Program	A+/Stable	Affirmed
Colorado St Univ Sys Brd of Governors PCU_USF		
Long Term Rating	AA/Stable	Affirmed
Unenhanced Rating	NR(SPUR)	Current
Underlying Rating for Credit Program	A+/Stable	Affirmed
Colorado St Univ Sys Brd of Governors PCU_USF		
Long Term Rating	AA/Stable	Affirmed
Underlying Rating for Credit Program	A+/Stable	Affirmed
Colorado St Univ Sys Brd of Governors PCU_USF		
Long Term Rating	AA/Stable	Affirmed
Underlying Rating for Credit Program	A+/Stable	Affirmed
Colorado St Univ Sys Brd of Governors PCU_USF		
Long Term Rating	A+/Stable	Affirmed
Colorado St Univ Sys Brd of Governors PCU_USF		
Long Term Rating	AA/Stable	Affirmed
Underlying Rating for Credit Program	A+/Stable	Affirmed

Ratings Detail (As Of September 10, 2019) (cont.)		
Colorado St Univ Sys Brd of Governors PCU_USF		
Long Term Rating	A+/Stable	Affirmed
Colorado St Univ Sys Brd of Governors PCU_USF		
Long Term Rating	AA/Stable	Affirmed
Unenhanced Rating	NR(SPUR)	Current
Underlying Rating for Credit Program	A+/Stable	Affirmed
Colorado St Univ Sys Brd of Governors PCU_USF series 2017E		
Long Term Rating	AA/Stable	Affirmed
Underlying Rating for Credit Program	A+/Stable	Affirmed
Colorado St Univ Sys Brd of Governors PCU_USF ser 2017F		
Long Term Rating	A+/Stable	Affirmed
Colorado St Univ Sys Brd of Governors PCU_USF (BAM)		
Unenhanced Rating	AA(SPUR)/Stable	Affirmed
Underlying Rating for Credit Program	A+/Stable	Affirmed
Colorado St Univ Sys Brd of Governors PCU_USF		
Long Term Rating	AA/Stable	Affirmed
Unenhanced Rating	NR(SPUR)	Current
Underlying Rating for Credit Program	A+/Stable	Affirmed
Colorado St Univ Sys Brd of Governors PCU_USF		
Long Term Rating	AA/Stable	Affirmed
Unenhanced Rating	NR(SPUR)	Current
Underlying Rating for Credit Program	A+/Stable	Affirmed
Colorado St Univ Sys Brd of Governors PCU_USF		
Long Term Rating	A+/Stable	Affirmed
Colorado St Univ Sys Brd of Governors SCHSTPR		
Long Term Rating	AA/Stable	Affirmed
Underlying Rating for Credit Program	A+/Stable	Affirmed
Colorado St Univ Sys Brd of Governors sys enterprise		
Unenhanced Rating	A+(SPUR)/Stable	Affirmed

Many issues are enhanced by bond insurance.

MOODY'S
INVESTORS SERVICE

Rating Action: Moody's downgrades Fort Lewis College, CO bonds to A3 from A2; assigns A3 to proposed Series 2020 bonds and affirms Aa2 enhanced ratings; outlook stable

27 Aug 2020

New York, August 27, 2020 -- Moody's Investors Service has downgraded the rating on Fort Lewis College, CO revenue bonds to A3 from A2 and assigned an A3 to the college's proposed issuance of approximately $6 million Enterprise Refunding Revenue Bonds Tax Exempt Series 2020A-1, Taxable Series 2020A-2, Tax Exempt Series 2020B-1, and Taxable Series 2020B-2 with final maturities in 2039.Concurrently, we have affirmed the outstanding Aa2 enhanced ratings on the college's previously issued bonds. The downgrade to A3 effects approximately $33 million of outstanding debt. The outlook has been revised to stable from negative.

RATINGS RATIONALE

The downgrade to A3 reflects expected weaker operating performance driven by state funding cuts, pandemic-related financial impacts, and continued longer-term student market challenges. Student market challenges and pandemic-related financial impacts are both considered social risks under our ESG framework. The college projects operating performance pressures through at least fiscal 2021, with coronavirus financial impacts affecting fiscal 2020 and 2021 and state funding cuts impacting fiscal 2021 and potentially beyond. Furthermore, the college has faced significant enrollment challenges over the past few years with a resulting loss of approximately 10% of students since fall 2015, notable given the college's high-reliance on student charges to fund operations.

The A3 underlying rating incorporates the college's important role in the State of Colorado (Aa1, stable) and region as a provider of liberal arts education with prominent provision of higher education to Native American students. The latter mission significantly contributes to the college's credit quality as Colorado subsidizes the full cost of tuition for Native American students and provides capital support, which is unusual for public universities in the state. As a result, Fort Lewis has the ability to invest in academic facilities while maintaining low financial leverage despite modest wealth compared with peers, offering some flexibility in times of operating stress. The college's unrestricted monthly liquidity provides solid coverage of expense and is a favorable credit element given student market challenges and uncertainty surrounding future pandemic-related expenses. Despite management's commitment to contain expenses, which will limit short-term operating performance erosion, the college's small operating base limits future large-scale expense reductions without harming core programs. Favorably, the college reports leading indicators of higher expected enrollment in fall 2020, which would lead to better than budgeted operations. Additional credit factors include the college's pension liability and state demographic trends.

The Aa2 enhanced rating and stable outlook are derived from the structure and mechanics of the Colorado Higher Education Enhancement Program, which is based on Colorado's current rating and outlook.

RATING OUTLOOK

The stable outlook reflects expectations of effective enrollment management and operating cash flow margins, as calculated by Moody's, of at least 8% in fiscal 2021 and fiscal 2022. It also incorporates expectations of no additional debt and at least stable cash reserves.

FACTORS THAT COULD LEAD TO AN UPGRADE OF THE RATINGS

-Material increase in total cash and investments

-Significant strengthening of student demand, reflected in sustained enrollment growth and improved pricing power

-Substantially higher operating support from the State of Colorado

-For the enhanced rating, upgrade to the State of Colorado rating

FACTORS THAT COULD LEAD TO A DOWNGRADE OF THE RATINGS

-Reduction in support for the Native American tuition waiver program or greater than expected state funding cuts

-Inability to stabilize enrollment

-Material use of available reserves

-For the enhanced rating, deterioration in credit quality of the State of Colorado rating

LEGAL SECURITY

The college's outstanding and proposed bonds are payable from a net revenue pledge of the college. This net revenue pledge includes the gross revenues of all of the college's facilities, student fees, all revenues accruing to the college from overhead charges on research projects, less operating and maintenance expenses. The pledge also includes 10% of the tuition revenues received by the college, as long as it maintains enterprise status (the college had enterprise status in fiscal 2019), and other income that the board determines to include in gross pledged revenues. In fiscal 2019, net revenues covered debt service a healthy 2.95x and the college projects over 3x coverage for fiscal 2020 despite housing refunds provided in the spring. On parity, the Series 2019B and proposed Series 2020B bonds have an additional pledge of student union building revenue fees and in fiscal 2019, those fees covered nearly all of the debt service associated with those bonds.

Outstanding Series 2016A and Series 2016B bonds are covered by the State of Colorado's higher education intercept program that is categorized as an unlimited advance. Should the college fail to provide sufficient funds for debt service, the trustee is required to notify the state treasurer on the business day prior to the debt service payment date. The treasurer is required to remit funds to the trustee immediately from available state funds. The treasurer recovers the debt service payment from the college's fee-for-service funds, as well as from unpledged tuition revenue.

USE OF PROCEEDS

Proceeds from the Series 2020 bonds will go towards refunding various maturities in fiscal 2021 and fiscal 2022, providing near term debt service relief.

PROFILE

Fort Lewis College is a public four-year liberal arts college in Colorado, located in the southwest Colorado City of Durango. The college continues to honor its historic commitment to Native Americans by offering full tuition scholarships to all qualified Native Americans who meet admission requirements. A member of the Council of Public Liberal Arts Colleges (COPLAC), Fort Lewis College had fiscal 2019 operating revenues of $74 million and enrolled 3,044 students in Fall 2019.

METHODOLOGY

The principal methodology used in the underlying ratings was Higher Education published in May 2019 and available at https://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBM_1175020 . The principal methodology used in the enhanced ratings was State Aid Intercept Programs and Financings published in December 2017 and available at https://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBM_1067422. Alternatively, please see the Rating Methodologies page on www.moodys.com for a copy of these methodologies.

REGULATORY DISCLOSURES

For further specification of Moody's key rating assumptions and sensitivity analysis, see the sections Methodology Assumptions and Sensitivity to Assumptions in the disclosure form. Moody's Rating Symbols and Definitions can be found at: https://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBC_79004.

For ratings issued on a program, series, category/class of debt or security this announcement provides certain regulatory disclosures in relation to each rating of a subsequently issued bond or note of the same series, category/class of debt, security or pursuant to a program for which the ratings are derived exclusively from existing ratings in accordance with Moody's rating practices. For ratings issued on a support provider, this announcement provides certain regulatory disclosures in relation to the credit rating action on the support

provider and in relation to each particular credit rating action for securities that derive their credit ratings from the support provider's credit rating. For provisional ratings, this announcement provides certain regulatory disclosures in relation to the provisional rating assigned, and in relation to a definitive rating that may be assigned subsequent to the final issuance of the debt, in each case where the transaction structure and terms have not changed prior to the assignment of the definitive rating in a manner that would have affected the rating. For further information please see the ratings tab on the issuer/entity page for the respective issuer on www.moodys.com.

The ratings have been disclosed to the rated entity or its designated agent(s) and issued with no amendment resulting from that disclosure.

These ratings are solicited. Please refer to Moody's Policy for Designating and Assigning Unsolicited Credit Ratings available on its website www.moodys.com.

Regulatory disclosures contained in this press release apply to the credit rating and, if applicable, the related rating outlook or rating review.

Moody's general principles for assessing environmental, social and governance (ESG) risks in our credit analysis can be found at https://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBC_1133569 .

At least one ESG consideration was material to the credit rating action(s) announced and described above.

The Global Scale Credit Rating on this Credit Rating Announcement was issued by one of Moody's affiliates outside the EU and is endorsed by Moody's Deutschland GmbH, An der Welle 5, Frankfurt am Main 60322, Germany, in accordance with Art.4 paragraph 3 of the Regulation (EC) No 1060/2009 on Credit Rating Agencies. Further information on the EU endorsement status and on the Moody's office that issued the credit rating is available on www.moodys.com.

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MOODY'S
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MOODY'S
INVESTORS SERVICE

Rating Action: Moody's affirms Metropolitan State University of Denver, CO's A1 rating; outlook stable

14 Jan 2020

New York, January 14, 2020 -- Moody's Investors Service has affirmed Metropolitan State University of Denver, CO's A1 underlying rating on enterprise revenue debt totaling approximately $79 million, A1 rating on approximately $50 million of debt associated with the HLC@Metro project, and Aa2 enhanced rating on debt outstanding totaling approximately $79 million. The outlook is stable.

RATINGS RATIONALE

Metropolitan State University of Denver CO's (MSU Denver) A1 rating reflects its size and importance to the State of Colorado (Aa1 stable) and City and County of Denver (Aaa stable) as a provider of higher education. Growth in state support and MSU Denver's ability to raise tuition in fiscal 2020, which was not afforded to other Colorado public universities, provides evidence of the importance of the university to the state. MSU Denver is the third largest university in the state and is one of three complementary institutions on the Auraria Higher Education Center, CO (A1 stable).

MSU Denver has favorably witnessed continued growth in net tuition per student and overall net tuition revenue, leading to solid operating revenue growth in spite of fairly flat to declining enrollment. Despite good revenue growth, operating performance is tepid and maximum annual debt service coverage thin (including HLC@Metro debt service) because of continued high expense growth, primarily due to wage and fringe benefit pressures, as well as programmatic investments. Though state funding increases are favorable, overall support still lags peers outside of the state. High leverage remains a credit weakness with thin coverage from unrestricted assets and cash flow. Additional credit factors considered include an outsized pension liability, exposure to hotel operations of HLC@Metro (a component unit of the university), weak philanthropy, and good pricing power compared with other Colorado public universities.

The Aa2 enhanced rating and stable outlook are derived from the structure and mechanics of the Enhancement Program (the Colorado State Intercept Act), which is based on the State of Colorado's current rating and outlook.

RATING OUTLOOK

The stable outlook on the underlying rating reflects expectations of continued solid net tuition revenue trends and state funding growth leading to stable to improving operating performance. It also incorporates expectations of no additional debt without improvement in cash flow and liquid reserves.

The stable outlook for the enhanced ratings reflects the outlook for the programmatic level rating which currently mirrors the outlook for the State of Colorado.

FACTORS THAT COULD LEAD TO AN UPGRADE

-Significant increase in available liquid reserves

-Sustained improvement in operating performance providing stronger coverage of debt and debt service on an entity-wide basis

-Material growth in state support over multiple years improving revenue diversity

-For the enhanced rating, upgrade of the Colorado Higher Education Enhancement Program rating

FACTORS THAT COULD LEAD TO A DOWNGRADE

-Inability to improve and sustain operating cash flow margins above 8%

-Increase in debt without improved liquid reserves and cash flow to cover debt service

-Inability of HLC@Metro to make debt service payments requiring MSU Denver to cover the shortfall

-For the enhanced rating, downgrade of the Colorado Higher Education Enhancement Program rating

LEGAL SECURITY

All of MSU Denver's outstanding bonds, including Enterprise Bonds and bonds issued for HLC@Metro, are secured by pledged revenues that include 10% of tuition revenues, net revenues derived from a student facilities construction fee, indirect cost recoveries, mandatory fees for student and faculty services, continuing education services, the federal interest subsidy on qualifying bonds, and all designated unrestricted net income of the university. Estimated fiscal 2019 pledged revenues of $38 million cover maximum annual debt service on enterprise bonds (exluding HLC@Metro associated bonds) by 6.7x. There are no debt service reserve fund requirements on MSU Denver's enterprise revenue bonds, but there is 1.0x rate covenant.

The HLC@Metro Series 2010A bonds, issued through a MSU Denver component unit, are payable first from net hotel revenues, and federal direct payments received as a qualified Build America Bond. These bonds also have the absolute and unconditional guarantee of payment for gross debt service on parity with MSU's enterprise revenue bonds. Hotel operations covered debt service 1.2x in fiscal 2018 and are estimated to have covered debt service 1.1x in fiscal 2020.) The bonds also have the pledge of certain reserve funds including a liquidity fund (25% of the maximum annual debt service on the outstanding bonds) and reserve fund (initially established as $600,000, and with a reserves balance of $8.4 million in cash and repair and replacement reserves).

PROFILE

Metropolitan State University of Denver is the third largest four-year public higher education institution in Colorado, located in downtown Denver at the Auraria Higher Education Center (AHEC). AHEC was established as an agency of Colorado to provide land, plant and facilities to house three institutions: MSU Denver, the University of Colorado Denver and the Community College of Denver. MSU Denver had fiscal 2019 operating revenues of $221 million and served 14,638 full-time equivalent students in fall 2019.

METHODOLOGY

The principal methodology used in the Institutional Enterprise Revenue ratings was Higher Education published in May 2019. The principal methodology used in the Metro Inc Project rating was Rating Transactions Based on the Credit Substitution Approach: Letter of Credit-backed, Insured and Guaranteed Debts published in May 2017. The principal methodology used in the enhanced ratings was State Aid Intercept Programs and Financings published in December 2017. Please see the Rating Methodologies page on www.moodys.com for a copy of these methodologies.

REGULATORY DISCLOSURES

For ratings issued on a program, series, category/class of debt or security this announcement provides certain regulatory disclosures in relation to each rating of a subsequently issued bond or note of the same series, category/class of debt, security or pursuant to a program for which the ratings are derived exclusively from existing ratings in accordance with Moody's rating practices. For ratings issued on a support provider, this announcement provides certain regulatory disclosures in relation to the credit rating action on the support provider and in relation to each particular credit rating action for securities that derive their credit ratings from the support provider's credit rating. For provisional ratings, this announcement provides certain regulatory disclosures in relation to the provisional rating assigned, and in relation to a definitive rating that may be assigned subsequent to the final issuance of the debt, in each case where the transaction structure and terms have not changed prior to the assignment of the definitive rating in a manner that would have affected the rating. For further information please see the ratings tab on the issuer/entity page for the respective issuer on www.moodys.com.

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S&P Global
Ratings

Research

Summary:

Metropolitan State University Board of Trustees, Colorado; Public Coll/Univ - Unlimited Student Fees; School State Program

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Rationale

Outlook

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Summary:

Metropolitan State University Board of Trustees, Colorado; Public Coll/Univ - Unlimited Student Fees; School State Program

Credit Profile		
Metropolitan State University of Denver Roadrunner Recovery and Reinvestment Act Finance Authority, Colorado		
HLC @ Metro, Inc., Colorado		
HLC @ Metro series 2010 A, B, C revenue bonds		
Unenhanced Rating	A(SPUR)/Negative	Outlook Revised

Rationale

S&P Global Ratings revised its outlook to negative from stable and affirmed its 'A' underlying rating (SPUR) on Metropolitan State University Board of Trustees (MSU Denver), Colo.'s direct and guaranteed revenue debt. At the same time, S&P Global Ratings affirmed its:

- 'A' SPUR on the Metropolitan State College Board of Trustees' institutional enterprise revenue debt, issued for MSU Denver. The 'A' SPUR reflects our view of the university's pledge of fees, net auxiliary revenue, indirect cost recoveries, and pledge of 10% tuition revenue. We also have a 'AA' program rating on MSU Denver's institutional enterprise revenue debt, reflecting MSU Denver's participation in the Colorado Higher Education State Aid Intercept program; and
- 'A' SPUR on Metropolitan State University of Denver Roadrunner Recovery & Reinvestment Act Finance Authority, Colo.'s revenue debt, issued for HLC @ Metro Inc. HLC is an instrumentality of the state of Colorado, whose financials are presented as a discrete component unit of MSU Denver. The rating reflects our opinion of the guarantee, which is on par with MSU Denver's existing debt.

The negative outlook reflects our opinion of MSU Denver's weak available resources for the rating coupled with the university's upcoming debt plans, which we anticipate could further constrain the rating. While the debt issuance is modest at $8.25 million, we do not believe there is much flexibility at the current rating due to the university's already low available resources, modest demand profile with a modified open admission enrollment policy, and expectation for softer undergraduate enrollment over the near term.

We assess MSU Denver's enterprise profile as strong, with the university's niche position in the market as an urban university in Denver and overall stabilizing enrollment levels after several years of declines, but offset by a somewhat limited demand profile as the university operates with a modified open admission policy. The university's management team has historically been stable, but there have been some recent changes since a new president was appointed in 2017. We assess MSU Denver's financial profile as strong, with a history of positive full-accrual operations, flat state support in recent years, contingent liabilities related to pension obligations with a weak pension funding status of 58%,

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and low resources relative to its total debt for the current rating, which we believe limits the financial profile. Combined, we believe these credit factors lead to an indicative stand-alone credit profile of 'a' and a final rating of 'A'.

The 'A' rating reflects our opinion of the university's:

- Key niche in the state's higher education hierarchy, serving the urban metropolitan Denver area, with solid state support;
- Stabilizing total full-time-equivalent (FTE) enrollment in fall 2017 and 2018 after many years of declining enrollment, but expectation that undergraduate enrollment may soften over the near term (which accounts for approximately 96% of total enrollment), but somewhat offset by increases in graduate programs; and
- Historically positive full-accrual operations, which is expected to continue.

We believe these credit strengths are somewhat offset by what we consider MSU Denver's:

- Below-average available resource ratios with fiscal 2018 adjusted unrestricted net assets of $62.4 million equal to just 23.6% of adjusted operations and 41.8% of total pro forma debt;
- Total pro forma guaranteed and direct debt of $149 million, though we believe the pro forma MADS burden is manageable at 5.1%; and
- Modest endowment with limited fundraising history.

MSU Denver, founded in 1963, is one of 13 public state four-year colleges in Colorado. It occupies the 140-acre Auraria campus (created by state statute in 1974) in downtown Denver. The Auraria campus is also home to the Community College of Denver and University of Colorado at Denver. MSU Denver serves approximately half of the 42,000 students at the Auraria campus, and through its three colleges (letters, arts, and sciences; business; and professional studies) and one school (education), it offers 104 undergraduate majors, 35 undergraduate certificates, seven masters, and three masters certificates. Niche programs include accounting, hospitality, teacher education, and social work. In fall 2018, total student enrollment was 20,192, or 15,499 FTE students, 96% of which were undergraduates.

For more information, see the full analysis published March 22, 2019, on RatingsDirect.

Outlook

The negative outlook reflects our opinion of MSU Denver's weak available resources for the rating coupled with the university's upcoming debt plans, which we anticipate could further constrain the rating. While the debt issuance is modest at $8.25 million, we do not believe there is much flexibility at the current rating due to the university's already low available resources, modest demand profile with a modified open admission enrollment policy, weak student demand metrics for the rating, and expectation for softer undergraduate enrollment over the near term.

Downside scenario

We could consider a negative rating action if the university is unable to improve it available resources, if enrollment and demand profile metrics weaken, or operating deficits occur on a full-accrual basis.

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Upside scenario

We could revise the outlook to stable over the next two years if available resource ratios were to improve or if operating margins were to materially strengthen from current levels.

Ratings Detail (As Of March 22, 2019)		
Metro State College Brd of Trustees (Denver) Institutional Enterprise rev bnds ser 2009A		
Underlying Rating for Credit Program	A/Negative	Outlook Revised
Unenhanced Rating	NR(SPUR)	Current

Many issues are enhanced by bond insurance.

Certain terms used in this report, particularly certain adjectives used to express our view on rating relevant factors, have specific meanings ascribed to them in our criteria, and should therefore be read in conjunction with such criteria. Please see Ratings Criteria at www.standardandpoors.com for further information. Complete ratings information is available to subscribers of RatingsDirect at www.capitaliq.com. All ratings affected by this rating action can be found on S&P Global Ratings' public website at www.standardandpoors.com. Use the Ratings search box located in the left column.

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MOODY'S
INVESTORS SERVICE

Rating Action: Moody's assigns Aa1 and Aa1/VMIG 1 to University of Colorado's bonds; outlook is stable

22 Jun 2020

New York, June 22, 2020 -- Moody's Investors Service has assigned a Aa1 to University of Colorado's (CU) proposed up to $156 million University Enterprise Refunding Revenue Bonds, Taxable Series 2020B-2 with a proposed final maturity in fiscal 2048. We have also assigned a Aa1/VMIG 1 rating to $225 million in proposed multimodal University Enterprise Revenue Bonds, Series 2020A-1 (Variable Rate Demand Bonds) (Green Bonds), Series 2020A-2 (Variable Rate Demand Bonds) and University Enterprise Refunding Revenue Bonds, Series 2020B-1 (Variable Rate Demand Bonds). Moody's also affirmed outstanding Aa1 and P-1 ratings on approximately $1.7 billion of outstanding university enterprise revenue bonds, commercial paper, and extendable commercial paper programs. The outlook is stable.

RATINGS RATIONALE

The assignment and affirmation of the Aa1 rating reflects CU's role as the State of Colorado's (Aa1 stable, issuer rating) flagship institution, with excellent strategic positioning, a significant research enterprise and important role as a provider of medical education for the state. Campus locations in Boulder, Denver, Aurora, and Colorado Springs-along Colorado's Front Range-continues to bolster student draw and provides mitigation to potential short-term enrollment disruptions stemming from the coronavirus pandemic. Additionally, CU's diverse and substantial scope of operations and sizeable liquidity provides mitigation to potential financial impacts of the pandemic. Prior to the pandemic, CU has produced strong, positive operating performance with sound revenue growth, which we expect to resume after fiscal 2021.

Tempering the long-term credit quality of the university is very limited state support for operations and capital, ongoing need for capital investment across its multiple campuses, and exposure to potentially volatile healthcare operations through its affiliation with the University of Colorado Hospital Authority. CU also has a high underfunded pension liability, which will worsen due to recent financial market performance.

The assignment of the VMIG 1 ratings on the proposed variable rate demand bonds are derived from (i) the credit quality of TD Bank, N.A. (the Bank) as provider of liquidity support for each Series in the form of a Standby Bond Purchase Agreements (SBPA), (ii) the long-term rating of the Bonds and (iii) Moody's assessment of the likelihood of an early termination or suspension of the SBPAs without a mandatory tender. Events that would cause termination or suspension of the liquidity facilities without a mandatory purchase of the Bonds are directly related to the credit quality of the Board. Accordingly, the likelihood of any such event occurring is reflected in the long-term rating, Aa1, assigned to the bonds. Moody's current short-term Counterparty Risk (CR) Assessment of the Bank is P-1(cr).

Affirmation of the P-1 ratings on commercial paper notes are based on the strength of the university's sizeable available liquidity, strong internal liquidity and treasury management functions, as well as strong market access.

We regard the coronavirus outbreak as a social risk under our ESG framework, given the substantial implications for public health and safety. The coronavirus (COVID-19) situation has created dislocation across industries and geographies, triggering urgent challenges for many businesses and organizations to address. The prospects and path of economic recovery for the second half of the year and beyond depend on factors including when and at what pace lockdown measures will ease and to what extent fiscal and monetary policy measures are available to assist businesses and organizations. The combined credit effects of these developments are unprecedented.

RATING OUTLOOK

The stable outlook reflects expectations the CU will manage through coronavirus-related impacts through fiscal 2021 with budget and operational adjustments. It also reflects expectations that operating performance will improve in fiscal 2022.

FACTORS THAT COULD LEAD TO AN UPGRADE OF THE RATINGS

- Material growth in financial cushion relative to debt and operations with sustained elevated improvement in cash flow

- Further enhancement in philanthropic support

- Short-term VMIG 1 and P-1 ratings: not applicable

FACTORS THAT COULD LEAD TO A DOWNGRADE OF THE RATINGS

- Sustained weakening of operating performance and erosion of liquidity over a period of years

- Sustained, significant increase in leverage

- For short-term VMIG 1 rating: Moody's downgrades the short-term CR Assessment of the Bank, or a multi-notch downgrade of the long-term rating of the bonds

- For short-term P-1 ratings: significant deterioration in available liquidity, underlying credit quality, or market access

LEGAL SECURITY

CU's planned Series 2020A-1, Series 2020A-2, Series 2020B-1, and Series 2020B-2 bonds will be on parity with outstanding revenue and CP/ECP notes, secured by a pledge of net revenue (gross revenue less maintenance and operation expense) of certain auxiliary enterprise facilities, including income derived from housing, dining, parking, rent of research facilities, and particular student fees. The parity obligations are also secured by a pledge of 100% of tuition revenue, revenue from direct cost recovery, and mandatory facilities construction fees. There are no debt service reserve funds.

Fiscal 2019 pledged net revenues totaled $1.3 billion and provide nearly 9.0x coverage of pro forma maximum annual debt service.

Liquidity Support for Tenders (SBPA)

The Bank may automatically terminate or suspend its obligations to purchase the Bonds under the SBPAs upon any of the following:

- the Board fails to pay when due regularly scheduled principal of or interest on the Bonds or on any debt of the Board on parity with the Bonds;

- A final, non-appealable judgment or order for the payment of money in excess of $20,000,000 shall be rendered against the Board or the University and shall continue unsatisfied and unstayed for a period of 60 days;

- the bankruptcy or insolvency of the Board;

- the Board imposes a debt moratorium, debt restructuring or comparable restriction on the payment of principal and interest on any debt of the Board on parity with the Bonds;

- any governmental authority having jurisdiction over the Board imposes a debt moratorium, debt restructuring or comparable restriction on the payment of principal and interest on the Bonds or on all debt of the Board;

- any governmental authority of competent jurisdiction shall rule that any provision in the SBPAs, the Paying Agent/Registrar Agreement, the Resolution, or the Bonds, relating to the payment of principal of or interest on the Bonds or the security for the Bonds cease to be valid and binding on the Board; or the validity or enforceability of any provisions in the SBPAs, the Paying Agent/Registrar Agreement, the Resolution, or the Bonds, relating to the payment of principal of or interest on the Bonds or the security for the Bonds shall be publicly contested by the Board; or the Board shall repudiate or deny that it has any liability or obligation under the SBPAs, the Paying Agent/Registrar Agreement, the Resolution or the Bonds;

- each rating agency rating the Bonds downgrades to below investment grade, suspends or withdraws the rating of the Bonds or any obligations of the Board on parity with the Bonds;

- the dissolution or termination of the existence of the Board or the University.

Series 2020A-1 Bonds will be issued in the weekly rate mode, Series 2020A-2 and Series 2020B-1 will be issued in the daily rate mode and all Bonds will pay interest on the first business day of each month. The interest rate on each series of Bonds may be converted, in whole or part, to the term or fixed rate modes. The Bonds will be subject to mandatory tender upon such interest rate conversion.

Each SBPA may be substituted. Prior to any substitution, the Board shall obtain evidence from each Rating Agency that its applicable rating will not be reduced or withdrawn solely as a result of such substitution. The Bonds are also subject to mandatory tender on the fifth (5th) business days prior to the expiration date of the applicable SBPA, any earlier termination of the applicable SBPA, and the termination date of the applicable SBPA resulting from receipt by the paying agent of notice of default under the SBPA from the Bank.

Each SBPA covers the full principal amount of the applicable series of Bonds outstanding plus 34 days of interest at 12%, the maximum rate applicable to the Bonds. Each SBPA is available to pay purchase price to the extent remarketing proceeds received are insufficient and provides sufficient coverage for the Bonds while in the daily or weekly rate modes.

USE OF PROCEEDS

Proceeds from the Series 2020B-2 taxable, fixed rate bonds will be used for: (i) refunding a portion of the Series 2014B-1 Bonds, Series 2015A Bonds and Series 2016A Bonds for savings, and (ii) provide specific budget relief in Fiscal Year 2021 and Fiscal Year 2022 by defeasing approximately $60.3 million of principal coming due on certain of the Boards Outstanding Bonds on June 1, 2021 and June 1, 2022 and the interest due on those dates, and pay a portion of interest unrelated to the refunded bonds in the amount totaling approximately $13.25 million due on December 1, 2020 and $13.27 million due on June 1, 2021. Proceeds from the Series 2020A-1 and Series 2020A-2 variable rate demand bonds will be used for financing the construction of medical research projects at the university's Anschutz Medical Campus. Proceeds from the Series 2020B-1 bonds will refund outstanding commercial paper. The CP program will become dormant, but will continue to be authorized and will be re-activated at some future date.

PROFILE

The University of Colorado is the flagship public higher education institution for the State of Colorado with multiple campuses. The main campus is located in Boulder, with additional campuses in Downtown Denver, Aurora (Anschutz Medical campus) and Colorado Springs. CU is a member of the Association of American Universities. In fiscal 2019, CU recorded $4.5 billion in operating revenue and fall 2019 enrollment of 56,937 full-time equivalent (FTE) students.

METHODOLOGY

The principal methodology used in the long-term ratings was Higher Education published in May 2019 and available at https://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBM_1175020 . The principal methodology used in the short-term enhanced ratings was Variable Rate Instruments Supported by Conditional Liquidity Facilities published in March 2017 and available at https://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBC_1057134 . The principal methodology used in the self liquidity ratings was Municipal Bonds and Commercial Paper Supported by a Borrower's Self-Liquidity Methodology published in October 2019 and available at https://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBM_1146778 . The principal methodology used in the bond anticipation note rating was US Bond Anticipation Notes and Related Instruments Methodology published in October 2019 and available at https://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBM_1146782 . Alternatively, please see the Rating Methodologies page on www.moodys.com for a copy of these methodologies.

REGULATORY DISCLOSURES

For further specification of Moody's key rating assumptions and sensitivity analysis, see the sections Methodology Assumptions and Sensitivity to Assumptions in the disclosure form. Moody's Rating Symbols and Definitions can be found at: https://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBC_79004.

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FitchRatings

RATING ACTION COMMENTARY

Fitch Rates University of Colorado's Ser 2020A-1, A-2, B-1, & B-2 Revs 'AA+'; Outlook Stable

Fri 19 Jun, 2020 - 3:08 PM ET

Fitch Ratings - Chicago - 19 Jun 2020: Fitch Ratings has assigned 'AA+' ratings to $225 million of series 2020A-1, 2020A-2, and 2020B-1 variable rate demand bonds (VRDBs) and $156 million of series 2020B-2 taxable fixed rate enterprise refunding revenue bonds to be issued by the Regents of the University of Colorado on behalf of the University of Colorado (CU). In addition, Fitch has affirmed CU's 'AA+' Issuer Default Rating (IDR), 'AA+' revenue bond ratings, and 'F1+' Short-Term rating on the CU's commercial paper (CP) program.

The Rating Outlook is Stable.

Proceeds from the series 2020 financing will be used to refund portions of the series 2014B-1, 2015A, and 2016A bonds; retire the outstanding portion of CU's CP outstanding; provide $175 million of funds to support capital spending; and pay the costs of issuance. The series 2020A-1, A-2, B-1, and B-2 bonds are expected to price on July 1, 2020.

Revenue bonds are secured by University of Colorado enterprise revenues, consisting primarily of auxiliary net revenues, indirect cost recovery revenues, student fees, 100% of tuition revenues, and other self-funded and research related services. Pledged revenues exclude state appropriations.

The 'F1+' Short-Term rating is based on the adequacy of CU's self-liquidity to support the CP program and CU's strong overall credit quality. CU plans to refund its remaining outstanding CP as part of the series 2020 plan of finance. Nevertheless, Fitch will maintain a short-term rating as CU plans to keep the CP program active even though there are no near-term plans to access the funds.

The short-term ratings on the series 2020A-1, A-2, & B-1 VRDBs, which are to be supported by standby bond purchase agreements (SBPA) from TD Bank, are to be assigned at a later date.

ANALYTICAL CONCLUSION

CU's 'AA+' IDR rating is based on to the university's very strong financial profile combined with its 'aa' revenue defensibility and 'a' operating risk profile assessments. As a comprehensive flagship research university, CU has a statewide and expanding national draw for students and has considerable fundraising capabilities.

The recent outbreak of coronavirus and related containment measures create an uncertain environment for the U.S. public finance Higher Education sector. Fitch's forward-looking analysis is informed by management expectations and by Fitch's common set of

baseline and downside macroeconomic scenarios. Fitch's scenarios will evolve as needed during this dynamic period. Currently, Fitch's baseline scenario includes a sharp economic contraction in the second quarter of 2020, with sequential recovery starting in the third quarter. Rating sensitivities address potential rating implications under a downside scenario, which assumes slower economic recovery and prolonged or recurring coronavirus-related disruptions into fiscal 2021.

The Stable Rating Outlook reflects Fitch's expectation that CU will maintain at least sufficient adjusted cash flow margins and robust balance sheet strength, which should provide necessary financial flexibility as the university manages through the considerable challenges presented by the coronavirus pandemic and associated economic contraction. Management implemented a number of steps in response to the coronavirus, starting in spring 2020. Most notably, CU closed resident halls and moved to almost entirely remote learning, which is extended through the summer term of 2020. Currently, CU plans to reopen for on campus learning in the fall semester 2020, which will include significant modifications to campus life such as residence and dining halls, with tools in place for testing and contact tracing. CU is eligible for approximately $36 million of CARES Act HEERF funding, roughly half of which is targeted for student aid.

KEY RATING DRIVERS

Revenue Defensibility: 'aa'

Comprehensive Flagship Research University with Expanding Reach

Revenue defensibility is consistent with a 'aa' assessment. CU is a comprehensive flagship research university with broad statewide and expanding national draw. Retention rates are sound and average SAT/ACT scores are well above average, although acceptance and matriculation rates are comparatively modest. Fitch views CU's enrollment demand to be somewhat inelastic to tuition rates, and state support has grown in recent years. The endowment spend rate is quite manageable and should support liquidity growth.

Operating Risk: 'a'

Track-Record of Sound Cash Flow Margins; Coronavirus Pressuring Results

CU's operating risk profile is consistent with an 'a' assessment. The university has a track-record of sufficient adjusted cash flow margins, which Fitch expects CU to sustain if not improve once near term pressures abate. Additionally, capital spending needs are manageable and only somewhat elevated in the near term.

Financial Profile: 'aa'

Very Strong Capital-Related Ratios through the Cycle

CU's financial profile is very strong. Capital-related ratios should improve, including through the cycle in the stress case of Fitch's FAST scenario analysis. In 2018, the state approved significant PERA pension reform, which will provide meaningful long-term reductions to net pension liabilities to CU over time. CU's liquidity should grow and capital-related ratios should improve in the future, and liquidity does not pose an asymmetric risk.

ASYMMETRIC ADDITIONAL RISK CONSIDERATIONS

There are no asymmetric risk factors associated with CU's rating.

RATING SENSITIVITIES

The Stable Rating Outlook reflects Fitch's expectation that CU will sustain at least sufficient adjusted cash flow margins over the long-term and maintain robust balance sheet strength, which should help the university to manage through the challenges presented by the coronavirus and economic contraction.

Factors that could, individually or collectively, lead to positive rating action/upgrade:

--Operating margins that prove resilient beyond expected pressures in fiscals 2020 and 2021, ultimately leading to a sustained adjusted cash flow margin of better than 12%;

--Continued improvement in already strong leverage ratios, most notably AF-to-adjusted debt.

Factors that could, individually or collectively, lead to negative rating action/downgrade:

--Prolonged operating pressures resulting in adjusted cash flow margins below 6% for a sustained period;

--A significant increase in leverage and/or weakening of liquidity leading to an AF-to-adjusted debt closer to 40%.

BEST/WORST CASE RATING SCENARIO

International scale credit ratings of Public Finance issuers have a best-case rating upgrade scenario (defined as the 99th percentile of rating transitions, measured in a positive direction) of three notches over a three-year rating horizon; and a worst-case rating downgrade scenario (defined as the 99th percentile of rating transitions, measured in a negative direction) of three notches over three years. The complete span of best- and worst-case scenario credit ratings for all rating categories ranges from 'AAA' to 'D'. Best- and worst-case scenario credit ratings are based on historical performance. For more information about the methodology used to determine sector-specific best- and worst-case scenario credit ratings, visit https://www.fitchratings.com/site/re/10111579.

CREDIT PROFILE

CU is a comprehensive flagship graduate research university and the largest institution of higher education in Colorado. The university offers a full array of undergraduate, graduate, and professional programs on four campuses: the flagship location in Boulder, Colorado Springs, Denver, and the Anschutz Medical Campus in Aurora. The Anschutz campus is also home to the University of Colorado Hospital, the flagship of 'AA' rated UCHealth. UCHealth is a separate legal entity, but maintains very tight alignment with CU's School of Medicine and is CU's primary teaching hospital.

CU has realized steady student enrollment growth in recent years. For example, total system-wide FTE undergraduate enrollment increased approximately 13% between fall 2014 and fall 2019. Nevertheless, it is uncertain what fall 2020 enrollment will be given the coronavirus pandemic; of course, this is a challenge nearly all colleges and universities in the U.S. face. Student demand has yielded favorable net tuition growth, which increased roughly 25% between fiscals 2015 and 2019, rising to more than $1.1 billion in fiscal 2019.

REVENUE DEFENSIBILITY

Revenue defensibility is consistent with a 'aa' assessment. CU is a comprehensive flagship research university with broad statewide and expanding national/international draw, although international student enrollment may see a notable decline in the

near term due to the coronavirus. Retention rates are sound and average SAT/ACT scores are very high, although acceptance and matriculation rates are comparatively modest. Fitch views CU's enrollment demand to be reasonably inelastic to tuition rates. While state support is robust, the state recently announced higher education budget cuts due to the economic recession resulting from the coronavirus shut downs. The endowment spend rate is quite manageable and should support liquidity growth.

CU's demand assessment is 'aa', as Fitch views the university as having competitive demand indicators. Based on data provided by management, in fall 2019 the freshmen-to-sophomore retention rate was a sound 87% at the Boulder flagship campus. Student quality is very strong as Boulder's freshmen average SAT and ACT scores measured well above average at 1251 and nearly 28, respectively, in fall 2019. Other key demand characteristics are comparatively more modest, however, as Boulder's fall 2018 freshmen acceptance rate was 78% and matriculation rate was 22%.

In-state students accounted for an average of just under 60% of undergraduate enrollment at Boulder in recent years, including 58% in fall 2019, which is rather low for a state university and is indicative of both the university's national draw and the flexibility afforded to CU by the state in terms of enrollment management. Illustrative of this, the state recently approved measures to allow CU to increase its share of out-of-state students from 33% to as high as 45% (for each campus). This measure increases the university's operating flexibility and could support further net student tuition growth. On the other hand, there is uncertainty around enrollment heading into fall 2020 because of the coronavirus, and international student enrollment will almost certainly decrease. Nevertheless, per U.S. Census Bureau data, recent population growth has been well above average in Colorado and this trend is expected to continue, portending continued enrollment demand over the long term.

CU's revenue source characteristics are consistent with a 'aa' assessment. Fitch views CU's enrollment demand as being somewhat inelastic relative to price increases. This is illustrated by CU's robust recent net tuition growth; CU's five-year net tuition revenue per FTE enrollment CAGR was approximately 3% as of fiscal 2019. As a leading comprehensive flagship research university in a fast-growing state, CU's demand capacity is considerable. Freshmen applications for the Boulder flagship campus have increased meaningfully in recent years, rising 41% between fall 2014 and fall 2019. Management reports that application trends continued apace in the current year prior to the coronavirus pandemic, and of course there is uncertainty revolving on-campus enrollment in fall 2020. Nevertheless, over the long-term, Fitch believes that significant population growth in Colorado, the university's increasingly national profile, and the recent flexibility afforded to CU by the state to allow for even more out-of-state students should support continued application and enrollment demand over time. Management notes that summer 2020 enrollment is 13% higher than in summer 2019, as students take advantage of increased online learning tools.

CU has considerable support from various revenue streams. Its endowment spend policy of 4% should be sustainable and allow for continued liquidity growth and future investment returns over time, particularly given the university's track-record of cash flow generation and fundraising capabilities. CU has received regular operating support from the state, and state support has increased steadily in recent years, as total funding grew from $164 million in fiscal 2014 to $234 million in fiscal 2019, and to more than $250 million in fiscal 2020. The coronavirus pandemic is having a material effect on state budget support, however. For example, in late May the Colorado Joint Budget Commission announced a 58% cut in support to the higher education budget, amounting to nearly $500 million for all public universities and colleges in the state (an estimated $140 million cut to CU). While this is largely offset by Governor Polis' executive order to allocate $450 million of state CARES Act funding to public higher education institutions (an estimated approximately $138 million to CU), Fitch believes that state support to public universities and colleges will be tight over the next year or two until the economy recoveries and state tax revenue rebounds. (the $450 million CARES Act allocation is in addition to CARES Act funding that was allocated directly to universities as part of the act).

CU's healthcare operations provide considerable cash flow to the university. While UCHealth is a separate legal entity from CU, the two organizations are tightly and strategically aligned and UCHealth serves as the primary teaching hospital for CU's School of Medicine. Healthcare operations accounted for approximately 27% of CU's fiscal 2019 total operating revenues. Healthcare providers have been particularly stressed because of the coronavirus, as most states significantly limited hospitals from performing elective procedures in an effort to free capacity for Covid-19 patients and expenses increased as health systems scrambled to secure PPE and related equipment.

There are no asymmetric rating factors associated with CU's revenue defensibility.

OPERATING RISK

CU's operating risk profile is consistent with an 'a' assessment. The university has a track-record of good adjusted cash flow margins. While margins are being pressured because of the coronavirus and associated economic recession, over the long-term Fitch believes CU's operating platform is robust and should support a return to sufficient -- if not better -- results. Capital spending needs are moderate and flexible.

CU's operating cost flexibility assessment is consistent with an 'a' assessment. The university's adjusted cash flow margin as calculated by Fitch averaged approximately 11% over the five year period through fiscal 2019 (June 30 year-end), which under Fitch's Criteria includes a proportionate share of the service cost for reported pensions. CU's adjusted cash flow margin has been elevated in the last three years, averaging 12% over the period including 12.7% in fiscal 2019. As noted, CU has benefited from strong demand characteristics, recent fundraising success, state appropriations, and a successfully healthcare operation.

As noted above, operating results are being pressured in fiscal 2020 and into fiscal 2021 because of the coronavirus and related economic challenges. Per management prepared unaudited nine-months financial results through March 31, 2020, CU's operating bottom-line was more than $75 million unfavorable to the same period fiscal 2019. A significant contribution to the operating income shortfall was a nearly 18% increase in health services expenses, as CU, like almost all other healthcare providers in the U.S., raced to secure PPE to address the coronavirus. Health operations in April and May also were likely stressed as elective procedures were tightly restricted as part of the state's response to the pandemic (restrictions on elective procedures were eased starting in late May).

Management implemented a number of initiatives in response to the coronavirus pandemic to bolster CU's finances including the following: closing residential halls in mid-March and converting to almost entirely all online learning; applying for federal CARES Act higher education funding, amounting to approximately $36 million to CU, half of which is for student financial aid; receiving the aforementioned estimated roughly $138 million from the state's CARES Act allocation; furloughing staff hours, amounting to an effective 10% pay cut for officers (some other staff will have effective 5% pay cut while others will not have pay reductions). Moving forward, as CU looks to reopen on-campus learning in the fall 2020, the system is implementing a number of tools, including developing testing and tracing and allowing for student quarantining; establishing social distancing in the class rooms; changing the fall schedule such that students will be on campus until the Thanksgiving holiday, and then convert to online learning and testing for the remainder of the fall 2020 semester (before returning to campus in early calendar year 2021); and modifying research at the Anschutz campus to allow for social distancing.

Operating margins will be stressed as a result of the coronavirus at least into fiscal 2021. CU management has prepared detailed sensitivity analysis for each campus under three scenarios. All three scenarios include remote learning through summer term 2020. Under the least restrictive scenario, students would return to campus in fall 2020, while under the most restrictive -- and financially stressed -- students would not return to campus until at least summer 2021. Fitch expects CU's adjusted cash flow margin to weaken considerably in fiscal 2021, even the least restrictive scenario. Nevertheless, over the long-term, as society eventually recovers from the coronavirus and the economy (and state budget) rebound, Fitch expects that CU will return to an adjusted cash flow margin consistent with at least an 'a' assessment. Moreover, the university's robust liquidity position cushion against operating challenges.

Fitch views CU's near-term capex requirements as moderate in the context of the university's scope of operations, fundraising ability, and current average age of plant. Current capex is highlighted by the following projects: the IMIG Music School addition; the Anschutz Health Sciences Building on the Anschutz medical campus; build-out of the research building basement at the Anschutz campus; and construction of a student housing building at the Denver campus. While in the past Fitch had expected CU to maintain a capital spending ratio in the 1.0x-1.2x range, we view the university has having a degree of flexibility in terms of the timing and scope of capex. CU's average age of plant measured 12.0 years at FYE 2019. Furthermore, the university has reinvested in its physical infrastructure as its capital spending averaged approximately 1.8x over the five years through FYE 2019.

CU has demonstrated considerable fundraising capabilities in recent years, supporting both university operations and capital needs. Management received more than $400 million in contributions in fiscal 2019. While management believes that university philanthropy has matured to a point where this level of fundraising is expected to be sustained, there is a degree of uncertainty as to how the coronavirus and economic recession will affect philanthropy.

FINANCIAL PROFILE

CU's financial profile is very strong in the context of the university's 'aa' revenue defensibility and 'a' operating risk profile assessments. Even with pressure from the current economic recession, Fitch expects capital-related ratios to remain strong through the cycle.

Inclusive of the current debt issuance CU (which includes approximately $175 million of new money debt), pro forma total debt is just under $1.9 billion (which includes direct debt, notes payable, capitalized leases, and other obligations). Available funds (AF) measured nearly $4.2 billion at FYE 2019, including available Foundation funds (Fitch defines AF as unrestricted cash and investments less non-expendable restricted net assets).

CU has considerable debt equivalents, particularly defined benefit (DB) pension plan obligations via the university's participation in the state plan of Colorado Public Employees' Retirement Association (PERA). Per the fiscal 2019 audit (whose DB pension data are based on PERA's measurement date of December 31, 2018), CU's net pension liability (NPL) measured $1.2 billion (down from $2.2 billion in the fiscal 2018 audit) and the university's ratio of plan assets to liabilities measured 55% (up from 43%). The December 2018 figure was calculated based on a discount rate of 7.25% (up from 4.72% as of the December 2017 measurement date). Because the fiscal 2019 audited pension obligations include a discount rate of 7.25%, Fitch adjusts CU's DB pension obligation to a discount rate of 6%. This translates to an NLP of $1.6 million (48% funded ratio). In 2018 the state passed SB 18-200, a major pension reform. Despite the sizable DB pension obligation, CU's net adjusted debt (adjusted debt minus AF) was favorably negative at FYE 2019 and remains negative pro forma (including the series 2020 financing).

The pension reform noted above temporarily freezes COLAs for current retirees, delays COLAs for new retirees, caps all future COLAs at 1.5% annually instead of the previous 2%, modifies age and salary requirements for future employees, and expands eligibility for PERA's defined contribution plan, among other changes. It also raises employee and employer contributions and requires an annual lump sum, $225 million state contribution for 30 years. The reforms capitalize on a court ruling in 2014 that validated past statutory changes lowering COLAs.

CU's capital-related ratios are very strong, and are expected to remain so through the cycle despite the current economic stress of the coronavirus. The university's AF-to-adjusted debt measured approximately 120% at FYE 2019 and nearly 115% pro forma (inclusive the series 2020 financing). Through the cycle, net adjusted debt remains favorably negative in every year of the base case (which includes Fitch modeled investment losses tied to the coronavirus). AF-to-total adjusted debt exceeds 100% in every year of the base case, and remains well above 40% in every year of the highly pressured stress case.

'F1+' Short-Term Rating

CU's long-term credit quality and 'AA+' IDR, together with its sufficient liquid resources and written procedures to fund any un-remarketed put and/or commercial paper roll on the $200 million of maximum potential CP debt, and self-liquidity support the 'F1+' Short-Term rating. CU plans to refund its remaining outstanding CP as part of the series 2020 plan of finance. Nevertheless, Fitch will maintain a short-term rating as CU plans to keep the CP program active even though there are no near-term plans to access the funds.

ASYMMETRIC ADDITIONAL RISK CONSIDERATIONS

There are no asymmetric risk factors associated with CU's rating.

CU's former President Bruce Benson retired as of June 2019. He led the university for more than 10 years. The university's new President, Mark Kennedy, joins CU after serving in a similar role at the University of North Dakota. Prior to his tenure at UND, President Kennedy was a corporate CFO and member of Congress.

Total AF (including Foundation available funds) measured nearly $4.2 billion at FYE 2019. AF-to-operating expense measured nearly 100% at FYE 2019, and therefore does not pose an asymmetric risk despite the current equity market volatility.

Pro forma, inclusive of the series 2020 plan of finance, CU has just under $1.9 billion of debt outstanding, including notes payable and capital leases. The series 2020A-1, series 2020A-2, and series 2020B-1 VRDBs are expected to be supported by SBPAs from TD Bank N.A. Pro forma maximum annual debt service (MADS) is $139 million. Pro forma MADS coverage based on fiscal 2019 results is 4.0x and does not pose an asymmetric risk.

In addition to the sources of information identified in Fitch's applicable criteria specified below, this action was informed by information from Lumesis.

REFERENCES FOR SUBSTANTIALLY MATERIAL SOURCE CITED AS KEY DRIVER OF RATING

The principal sources of information used in the analysis are described in the Applicable Criteria.

ESG CONSIDERATIONS

The highest level of ESG credit relevance, if present, is a score of 3. This means ESG issues are credit-neutral or have only a minimal credit impact on the entity(ies), either due to their nature or to the way in which they are being managed by the entity(ies). For more information on Fitch's ESG Relevance Scores, visit www.fitchratings.com/esg.

RATING ACTIONS

ENTITY/DEBT	RATING			PRIOR
University of Colorado (CO)	LT IDR	AA+ Rating Outlook Stable	Affirmed	AA+ Rating Outlook Stable
• University of Colorado (CO) /General Revenues/1 LT	LT	AA+ Rating Outlook Stable	Affirmed	AA+ Rating Outlook Stable
• University of Colorado (CO) /Self-Liquidity/1 ST	ST	F1+	Affirmed	F1+

VIEW ADDITIONAL RATING DETAILS

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APPLICABLE CRITERIA

U.S. Public Finance College and University Rating Criteria (pub. 26 Mar 2020) (including rating assumption sensitivity)

Public Sector, Revenue-Supported Entities Rating Criteria (pub. 27 Mar 2020) (including rating assumption sensitivity)

ADDITIONAL DISCLOSURES

Dodd-Frank Rating Information Disclosure Form

Solicitation Status

Endorsement Policy

ENDORSEMENT STATUS

University of Colorado Regents (CO)	EU Endorsed

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MOODY'S
INVESTORS SERVICE

Rating Action: Moody's assigns A3 and enhanced Aa2 to University of Northern Colorado's (CO) Series 2019A; outlook stable

18 Jul 2019

New York, July 18, 2019 -- Moody's Investors Service has assigned an A3 underlying and Aa2 enhanced rating to University of Northern Colorado, CO's (Greeley, Colorado) proposed $32.8 million Institutional Enterprise Revenue Refunding Bonds Taxable Series 2019A (fixed rate, maturing 2031). The bonds will be issued by the Board of Trustees for the University of Northern Colorado. The outlook on the underlying rating and enhanced ratings is stable. We maintain underlying ratings on approximately $139 million and enhanced ratings on approximately $133 million of outstanding debt.

RATINGS RATIONALE

The underlying A3 rating reflects University of Northern Colorado's (UNC) role as a mid-sized regional public university, with relatively moderate direct debt leverage and no additional debt plans. The university operates in a fiercely competitive student market, which has pressured its operations recently. UNC is in the midst of a transition in strategic plans, winding down a multi-year, sizable investment in recruitment and programming enhancements, now planning for enrollment and net tuition right-sizing under the leadership of a new president. While UNC did experience some success from its recent strategic plan, with enrollment stability and favorable net tuition growth, significant expense growth constrained cash flow benefits. Both operations and financial cushion deteriorated with substantial multi-year use of cash reserves and cash flow, coupled with rising financial aid needs and limited gift support.

Weak operations are expected through fiscal 2020, though a campus-wide focus on expense efficiencies will limit larger deficits. Additional rating pressure stems from historically limited operating and capital support from State of Colorado (Aa1 stable issuer rating), as well as elevated exposure to the state's underfunded pension liability, though state-enacted pension reforms during fiscal 2018 have decreased the magnitude of future potential expense pressure.

The Aa2 enhanced rating and stable outlook are derived from the structure and mechanics of the Colorado Higher Education Enhancement Program, which is based on the State of Colorado's current rating and outlook.

RATING OUTLOOK

The stable outlook reflects our expectations of operating cash flow margins between 6-8%, debt service coverage above 1.0x, and limited use of liquidity through fiscal 2020. It also incorporates our expectation UNC will achieve balanced operations in fiscal 2021, with a return to measured growth in financial reserves.

The stable outlook for the enhanced rating is based on the state's current stable long-term outlook.

FACTORS THAT COULD LEAD TO AN UPGRADE

-Underlying rating: Sustained move to markedly stronger operation performance; material growth in unrestricted liquidity

-Enhanced rating: Upgrade in the State of Colorado rating

FACTORS THAT COULD LEAD TO A DOWNGRADE

-Underlying rating: Failure to maintain debt service coverage of at least 1.0x; continued use of reserves further deteriorating liquidity position

-Enhanced rating: Deterioration in credit quality of the State of Colorado rating

LEGAL SECURITY

All of UNC's debt (Series 2011A, 2014A, 2015A, 2016A, 2018A and 2018B, collectively, the parity bonds) is

secured by a pledge that includes net revenues of certain auxiliary enterprise facilities (housing, dining, and certain student recreational facilities), certain mandatory student fees, 10% of net tuition revenue, as well as indirect cost recoveries (overhead received for research grants and contracts) and extended studies revenue. The fiscal 2018 net pledged revenue was $42.3 million, which is a limited 20% of the university's Moody's adjusted operating revenues of $213 million.

The Series 2019A bonds will be secured by the state intercept program. The intercept program currently covers the Series 2011A, 2014A, 2015A, 2016A and 2018B bonds. Colorado's higher education intercept program is categorized as an unlimited advance. Should the university fail to provide sufficient funds for debt service, the trustee is required to notify the state treasurer on the business day immediately prior to the debt service payment date. The treasurer is required to remit funds to the trustee in immediately available funds of the state. The treasurer recovers the debt service payment from the university's fee-for-service funds, as well as from unpledged tuition revenue.

USE OF PROCEEDS

Proceeds of the Taxable Series 2019A bonds are expected to be used to refund all or portions of the outstanding Series 2011A bonds and to pay costs of issuance.

PROFILE

The University of Northern Colorado is a four-year university located in Greeley, Colorado, which is located one hour north of the Denver Metropolitan Area. UNC offers undergraduate and graduate programs among its five colleges. In fiscal 2018, the university recorded operating revenues of $213 million and in fall 2018 enrolled 11,179 full-time equivalent (FTE) students.

METHODOLOGY

The principal methodology used in the underlying rating was Higher Education published in May 2019. The principal methodology used in the enhanced rating was State Aid Intercept Programs and Financings published in December 2017. Please see the Rating Methodologies page on www.moodys.com for a copy of yhese methodologies.

REGULATORY DISCLOSURES

For ratings issued on a program, series or category/class of debt, this announcement provides certain regulatory disclosures in relation to each rating of a subsequently issued bond or note of the same series or category/class of debt or pursuant to a program for which the ratings are derived exclusively from existing ratings in accordance with Moody's rating practices. For ratings issued on a support provider, this announcement provides certain regulatory disclosures in relation to the credit rating action on the support provider and in relation to each particular credit rating action for securities that derive their credit ratings from the support provider's credit rating. For provisional ratings, this announcement provides certain regulatory disclosures in relation to the provisional rating assigned, and in relation to a definitive rating that may be assigned subsequent to the final issuance of the debt, in each case where the transaction structure and terms have not changed prior to the assignment of the definitive rating in a manner that would have affected the rating. For further information please see the ratings tab on the issuer/entity page for the respective issuer on www.moodys.com.

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S&P Global
Ratings

RatingsDirect®

Board of Trustees of the University of Northern Colorado
University of Northern Colorado; Public Coll/Univ - Unlimited Student Fees; School State Program

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Board of Trustees of the University of Northern Colorado
University of Northern Colorado; Public Coll/Univ - Unlimited Student Fees; School State Program

Credit Profile		
Board of Trustees of the University of Northern Colorado, Colorado		
University of Northern Colorado, Colorado		
Univ of Northern Colorado ser 2007A		
Long Term Rating	A-/Stable	Current

Rationale

S&P Global Ratings long-term and underlying rating on the Board of Trustees of the University of Northern Colorado's debt outstanding, issued for the University of Northern Colorado (UNC) is 'A-'. The outlook is stable.

We assessed UNC's enterprise profile as strong with steady retention and student quality metrics and a historically growing enrollment profile that is currently experiencing some pressure. We assessed UNC's financial profile as adequate with good financial management policies on monitoring strategic goals and a manageable debt burden, offset by declining, but still sufficient, available resources, and consistent operational deficits on a full-accrual basis. We believe these combined credit factors lead to an indicative stand-alone credit profile of 'bbb+'. As our criteria indicate, the final rating can be within one notch of the indicative credit level given peer comparisons. In our opinion, the 'A-' rating better reflects our view of UNC's comprehensive enterprise profile, student demand metrics, and balance sheet ratios that are more consistent with its similarly rated peer institutions.

The rating reflects our assessment of UNC's:

- History of full-time equivalent (FTE) enrollment increases, though some pressure is anticipated over the near term;
- Experienced senior management team that is currently undergoing some transition; and
- Manageable maximum annual debt service (MADS) burden of 4.2%.

Partly offsetting the above strengths, in our view, are UNC's:

- Recent track record of full-accrual operating deficits as the university executes its long-term sustainability plan, with expectations for continued operating deficits over the near-term;
- History of deteriorating available resources, though they remain adequate for the rating, and we expect available resources should begin to stabilize going forward; and
- Limited fundraising history relative to peers, though the university recently completed its first campaign in a number of years and is working to improve fundraising.

The 'AA' long-term rating on some of UNC's previously issued bonds is based solely on the university's participation in the Colorado Higher Education State Aid Intercept Program. For more information on the state intercept program, see our report published May 17, 2018, on RatingsDirect.

The 2014A bonds, which we rate, are secured by an irrevocable lien on net revenue of the auxiliary facilities system, which includes a broad mix of revenue from various auxiliary facilities, and a subordinated lien on up to 10% of tuition revenue. In addition, the bond benefits from a pledge of additional revenue, including indirect cost recoveries and net extended studies revenue, which were not available to the prior obligations. At the time of issuance the series 2014A debt was issued on a subordinate basis to prior obligations, however; the board's series 2018A issuance entirely refunded the 2008A bonds, which was the last remaining prior obligation, and therefore all debt currently outstanding is on parity. In addition to series 2014A fixed-rate bonds, which we rate, the university has series 2015, 2016A, 2018A, 2018B, and 2019A institutional enterprise revenue bonds.

UNC is located in Greeley, approximately one hour north of Denver, and is one of three comprehensive state universities in Colorado, along with the University of Colorado and Colorado State University. The university offers graduate and undergraduate degree programs in five colleges. Management reports the university is known for its undergraduate education and business programs, consistent with its history as a normal (teaching) school.

Outlook

The stable outlook reflects our view that UNC's operating margins will continue to be negative and that financial resources will remain stable during the outlook period. Though enrollment may be pressured over the near term, we anticipate the university will continue to actively manage operating expenses so that operating margins continue to show improvement. The rating continues to reflect our view of the university's manageable debt burden.

Downside scenario

We could consider negative rating action in the next two years if UNC's available resources or operating margins continue to deteriorate beyond current levels to levels more commensurate with a lower rating or with persistent enrollment declines that lead to further operating pressure.

Upside scenario

We do not anticipate taking a positive rating action in the next two years given the university's continued expectation for full-accrual operating deficits; however, we would positively view an increase in available resources to levels that are commensurate with a higher rating, operating performance that is near break-even on a full-accrual basis, and enrollment stability.

Enterprise Profile

Industry risk

Industry risk addresses our view of the higher education sector's overall cyclicality and competitive risk and growth through application of various stress scenarios and evaluation of barriers to entry, levels and trends of profitability, substitution risk, and growth trends observed in the industry. We believe the higher education sector represents a low

credit risk when compared with other industries and sectors.

Economic fundamentals

In our view, UNC is mostly regional with about 79.6% of students from Colorado. As such, the Colorado GDP per capita anchors our assessment of UNC's economic fundamentals.

Market position and demand

After increasing modestly in fall 2017, the university's total FTE enrollment declined approximately 1.4% to 11,179 in fall 2018. Management has budgeted for an enrollment decline of about 4% for undergraduate FTE and 6.8% for graduate FTE in fall 2019, given the highly competitive environment for students. Historically the university has been focused on enrollment growth, but with new leadership we believe the university has shifted more from a growth model to focus more on student success. It also is working on setting realistic enrollment, retention and discounting targets to maximize net tuition revenue. We believe UNC has some demand flexibility, with average selectivity but good retention for a regional public university. UNC maintained three-year averages of approximately 90% and 71% for selectivity and retention, respectively.

Student quality is near the national average with UNC reporting ACT scores of 22.4 for fall 2018. The graduation rate has remained relatively static over the past few years, with six-year graduation rates of 47.3%; graduation rates are comparable with those of peer institutions. According to management, UNC's competitors include Metropolitan State University, University of Colorado at Colorado Springs, University of Colorado at Boulder, Colorado State University, and the Colorado Mesa University.

The university recently completed its first fundraising campaign and raised $54 million, which was in excess of its $50 million goal. We consider UNC to have a historically limited fundraising capability relative to peers, with an alumni participation rate of 3.1% in fiscal 2018, in our opinion. However, management does remain focused on improving and has seen increases in contributions the last three fiscal years.

Management and governance

The responsibility for overall management and determination of university policy and standards is vested with the board of trustees. The president of the university is appointed by the board and is responsible to the board for governance and management of the university. Though management has historically been stable, it has been undergoing some transition. A new president began in July 2018 following the retirement of the university's previous long-standing president. In addition, in 2019 a new provost was named, and we understand that a number of the university's deans anticipate retiring or moving on in the near term. The chief financial officer has been at the university since 1999 and in the role since 2010, which we believe lends stability to the overall credit profile.

The university recently contracted with Huron Consulting to assist it in developing and implementing Strategic Enrollment and Student Success (SESS) plan and organizational design work. The university has a well-developed strategic framework that outlines nine core plans. Each core plan has supporting plans in place that articulate steps that need to be taken. Planning for the university's next strategic plan begins in fall 2019--we understand student success will be a key area of emphasis. Management also operates under a master plan, which is anchored to its academic portfolio and enrollment plan.

Financial Profile

Financial management policies

The university has formal policies for endowment, investments, and debt. It operates according to a five-year strategic plan. Although it lacks a formal reserve and liquidity policy, it reviews reserves and liquidity at every quarterly meeting. UNC meets standard annual disclosure requirements. The financial policies assessment reflects our opinion that despite areas of risk, the organization's overall financial policies are not likely to hamper its ability to pay debt service. Our analysis of financial policies includes a review of the organization's financial reporting and disclosure, investment allocation and liquidity, debt profile, contingent liabilities, and legal structure and a comparison of these policies with those of comparable providers.

Financial performance

UNC has experienced operating deficits since fiscal 2013 with margins for fiscal 2016, fiscal 2017, and fiscal 2018 at negative 3.6%, negative 5.1%, and negative 4.8%, respectively. Management attributes these deficits primarily to historical declines in enrollment while it experienced a need to reinvest in strategic priorities in support of long-term sustainability. The university expects to end fiscal 2019 with another operating deficit on a full-accrual basis. However, the deficit is projected to be better than 2018 levels due extensive expense control measures that include increasing the staff contribution toward health insurance, modifying the employee or dependent tuition waiver benefit, and offering a faculty retirement incentive. In addition, the management eliminated 80 vacant, exempt, classified, and faculty positions. Also, 11 positions were eliminated through layoffs of exempt and classified employees. The fiscal 2020 budget reflects anticipated continued improvement in operating performance, with a decline in tuition revenue from enrollment declines being offset by a healthy increase in state support and continued expense management. While on an accrual basis UNC maintains consistently negative operating margins, on a cash basis the school has achieved positive operating results for the past several fiscal years. The university is focused on gradually increasing its revenue through growth in net tuition through its strategic enrollment and success plan, and is also evaluating ways to minimize expenses over the near term.

State support in Colorado combines tuition reimbursement, or college opportunity funds (COF), and fee for service payments. Each Colorado Student receives a COF stipend to use at any public, non-vocational institution and some private colleges in the state; the Colorado Legislature sets the amount each year. State support (including COF's and fee-for service payments) totaled $39.6 million in fiscal 2018, relatively flat from the previous year. State funding increased to about $42.5 million in fiscal 2019 and management expects total state support to increase a healthy 13% in fiscal 2020, though increases going forward will likely be more modest.

Net tuition revenue, the university's main revenue source has increased in recent years, but we note that college opportunity funds are included in the tuition line item in the audit. If we were to strip out the COF funding from tuition and include fee for service funds, state support would equal approximately 15.5% of adjusted operating expenses in fiscal 2018 and, and student related funds would be approximately 63%.

Available resources

Available resources for fiscal 2018 remain somewhat depressed after having weakened considerably over the past

couple of years- but it remains consistent with the rating, in our view. Available resources (as measured by adjusted unrestricted net assets) totaled $32.6 million based on fiscal 2018 results, down from $43.5 million in fiscal 2017 as a result of the university's commitment to increase spending on programs and infrastructure to support long-term sustainability. Available resources as of fiscal year-end 2018 were equal to 12.1% of adjusted operating expenses and 22.0% of pro forma debt, which we consider light. Total cash and investments at the university were stronger, and equaled $61.4 million as of the end of fiscal 2018. Though these levels have been pressured in recent years, management anticipates cash to remain relatively stable over the near term, and no other material declines are expected.

UNC has a foundation with $133 million of total net assets as of June 30, 2018, although this amount is almost entirely restricted. Asset allocation as reported in the foundation's audited 2018 financial report is about 44.5% equities, 13.1% fixed income, 28.9% alternative investments, 2.3% student managed funds, and 6.9% held in long-term trusts by others. The annual spending rate of the endowment funds is computed at 4% for funds with a market value greater than the value of the initial gift and 1% for funds with a market value less than the value of the initial gift for the fiscal year; the payout is transferred to temporarily restricted funds and is available for spending by the university; we view this spending rate as fairly typical.

Debt and contingent liabilities

UNC had $152.551 million in debt as of fiscal year-end 2018, which included bonds and capital leases. Since fiscal year end 2018, the university issued series 2018A, 2018B, and 2019A bonds, which fully refunded the series 2008, 2011B, and 2011A debt. After adjusting for the refunding activity, the university's pro forma debt in fiscal 2018 was $151.7 million, equivalent to a manageable MADS burden of 4.2%, relative to fiscal 2018 adjusted operating expenses. Since the series 2011B bonds were refunded, all university debt is now fixed rate and publicly issued. Management reports the university does not have any new debt plans during our outlook period.

We believe the university has long-term contingent liability risk exposure associated with pension obligations due to the low 56% funded ratio of the state division trust fund, as of Dec. 31, 2018. The SDTF is a cost-sharing multiple-employer defined benefit pension plan administered by the Public Employees' Retirement Association of Colorado (PERA). The university also sponsors the optional retirement plan-the defined contribution plan for retirement. The university contributes to these plans through a fringe benefit rate approved by the cost allocation services division of the U.S. Department of Health and Human Services. The university's annual contribution for the defined benefit plan totaled $6.7 million in fiscal 2018,

Total pension expense and OPEB expense for fiscal 2018 was $48.5 million and $388,000, respectively. We understand the state recently adopted pension reform in its 2018 legislative session, which in our view, should be sufficient to prevent further decline of the funded ratio within the current outlook period. We will monitor the university's pension obligations and its ability to fund this liability given the plan's weak funding level. In our view, the rating could be pressured if the pension funding level deteriorates. For more information on the plan, please see the debt and contingent liabilities section in the state report (published July 4, 2019) on RatingsDirect). For more information on Colorado SB 18-200, please see the report published May 21, 2018 on RatingsDirect.

University of Northern Colorado, Colo.: Enterprise And Financial Statistics

University of Northern Colorado, Colo.: Enterprise And Financial Statistics (cont.)

	--Fiscal year ended June 30--					--Medians for 'A' rated Public Colleges & Universities--
Enrollment and demand	**2019**	**2018**	**2017**	**2016**	**2015**	**2018**
Headcount	13,437	13,399	13,087	12,216	12,050	MNR
Full-time equivalent	11,179	11,337	11,126	9,796	9,791	12,854
Freshman acceptance rate (%)	90.90	89.30	90.60	89.60	90.10	74.30
Freshman matriculation rate (%)	26.00	32.30	35.50	32.20	35.50	MNR
Undergraduates as a % of total enrollment (%)	76.10	75.30	76.50	77.20	78.60	83.30
Freshman retention (%)	72.10	71.50	70.70	71.50	69.30	77.30
Graduation rates (six years) (%)	47.30	47.70	48.40	47.60	46.40	MNR
Income statement						
Adjusted operating revenue ($000s)	N.A.	255,568	243,329	231,019	222,522	MNR
Adjusted operating expense ($000s)	N.A.	268,382	256,344	239,638	235,601	MNR
Net adjusted operating income ($000s)	N.A.	(12,814)	(13,015)	(8,619)	(13,079)	MNR
Net adjusted operating margin (%)	N.A.	(4.77)	(5.08)	(3.60)	(5.55)	(1.00)
Estimated operating gain/loss before depreciation ($000s)	N.A.	4,413	4,382	8,836	3,990	MNR
Change in unrestricted net assets (UNA; $000s)	N.A.	(59,317)	(37,613)	(9,931)	(132,600)	MNR
State operating appropriations ($000s)	N.A.	N.A.	N.A.	N.A.	N.A.	MNR
State appropriations to revenue (%)	N.A.	N.A.	N.A.	N.A.	N.A.	21.00
Student dependence (%)	N.A.	68.70	68.70	69.90	69.90	52.40
Health care operations dependence (%)	N.A.	N.A.	N.A.	N.A.	N.A.	MNR
Research dependence (%)	N.A.	9.00	9.20	9.10	9.80	MNR
Endowment and investment income dependence (%)	N.A.	0.20	0.20	0.20	0.30	0.70
Debt						
Outstanding debt ($000s)	N.A.	152,551	157,465	139,825	137,125	169,922
Proposed debt ($000s)	N.A.	51,985	N.A.	N.A.	N.A.	MNR
Total pro forma debt ($000s)	N.A.	151,701	N.A.	N.A.	N.A.	MNR
Pro forma MADS	N.A.	11,311	N.A.	N.A.	N.A.	MNR
Current debt service burden (%)	N.A.	4.44	4.65	4.83	4.69	MNR
Current MADS burden (%)	N.A.	4.49	4.66	4.51	4.59	4.50
Pro forma MADS burden (%)	N.A.	4.21	N.A.	N.A.	N.A.	MNR
Financial resource ratios						
Endowment market value ($000s)	N.A.	87,023	82,782	76,855	81,492	115,187
Related foundation market value ($000s)	N.A.	132,994	120,665	113,393	119,914	138,714
Cash and investments ($000s)	N.A.	61,426	82,892	56,324	62,332	MNR
UNA ($000s)	N.A.	(188,110)	(128,793)	(91,180)	(81,249)	MNR
Adjusted UNA ($000s)	N.A.	32,574	43,505	42,657	52,335	MNR

University of Northern Colorado, Colo.: Enterprise And Financial Statistics (cont.)

Cash and investments to operations (%)	N.A.	22.90	32.30	23.50	26.50	46.30
Cash and investments to debt (%)	N.A.	40.30	52.60	40.30	45.50	100.60
Cash and investments to pro forma debt (%)	N.A.	40.50	N.A.	N.A.	N.A.	MNR
Adjusted UNA to operations (%)	N.A.	12.10	17.00	17.80	22.20	31.30
Adjusted UNA plus debt service reserve to debt (%)	N.A.	21.80	28.10	31.00	38.70	57.30
Adjusted UNA plus debt service reserve to pro forma debt (%)	N.A.	22.00	N.A.	N.A.	N.A.	MNR
Average age of plant (years)	N.A.	17.90	16.70	15.90	15.30	14.60
OPEB liability to total liabilities (%)	N.A.	1.20	N.A.	N.A.	N.A.	MNR

N.A.--Not available. MNR--Median not reported. MADS--Maximum annual debt service. Total adjusted operating revenue = unrestricted revenue less realized and unrealized gains/losses and financial aid. Total adjusted operating expense = unrestricted expense

Ratings Detail (As Of September 18, 2019)

Board of Trustees of the University of Northern Colorado, Colorado

University of Northern Colorado, Colorado

Northern Colorado Univ Brd of Trustees (University of Northern Colorado) institutional ent rev rfdg bnds (University of Northern Colorado)

Long Term Rating	AA/Stable	Current
Underlying Rating for Credit Program	A-/Stable	Current

Series 2011A

Underlying Rating for Credit Program	A-/Stable	Current
Long Term Rating	AA/Stable	Current

MOODY'S
INVESTORS SERVICE

Rating Action: Moody's Assigns Baa1 Underlying and Aa2 Enhanced to Western State Colorado Univ's Bonds; Outlook Stable

05 Aug 2016

New York, August 05, 2016 -- Issue: Auxiliary Facilities Revenue Refunding Bonds Series 2016; Rating: Baa1; Rating Type: Underlying LT; Sale Amount: $30,000,000; Expected Sale Date: 08/23/2016; Rating Description: Revenue: Public University Broad Pledge;

Issue: Auxiliary Facilities Revenue Refunding Bonds Series 2016; Rating: Aa2; Rating Type: Enhanced LT; Sale Amount: $30,000,000; Expected Sale Date: 08/23/2016; Rating Description: Revenue: Public University Broad Pledge;

Summary Rating Rationale

Moody's Investors Service has assigned a Baa1 underlying rating and Aa2 enhanced rating to Western State Colorado University's (WSCU) planned $30 million of fixed rate Auxiliary Facilities Revenue Refunding Bonds, Series 2016 (final maturity 2039). We have affirmed the Baa1 underlying and Aa2 enhanced ratings on the university's outstanding rated bonds. The outlook for the underlying and enhanced ratings is stable.The underlying Baa1 rating incorporates Western State's relatively small scope of operations as a regional public university in the central Rocky Mountain region. The rating acknowledges enrollment growth arising from strategic investments in capital and programming, relatively strong cash flow margins driven by rising net tuition revenue, and a fixed rate debt profile with no additional debt plans. Offsetting challenges include stiff competition for students, very high leverage and capital spending relative to expenses, historically limited operating and capital support from the State of Colorado (issuer rating Aa1 stable), weak gift support to offset high reliance on student charges, and a large unfunded pension liability.The Aa2 enhanced rating is based on the structure and mechanics of the Colorado Higher Education Enhancement Program, which is derived from the State of Colorado's current rating. The program outlook is stable.

Rating Outlook

The stable outlook reflects expectations of continued improvements in operating cash flow leading to strengthened debt service coverage, and moderate growth in flexible reserves. The stable outlook further refects our expectations that WCSU will make budgetary adjustments in response to enrollment fluctuations given the very competitive student market.The stable outlook for the enhanced rating is based on the state's current stable long-term outlook.

Factors that Could Lead to an Upgrade

Improvement of the leverage profile, either through resource or revenue growth

Sustained improvement in operating cash flow leading to stronger debt service coverage

For the enhanced rating, upgrade of the Colorado Higher Education Enhancement Program rating

Factors that Could Lead to a Downgrade

Increase in leverage

Sustained decrease in cash flow and debt service coverage of less than 1 time

Reduction in liquidity

For the enhanced rating, downgrade of Colorado Higher Education Enhancement Program rating

Legal Security

WSCU planned Series 2016 are on parity with prior debt in the security interest on auxiliary revenues. Prior bondholders additionally benefit from the 10% pledge of tuition, and 2016 bondholders are expected to benefit

from that once enterprise status is restored. For FY 2016, the net revenues will not include 10% of the university's tuition revenues that have been historically been included (see Recent Developments). Since the university expects that the 10% tuition pledge will be reinstated beginning in fiscal 2018, we have not made a rating distinction. Once the tuition pledge is reinstated it remains in place until the bonds mature.The FY 2015 pledged revenues of $8.1 million cover parity debt service of $5.4 million by 1.5 times. There is no legally pledged debt service reserve fund.All of WSCU's revenue bonds benefit from the presence of the Colorado Higher Education Enhancement Program (intercept) rating, which is categorized as an unlimited advance. If the university fails to provide sufficient funds, the paying agent is required to notify the state treasurer on the business day immediately prior to the debt service payment date. The treasurer is then required to remit funds to the paying agent, in immediately available funds of the state, the amount necessary to make the debt service payment.

Use of Proceeds

Proceeds of the Series 2016 Bonds are planned to be used to refund all or portions of the Series 2009 and 2010A bonds, and to pay cost of issuance.

Obligor Profile

Western State Colorado University is a four-year public university located in Gunnison, Colorado within Colorado's central Rocky Mountains. Among its academic offerings, WSCU's Professional Land and Resource Management (PLRM) program is one of only eight accredited programs in the US. In FY 2015, the university recorded operating revenues of $44 million and served 2,326 FTE students.

Methodology

The principal methodology used in the underlying rating was Global Higher Education published in November 2015. The principal methodology used in the enhanced rating was State Aid Intercept Programs and Financings: Pre and Post Default published in July 2013. Please see the Ratings Methodologies page on www.moodys.com for a copy of these methodologies.

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