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Ratings

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# Ohio State University; Auxiliary - System; Public Coll/Univ - Unlimited Student Fees

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# Ohio State University; Auxiliary - System; Public Coll/Univ - Unlimited Student Fees

| Credit Profile | | |
|---|---|---|
| US$72.0 mil gen receipts rfdg bnds ser 2017A dtd 12/21/2017 due 12/01/2029 | | |
| *Long Term Rating* | AA/Stable | New |
| **Ohio St Univ, various gen receipts bonds ser 2003B, 2005A, 2009A, 2010A, 2010C, 2010D, 2011A** | | |
| *Long Term Rating* | AA/Stable | Affirmed |

## Rationale

S&P Global Ratings assigned its 'AA' long-term rating to Ohio State University's (OSU) $71.855 million series 2017 general receipts bonds (multiyear debt issuance program). In addition, S&P Global Ratings affirmed its 'AA' long-term ratings, and where applicable 'AA/A-1+' dual rating, on various series of tax-exempt and taxable, (senior secured) general receipts bonds also issued by OSU. The 'A-1+' short-term rating component of the dual rated bonds reflects our opinion of the liquidity provided directly by OSU.

S&P Global Ratings also affirmed its 'AA-' long-term rating on OSU's $337.96 million series 2013A tax-exempt special-purpose general receipts bonds.

The outlook on all rated issues is stable.

These rating actions affect approximately $3.2 billion of outstanding general receipt (including senior lien obligations and special purpose general receipts obligations) bonds as of the university's latest fiscal year ended June 30, 2017.

The 'AA' long-term ratings reflect our view of OSU's extremely strong enterprise profile and very strong financial profile, which leads to an initial indicative stand-alone credit profile rating of 'aa+'. However, a higher-than-average debt burden, and potential additional debt issuance, compared with medians for the rating category and peer comparisons led us to issue a final indicative stand-alone credit profile rating of 'aa' and final bond issue rating of 'AA'.

The 'AA-' rating on the 2013A tax-exempt debt reflects our view of the bond's narrower security, which consists of a pledge of revenues from the university's student housing, dining, and recreational sports facilities. The pledge is subordinate to the one securing bonds backed by the university's general receipts pledge. The subordination arises because the revenues securing the series 2013A bonds constitutes part of the general receipts pledge and, therefore, OSU would first have to use these revenues to satisfy bonds secured by the general receipts pledge, if needed, before using them to satisfy the obligation of the special-purpose general receipts bonds. We understand in fiscal 2017 the pledged revenue backing these bonds totaled $213.6 million and produced debt service coverage of 8.5x on maximum annual debt service (MADS) of $25.1 million.

OSU's extremely strong enterprise profile recognizes its role as the state's flagship university of the state's higher educational system that consists of 14 public universities. In addition, OSU's breadth and depth is most evident in its academic offerings that include 200 undergraduate majors, 157 master degree programs, 121 doctoral degrees, and over 12,000 different courses as of fall 2017. Its main campus in Columbus is the third-largest individual campus in the U.S., with fall 2017 full-time equivalent (FTE) enrollment of 59,837. Total fall 2017 FTE enrollment for all of OSU's campuses is 61,016 a 1% increase over the prior year's enrollment of 60,701. OSU operates under an excellent common governance and management structure for all campuses with multiple levels of oversight. Also, reflected in the enterprise profile are OSU's superior economic fundamentals operating in a state that has a GDP per capita that trails the U.S. slightly that, nevertheless, has maintained S&P Global Rating's second-highest rating for more than two decades. OSU's financial profile continues to reflect our view of its excellent financial management policies, respectable financial performance, and a slightly elevated, but sound, debt burden with excellent available resources in relationship to its debt.

The long-term rating on the senior-secured general receipts bonds reflects our assessment of OSU's:

- Role as Ohio's leading public flagship university with extensive and comprehensive programs, strong demand for its undergraduate, graduate, and professional programs and top research institution;
- Solid financial operating performance on an adjusted full-accrual basis in most years and much stronger performance on a cash basis, inclusive of the results of University Health System, and its principal affiliate--The Ohio State University Wexner Medical Center, with revenues that constitute 50.9% of the university's $6.6 billion total adjusted operating revenues in fiscal 2017;
- Ongoing state operating support from Ohio that accounts for 7.2% of total fiscal 2017 adjusted operating revenue, and has been relatively stable, supplemented by limited capital support that typically is about $50 million annually;
- Excellent available resources for the rating, with adjusted unrestricted net assets of $4.2 billion as of fiscal year end 2017 up 30% over the prior year's $3.2 billion and representing 63.8% of fiscal 2017 adjusted operating expenses and 131.1% of outstanding debt; and
- Very favorable philanthropic support with its "But for Ohio State" capital campaign concluded in 2016, nine months ahead of schedule, and raised over $3.0 billion surpassing its $2.5 billion goal while total advancement receipts (gifts, endowment contributions and private capital support) increased 12.4% from 2016 to $260 million in fiscal 2017.

Credit factors that offset the preceding credit strengths include:

- The university's increased debt leverage having increased its debt by one-third to $3.2 billion at fiscal year-end 2017 from $2.3 billion at fiscal year-end 2012;
- Limited tuition flexibility as OSU's resident tuition and room and board charges have essentially been flat for the past several years, although we understand in fall 2017 a 5.5% increase was realized by locking in the current tuition rate, associated with a 6% increase allowed for fall 2017, for an incoming freshman's normal four year graduation period (The Ohio State Tuition Guarantee); and
- The recordation of a slight, ( negative 0.4%), adjusted operating deficit on a full accrual basis in fiscal 2017 and uncertainties about the sustainability of robust financial performance by the University Health System given constrained reimbursement from payors, increasing capital costs, and costs associated with health reform and increasing competition.

The university's long-term capital plan from 2010 to 2015 totaled $2.03 billion and incorporated $1.6 billion of debt issuance with about $1.5 billion of debt actually issued over that period. The largest component of the prior long-term capital plan was the $1.1 billion medical center expansion that began in 2010 and was fully operational in 2015. In fiscal 2016 and 2017, the university spent $473.4 million and $435.9 million, respectively, on capital while long-term debt declined slightly to $3.2 billion at fiscal year-end 2017 from $3.3 billion at fiscal year-end 2015. As of June 30, 2017, the university had 451 projects either in design, under construction or in the conceptual phase moving toward design that totaled $992 million.

Securing the majority of the university's debt is a pledge of, and first lien, on the university's gross general receipts, which include tuition, fees, and other student charges; hospital sales and services and auxiliary enterprise revenues; faculty practice revenues; and unrestricted government grants and contracts. We understand proceeds from the series 2017 bonds will be used to advance refund series 2008A bonds that mature after Dec. 1, 2018, and pay issuance costs. At the end of fiscal 2017, general receipts revenues totaled $4.7 billion up from $4.3 billion in the prior year. In March 2016, OSU issued its $600 million taxable general receipts bonds that were part of a simultaneous plan to launch an authorized $1 billion multiyear debt issuance program that has been authorized by the state through June 30, 2018, of which the series 2016A issue can be considered the first tranche of that program. The program is designed to facilitate future debt issuance by realizing certain efficiencies through advance standardization of offering documents and providing more timely access to markets when favorable economic/market opportunities arise.

We understand through the end of the current fiscal year the university has approximately $400 million of authorized but unissued debt capacity available to it under its multi-year debt issuance program. We also understand the university is in the planning stages for its next 7 to 10 year capital spending plan expected to be completed in spring 2018. Recently, the university announced a plan to construct a new hospital tower and ambulatory center with an estimated project cost of more than $2 billion with construction expected to be completed in 2025 according to a local press report. University officials indicate that at the present time there are no specific future debt issuance plans.

In our opinion, there is a moderately high likelihood of extraordinary state support based on our government-related entities (GRE) criteria. As a result, our GRE rating and the stand-alone rating are equivalent with the university's senior rated debt, and we rate both 'aa'.

## Outlook

The stable outlook reflects our expectation that OSU's enrollment trend will remain favorable, adjusted operating margins on a full accrual basis should return to their positive norm, and additional debt issuance will be minimal if any while available resources continue to strengthen. The outlook also assumes health care patient utilization and related operations will remain sound resulting in continued positive financial performance on a full accrual basis.

### Upside scenario

Continued enrollment increases, a return to healthy financial operating surpluses and a significant increase in available resources combined with a modest reduction in debt could lead to consideration of a higher rating. Also, because health care now accounts for approximately 51% of revenue, consideration of a higher rating would be predicated upon continuation of a favorable patient utilization trend and health care financial operating margins remaining strong, thereby offsetting some of the university's academic revenue constraints. Furthermore, a higher rating could be considered based on a stronger economy or a political environment, which substantially increased state funding.

### Downside scenario

We could consider a negative rating action over the outlook period if OSU's enrollment unexpectedly declines significantly, financial operating performance on a full accrual basis remains negative or if available resources weaken. Additional debt incurrence without a commensurate increase in available resources could result in a lower rating. Also, we could consider a negative rating action during the outlook period based on a weakened economy or a political environment that substantially reduced state funding.

Enterprise Profile

### Industry risk

Industry risk addresses the higher education and health care's 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 to each industry. We believe the higher education and health care services industries represent a low-to-intermediate credit risk when compared with other industries and sectors.

### Economic fundamentals

In our view, OSU has good geographic diversity; however, Ohio residents accounted for approximately 75.2% of the total fall 2017 headcount enrollment for all campuses. As such, our assessment of OSU's economic fundamentals is anchored by Ohio's GDP per capita of $49,317.

### Market position and demand

OSU is both Ohio's land grant institution and a flagship public university for the state's 14 public universities. It was founded in 1870 under the provisions of the Morrill Land Grant Act. Today, OSU is a comprehensive and major research institution with a headcount enrollment of 66,444 students in fall 2017. We understand OSU's enrollment places it among the top five of the largest universities in the country. It is also physically one of the largest universities in the country with 1,281 structures located on 16,146 acres with an estimated replacement value exceeding $13.7 billion and a capitalized cost at fiscal year-end 2017 of $4.9 billion. In addition to the main campus in Columbus, which operates under a perpetual full-time enrollment cap of 42,000 in-state undergraduate students, OSU also has five regional campuses: Lima; Mansfield; Marion; Newark; and Wooster, Ohio. Because of a number of exceptions, the university has not reached its Columbus cap. As the state's land grant institution, OSU also operates numerous agricultural-related facilities and programs and receives state support for those operating activities. The university also has one of the largest athletic departments in the country with 36 varsity sports. The department is self-supporting and generated $181 million in revenue in fiscal 2017.

Since fall 2012, OSU has realized FTE enrollment increases each year with steady improvement in student quality indicators. Typically, slightly more than three-quarters of all students are undergraduates, and the rest are graduate and professional students. Ohio residents represent 75% of the university's total enrollment, and a current objective is to increase the number of out-of-state and students from foreign countries to 30% from the current 25%.

OSU provides comprehensive undergraduate, graduate, and professional degrees in a wide array of academic programs. Major professional programs include law, medicine, dentistry, optometry, and veterinary medicine. OSU also has a large research base, with total university expenditures on research of $858.4 million in fiscal 2017 up 1.3% from the prior year's $847.1 million. The largest single sponsor of research at the university is the National Institutes of

Health, but the university's research program demonstrates sponsor diversity and includes nonfederal sponsors as well.

The university claims it operates one of the most comprehensive health sciences campuses in the country with The Ohio State University Wexner Medical Center serving as center of its varied health operations, which include a large teaching hospital in Columbus, a cancer hospital, and other health-related facilities. Medical center revenue (excluding OSU Physicians-the faculty practice plan) totaled $2.7 billion in fiscal 2017 representing an 8.0% increase over the prior year's revenue.

For fall 2017, OSU received 47,758 freshman applications at its Columbus campus, which is up 6.6% from the prior year's 44,821 applications. The acceptance rate in fall 2017 was approximately 51%, and in general, the matriculation rate, based on a five-year annual average, is approximately 36% per year. Retention rates have also been improving, and OSU reported a very good freshman retention rate of 94.2% for the 2017 to 2018 academic year. Management reports that on-campus housing facilities (42 residence hall buildings that can house 14,310 students) are full and expected to remain so even with 3,200 net new beds coming on line this summer when a sophomore residence requirement begins.

Student quality, as measured by standardized test scores, has been steadily improving; we consider the fall 2017 average ACT score for entering freshman very good at 29.2--a record high.

### Management and governance

President Michael V. Drake is serving his fourth year as OSU's president. President Drake has focused on strengthening the university's management and operations since his arrival at OSU; for example, key tenet of the five-year 2020 Vision Plan is the realization of $200 million in administrative efficiencies and another $200 million in new resource generation. The university remains focused on achieving key pillars of its strategic plan including excellence in faculty as measured by competitive research funding and faculty recognition and teaching--having started a teaching and learning institute last year. Also, senior management is focused on implementing more outcome-based measures and the university continues to benchmark itself against the top 20 public universities in the country. We understand a search is on for a new CEO for the health system after the prior CEO resigned under pressure in May 2017. Also we understand the CEO of the James Cancer Hospital and Solove Research Institute of OSU Wexner Medical Center resigned in mid-November 2017. In addition, it is expected a search will begin for a new research director due to the planned retirement later this month of the long-serving current director. Furthermore, the university's senior vice president and chief financial officer (CFO), Geoffrey Chatas, announced he is departing in February of 2018 to become the next chief operating officer at Georgetown University, his alma mater. We expect a search will be launched shortly to fill that position, and in the interim, Deputy Chief Financial Officer and Treasurer Michael Papadakis will serve as interim CFO. We believe these developments are reflective of the difficulties inherent in managing such a large and complex organization but nevertheless believe that the underlying management and governance structure of OSU remains sound and that all vacancies will be filled in a timely basis with competent leaders.

### Government-related entity profile

In accordance with our criteria for GREs, we based our view of a moderately high likelihood of extraordinary government support on our assessment of OSU's strong link with Ohio, which reflects the state's history of regular operating support, periodic capital support for academic facilities, ability to appoint the university's governing board, and relatively active role in overseeing the financial health of its public universities. In addition, we based our assessment on OSU's important role in the state's economy compared with that of other state GREs, given its position as the flagship university in the state, designated land-grant institution, and large research base with an indirect contribution to economic development in the state. The university is a state educational institution created pursuant to the state constitution and statutes.

## Financial Profile

### Financial management policies

OSU has formal policies for endowment, investment management, operating funds liquidity management, derivatives, and debt. It operates according to a five-year strategic plan, and has a formal reserve liquidity policy. The system meets standard annual disclosure requirements. The financial policies assessment reflects our opinion that, while there may be some areas of risk, the organization's overall financial policies are not likely to negatively affect its future 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 comparable providers.

### Financial performance

OSU's financial operations are characterized by positive adjusted operating results on a full accrual basis in most years and excellent available resource levels--the latter improved by favorable investment returns in fiscal 2017 and monetization of non-core assets. The university's financial statements include The Ohio State University and its hospitals and clinics, The Ohio State University Foundation, various research centers, and 13 independent legally separate corporations for which the university is legally accountable. Fiscal years 2017 and 2016 adjusted operating revenues were approximately $6.6 billion and $6.1 billion, respectively. Health care activities were the largest single source of operating revenue in both fiscal years 2017 and 2016, accounting for about 51% of the university's overall adjusted operating revenues in each year. Fiscal 2017 operations (on an adjusted basis) produced a slight deficit of $28.7 million after recording a prior year surplus of $99.0 million. However, for fiscal 2017 on a cash basis, adding back depreciation of $381.8 million, results were positive $352.9 million consistent with prior year's results.

OSU's operating expenses in fiscal years 2017 included the university's annually required contribution of $315.6 million a 5.6% increase over fiscal 2016's required contribution of $298.7 million for its participation in state-level retirement plans.

In fiscal 2017, key university revenues consisted of state appropriations (7.2% of adjusted operating revenue), OSU Health System and other health care income (50.9%), net tuition dependence (16.9%), governmental grants and contracts (6.6%), auxiliary revenues (4.7%), and private gifts and grants (2.8%). OSU also has a substantial research enterprise as discussed above.

State operating appropriation to OSU increased 3.7% to $473.1 million in fiscal 2017 from $456.1 million in fiscal 2016. OSU also received $68.3 million of capital appropriation in fiscal 2017, $36.4 million in fiscal 2016 and $40.9 million in fiscal 2015. For fiscal 2018, OSU has budgeted a state operating appropriation of $476.8 million. For the state's fiscal



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biennium ending June 30, 2018, the university anticipates receiving a capital appropriation of $97.4 million.

The Ohio State University Health System demonstrated strong operating performance in fiscal years 2017 and 2016, with an operating margin of $349 million and $318 million, respectively. Management attributes this strong financial performance in large part due to increased patient volumes, a strong payor mix and ongoing expense control. Also, the performance of the James Cancer Hospital--one of 20 nationally designated comprehensive cancer centers and for which Medicare reimbursement is exempt from its prospective payment system rates contributes to the favorable financial results. On a combined basis, the Ohio State University Health System staffs 1,049 inpatient beds and its Wexner Medical Center hospitals serve more than 61,000 adult inpatients and more than 1.7 million outpatients per year.

### Available resources

In our opinion, OSU has a very firm financial cushion for a public university. OSU closed fiscal 2017 with cash and investments of $7.4 billion, up 12.2% over the prior year's balance of $6.6 billion, or 112.8% of adjusted fiscal 2017 operating expenses and 231.7% of outstanding debt of $3.2 billion. Adjusted unrestricted net assets were lower at $4.2 billion equivalent to 63.8% of adjusted operating expenses and 131.1% of outstanding debt. We understand, at present, the university doesn't have any specific additional debt plans over the next two years but continues to assess market conditions and its other funding sources to determine the optimal time for considering additional debt issuance. The board of trustees had previously authorized up to $1 billion in financing through June 30, 2018, however, included in this total is the $600 million of debt that was issued in 2016.

The university closed fiscal 2017 with a long-term investment pool of $4.3 billion up 17.6% over the prior year's $3.6 billion. Management reports that the return for the long-term investment pool was 14.5% for fiscal 2017 compared with a return of negative 3.43% for fiscal 2016 and 3.8% for fiscal 2015. The market value of the long term investment pool as of Sept. 30, 2017, was $5.0 billion. The long-term investment pool as of Sept. 30, 2017, is invested in a diversified mix of asset classes, the largest of which was equities at 37.7% followed by absolute return and hedge funds at 28.3%, real assets at 14.3%, private equity at 11.7%, and other at 8.0% (includes fixed income and cash). In addition to its long-term investment pool, which provides a spending distribution, the university maintains substantial operating reserves, which consist of highly liquid investments.

For fiscal 2010 and beyond, OSU adopted a new spending policy that will use 4.5% of a seven-year market value average. In previous years, it used 4.25% of the five-year market value average for existing endowments and 4% for newer endowments. In fiscal years 2017, 2016, and 2015, OSU transferred about $166.6 million (4.6%), $145.8 million (4.0%) and $142.2 million (3.9%), respectively, to current funds for spending.

The university concluded its "But for Ohio State" fundraising campaign at the end of September 2016, that went public in 2012, realizing over $3.0 billion in gifts, surpassing its goal of $2.5 billion by $500 million and nine months ahead of schedule. We believe OSU has significant fundraising potential, with a large base of loyal alumni. The alumni-participation rate as of fiscal 2017 was 14.9%.

### Debt and contingent liabilities

OSU's outstanding debt at fiscal year ended June 30, 2017, totaled $3.2 billion (inclusive of capital leases and notes). Of the total, 81% is fixed rate and 19% variable-rate demand bonds (VRDBs). The university has historically had a commercial paper (CP) program; however, no CP notes are currently outstanding. OSU, as of fiscal year end 2017, has approximately $588 million of outstanding variable-rate demand bonds (VRDBs), also secured by general receipts and supported by its own liquidity. Investments that are available to support the university's liquidity for the VRDBs consist primarily of cash, rated money market funds, publicly traded domestic equities, and U.S. Treasury and agency securities. S&P Global Ratings monitors the quality and availability of these funds on a monthly basis.

While not currently anticipated over the next two years we understand the university could issue its remaining $400 million authorization under its multiyear debt issuance program. If the full authorization is issued, pro forma debt could rise to about $3.6 billion. As OSU issued its series 2016A bonds with a long-term bullet maturity with principal due in 2046 and has previously issued $500 million of debt with a bullet maturity for principle amortization not due until 2111 we consider (smoothed) MADS of $324.2 million slightly elevated for the rating category at 4.9% of fiscal 2017 adjusted operating expenses. The university has never entered into any interest rate swaps for any of its variable-rate debt.

OSU's facilities are extensive and require considerable renewal and expansion. However, we still consider the average age of plant moderate at 10.7 years, and consistent with other 'AA' rated public universities. OSU plans to use fundraising results for physical facilities as well, especially proceeds from its last capital campaign and ongoing fundraising.

The university's debt policy establishes a debt limit to keep debt service at less than 5% of operating expenses. Historically, the state carried all OSU-related unfunded liabilities for pensions and other postemployment benefits. However, with the implementation in fiscal 2015 of GASB 68 OSU recorded a $2.8 billion pension liability. At year end fiscal 2017 the net pension liability was $3.6 billion. The university has various operating leases in place, but the amounts are modest compared with debt service on bonded debt.

In early July of 2017, the university entered into a 50-year lease and concession agreement with an unaffiliated party, Ohio State Energy Partners, to manage its on-campus energy systems including its electricity, chilled water/cooling, steam/heating and natural gas. The university realized a substantial up-front payment of $1.1 billion that is being invested in the long-term investment pool and that will be used to support various academic needs.

In September 2012, OSU closed on a 50-year lease and concession agreement with Queensland Investment Corp. (QIC) for its parking facilities. Upon the expiration of the lease the parking facilities will revert back to the university. Pursuant to the terms of this agreement, parking revenues will flow to the private operator rather than the university and, in return, the university received a $483 million up-front payment from QIC. The university defeased $75 million of debt related to the parking facilities with internal funds in November 2012. The university is investing the up-front payment proceeds in its long-term investment pool. The university is using the earnings over the 50-year horizon for various purposes such as faculty initiatives and research support, transportation and sustainability initiatives, student scholarships, and support of a university arts district with specific amounts for each category up to the total $483 million realized from the privatization.

## Ohio State University, Ohio Enterprise And Financial Statistics

| | --Fiscal year ended June 30-- | | | | | Medians for 'AA' rated Public Colleges & Universities |
|---|---|---|---|---|---|---|
| | **2018** | **2017** | **2016** | **2015** | **2014** | **2016** |
| **Enrollment and demand** | | | | | | |
| Headcount | 66,444 | 66,046 | 65,184 | 64,868 | 63,964 | MNR |
| Full-time equivalent | 61,016 | 60,701 | 59,790 | 59,455 | 58,661 | 32,506 |
| Freshman acceptance rate (%) | 55.6 | 60.4 | 56.6 | 60.7 | 55.5 | 69.3 |
| Freshman matriculation rate (%) | 32.1 | 33.8 | 36.7 | 36.9 | 40.8 | MNR |
| Undergraduates as a % of total enrollment (%) | 79.0 | 79.3 | 79.4 | 79.0 | 79.0 | 77.7 |
| Freshman retention (%) | 94.2 | 94.2 | 93.8 | 93.7 | 92.4 | 86.0 |
| Graduation rates (six years) (%) | 82.5 | 83.6 | 83.1 | 83.5 | 83.2 | MNR |
| **Income statement** | | | | | | |
| Adjusted operating revenue ($000s) | N.A. | 6,560,068 | 6,089,942 | 5,692,477 | 5,312,027 | MNR |
| Adjusted operating expense ($000s) | N.A. | 6,588,740 | 5,990,936 | 5,458,627 | 5,237,298 | MNR |
| Net adjusted operating income ($000s) | N.A. | (28,672) | 99,006 | 233,850 | 74,729 | MNR |
| Net adjusted operating margin (%) | N.A. | (0.44) | 1.65 | 4.28 | 1.43 | 1.46 |
| Estimated operating gain/loss before depreciation ($000s) | N.A. | 353,081 | 457,332 | 576,046 | 341,636 | MNR |
| Change in unrestricted net assets (UNA; $000s) | N.A. | 210,025 | 181,713 | (1,825,789) | 582,344 | MNR |
| State operating appropriations ($000s) | N.A. | 473,061 | 456,063 | 435,824 | 440,924 | MNR |
| State appropriations to revenue (%) | N.A. | 7.2 | 7.5 | 7.7 | 8.3 | 19.4 |
| Student dependence (%) | N.A. | 21.6 | 21.8 | 22.5 | 22.8 | 41.8 |
| Health care operations dependence (%) | N.A. | 50.9 | 51.1 | 48.5 | 46.6 | MNR |
| Research dependence (%) | N.A. | 6.6 | 6.8 | 7.6 | 8.2 | MNR |
| Endowment and investment income dependence (%) | N.A. | 1.9 | 1.6 | 1.6 | 1.8 | 0.8 |
| **Debt** | | | | | | |
| Outstanding debt ($000s) | N.A. | 3,206,676 | 3,279,095 | 2,743,351 | 2,515,108 | 698,540 |
| Proposed debt ($000s) | N.A. | 82,787 | N.A. | N.A. | N.A. | MNR |
| Total pro forma debt ($000s) | N.A. | 3,206,676 | N.A. | N.A. | N.A. | MNR |
| Pro forma MADS | N.A. | 324,189 | N.A. | N.A. | N.A. | MNR |
| Current debt service burden (%) | N.A. | 3.12 | 3.40 | 2.89 | 3.04 | MNR |
| Current MADS burden (%) | N.A. | 3.75 | 4.35 | 3.89 | 3.73 | 3.60 |
| Pro forma MADS burden (%) | N.A. | 4.92 | N.A. | N.A. | N.A. | MNR |
| **Financial resource ratios** | | | | | | |
| Endowment market value ($000s) | N.A. | 1,062,321 | 977,173 | 1,047,985 | 1,057,810 | 748,837 |
| Related foundation market value ($000s) | N.A. | 877,261 | 763,332 | 757,158 | 710,961 | 606,279 |
| Cash and investments ($000s) | N.A. | 7,430,229 | 6,622,986 | 5,994,558 | 5,606,326 | MNR |

## Ohio State University, Ohio Enterprise And Financial Statistics (cont.)

| | --Fiscal year ended June 30-- | | | | | Medians for 'AA' rated Public Colleges & Universities |
|---|---|---|---|---|---|---|
| | 2018 | 2017 | 2016 | 2015 | 2014 | 2016 |
| UNA ($000s) | N.A. | 638,685 | 428,660 | 246,947 | 2,072,736 | MNR |
| Adjusted UNA ($000s) | N.A. | 4,204,429 | 3,223,652 | 2,377,290 | 2,072,736 | MNR |
| Cash and investments to operations (%) | N.A. | 112.8 | 110.6 | 109.8 | 107.0 | 54.7 |
| Cash and investments to debt (%) | N.A. | 231.7 | 202.0 | 218.5 | 222.9 | 159.6 |
| Cash and investments to pro forma debt (%) | N.A. | 231.7 | N.A. | N.A. | N.A. | MNR |
| Adjusted UNA to operations (%) | N.A. | 63.8 | 53.8 | 43.6 | 39.6 | 31.9 |
| Adjusted UNA plus debt service reserve to debt (%) | N.A. | 131.1 | 98.3 | 86.7 | 82.4 | 89.7 |
| Adjusted UNA plus debt service reserve to pro forma debt (%) | N.A. | 131.1 | N.A. | N.A. | N.A. | MNR |
| Average age of plant (years) | N.A. | 10.7 | 10.5 | 10.1 | 11.9 | 12.9 |
| OPEB liability to total liabilities (%) | N.A. | N.A. | 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 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 December 4, 2017)

| | | |
|---|---|---|
| Ohio St Univ | | |
| *Long Term Rating* | AA-/Stable | Affirmed |
| Ohio St Univ PCU_USF | | |
| *Long Term Rating* | AA/Stable | Affirmed |
| Ohio St Univ PCU_USF | | |
| *Long Term Rating* | AA/Stable | Affirmed |
| Ohio St Univ PCU_USF | | |
| *Long Term Rating* | AA/Stable | Affirmed |
| Ohio St Univ PCU_USF | | |
| *Long Term Rating* | AA/Stable | Affirmed |
| Ohio St Univ PCU_USF | | |
| *Long Term Rating* | AA/Stable | Affirmed |
| **Ohio St Univ var rate dem gen receipts ser 1997, 2005B** | | |
| *Long Term Rating* | AA/A-1+/Stable | Affirmed |
| **Ohio St Univ var rate dem gen receipts ser 1999B and 2010E** | | |
| *Long Term Rating* | AA/A-1+/Stable | Affirmed |
| **Ohio St Univ var rate dem gen receipt ser 2001** | | |

| Ratings Detail (As Of December 4, 2017) (cont.) | | |
|---|---|---|
| *Long Term Rating* | AA/A-1+/Stable | Affirmed |
| **Ohio St Univ var rate dem gen reciepts bnds ser 2003C, 2008B** | | |
| *Long Term Rating* | AA/A-1+/Stable | Affirmed |



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