



July 10, 2020

Alternative Plan to Address the University of Arizona COVID-19 Budget Shortfall

By Eller College Faculty

Executive Summary

The faculty of the Eller College of Management offers an alternative plan for addressing the large COVID-19 budget shortfall at the University of Arizona. Our plan revolves around a bond issue coupled with the use of some cash reserves. While there may be some challenges in implementation, this plan would allow the University of Arizona to cover the entire budget shortfall. Debt and cash will allow executive management at the University of Arizona to lessen the immense pain associated with this unforeseen circumstance (i.e., COVID-19) and smooth it out as a manageable burden over a 20- to 30-year period.

The remainder of our report provides the details supporting our proposal, and additional information will be made available upon request. Highlights from our analyses follow:

- Bond market conditions have improved substantially since March and April. Long-term borrowing is now very attractive with historically low rates.
- Many other universities are raising debt to cover COVID-19 losses. A recent Bloomberg article reported that universities have raised seven times as much funding from bond offerings in 2020 compared with the same period in 2019.
- We estimate that a \$200 million bond offering would require annual repayments of \$12.5 million per year for the next 20 years and a one-time issuance cost less than \$2 million. Absorbing the yearly \$12.5 million repayment in our \$2.2 billion budget is much more manageable than absorbing \$250 million in one year.
- Based on our analysis of 43 bond issuances by universities totaling \$15.8 billion over the past two months, our credit rating would likely not change. In the unlikely event our rating did change, current market rates suggest the associated interest rate increase would be less than 0.1%.
- Other universities face similar bond issuance constraints, but they have found creative solutions to issue more than \$30 billion in bonds in the first half of 2020. Given the extraordinary benefits that debt financing would provide in these challenging times, the University of Arizona should use whatever means necessary to follow other universities' lead by issuing bonds. The Debt Management Guidelines of the University of Arizona provide "management flexibility" in offering debt under "unforeseen circumstances" given approval by ABOR and potentially the Arizona State Legislature. The COVID-19 pandemic is a material unforeseen circumstance. The university could also find creative ways to use debt financing to fund ongoing capital projects that are currently being funded, at least partially, with unrestricted funds.
- Cash reserves could be used in conjunction with a bond offering to cover budget shortfalls. We believe using a portion of our cash reserves to offset the furlough and pay cut plan is reasonable and will have a manageable impact.
- The furlough and pay cut plan only covers about 30% of the projected shortfall and is causing widespread issues with morale and retention of our best faculty, staff, and graduate students, which will lead to significant long-term economic costs to the University of Arizona.

The faculty of the Eller College strongly encourage University of Arizona administration to consider using debt and cash to bridge the gap caused by the pandemic.

Background and Situation Overview

We acknowledge that the COVID-19 pandemic presents enormous financial challenges to the University of Arizona. Faced with a potential \$250 million budget shortfall, our University is currently set to implement a furlough and pay cut program and several other difficult cuts to balance the budget. This proposal presents an alternative method for overcoming the deficits: using debt markets and cash reserves to finance the shortfall. The debt markets may not have been a feasible or attractive option in the early months of the pandemic because these markets were functioning poorly, but recent improvements in market conditions have made a bond issue an attractive option. This bond issue could be large enough in scale to cover our anticipated losses. This solution does not eliminate the pain from the shortfall, but does allow us to smooth it evenly across many years (as described in detail below) and avoid the sharp cuts that will inflict more significant long-term damage to the university.

Bonds have traditionally been a preferred solution for obtaining funding during unexpected, short-term cash-flow shocks. Many organizations have adopted this strategy to mitigate the effects of lost revenue stemming from the pandemic. For example, U.S. corporations issued \$1.43 trillion in long-term bonds in the first half of 2020 compared with \$1.42 trillion in the entirety of 2019 (SIFMA). Similarly, borrowing by universities has spiked. When the University of Michigan raised nearly \$1 billion in early June, Bloomberg noted that the \$23 billion raised by colleges and universities at that point in 2020 was seven times the amount from the corresponding period in 2019.¹ We have identified over \$7 billion in additional university bond offerings in the few weeks since Michigan's offering. In short, the Higher Education Municipal Bond Market has been extremely active in the past two months as many of our peers use debt to finance COVID-19 losses.

We acknowledge that there are costs associated with using debt to finance a budget shortfall. Below, we discuss several aspects of the plan including bond market conditions, direct issuance costs, future interest payments, and credit rating implications. We also discuss constraints on debt issuance and potential solutions as well as the possibility of using cash reserves to cover budget losses. Finally, we consider the costs of attempting to address the budget shortfall by cutting costs within a single fiscal year using the furlough and pay cut plan along with other painful cuts. As we weigh the costs and benefits of each plan, the Eller College faculty believe that financing the deficit with a bond issue and cash reserves is better for preserving the University of Arizona's long-term health and sustainability.

Bond Market Conditions

The COVID-19 pandemic had a sharply negative impact on debt markets and caused credit spreads to spike. In mid-March, experts expressed concern that bond markets would freeze, leading to a "credit crunch" similar to the 2008 Financial Crisis. The Federal Reserve has concentrated its efforts on stabilizing bond markets by directly participating in the corporate and municipal bond markets. The bond markets have stabilized and improved, and the spike in credit spreads that made borrowing unattractive in March and April has subsided.

¹ This Bloomberg article is available at: <https://www.bloomberg.com/news/articles/2020-06-09/college-bond-sale-spree-grows-with-university-of-michigan-deal>.

Overall, borrowing rates for organizations similar to ours are now near historic lows. Our peer universities' recent bond offerings have included 30-year bonds with interest rates between 2.60% to 2.80%. The combination of low risk-free rates and reasonable credit spreads results in extremely attractive long-term borrowing rates. As a specific example, a recent \$590 million bond offering by the University of Missouri was composed of taxable revenue bonds. This offering included a weighted average maturity of 11.4 years with a weighted average yield of 1.95%. The University of Utah's recent \$105 million bond issue included some tax-exempt bonds and, on average, achieved a 1.39% yield with a 13.0-year maturity. These low borrowing costs represent an opportunity to secure necessary financing at a minimal cost.

Issuance Costs, Issuance Design, and Principal and Interest Payments

Issuing bonds carries costs. There are direct costs that are incurred when the bond is issued. A study by the Haas Institute estimates an average issuance cost of 0.91% for issues greater than \$10 million. Using this figure, the direct cost for a \$200 million issue would be \$1.82 million. However, the cost of issuing a \$200 million dollar bond may be smaller given economies of scale.

If we view a bond offering as a method for spreading the shorter-term COVID-19 shock across multiple years, a structure similar to the University of Utah's recent offering could be attractive. They issued bonds that mature each year between 2021 and 2040. The principal is back-loaded (e.g., the deal includes \$1.755 million of principal for 2021 bonds and \$8.650 million for 2040 bonds). Early interest payments will be highest because the principal balance remains large, and principal payments grow as interest payments shrink over time. In this sense, their bond offering shares characteristics with a residential mortgage.

We examined a bond offering structure that produces similar combined interest and principal payments each year over a 20-year term. Using information from market interest rates for higher education and an AA credit rating, we project that the University of Arizona can secure \$200 million in financing today with annual repayments of \$12.25-\$12.50 million per year over the next 20 years (details are provided in Appendix A). We can determine the best ways to improve operational efficiency to cover this annual cost, but the overall impact of a \$12.5 million debt payment within the \$2.2 billion budget should be much more manageable than trying to absorb a \$250 million shock in a single year.

This proposed bond issue would not cause the University of Arizona to approach debt capacity limits. Based on the Annual Assessment of Debt Capacity, the university's annual debt service is approximately \$107.3 million which is about 5.0% of total expenses. Adding an additional \$12.3 million per year would result in \$119.6 million of annual debt service, such that the resulting ratio of 5.6% of expenses is still well below the ABOR policy and State Statute maximum limit of 8.0%.

The specific payoff structure outlined above is provided to illustrate how the debt offering can help smooth out the impact of the shock. Given today's interest rates, including an even longer payoff term (such as 30 years, or even the 40-year term used this month by the University of California System) seems attractive. Regardless of the exact structure, smoothing the shock gives us the ability to maintain stability and avoid sharp cuts that can have a long-term negative impact.

Credit Rating Impact

The University of Arizona carries an Aa2 rating with Moody's. An adverse change in the university's credit rating could affect future borrowing costs. Both the likelihood of a credit rating change and the effect of a change on borrowing rates are important for gauging the economic importance of this issue.

We examined 43 bond offerings by universities that occurred on or after May 1, 2020 (details are provided in Appendix B). These bond offerings totaled \$15.8 billion with an average offering size of \$368 million. The median Moody's credit rating of these 43 universities is Aa2 with a range of Baa1 to Aaa. Of the 43 offerings, two resulted in downgrades by Moody's (Seton Hall and Virginia Commonwealth). Three offerings resulted in revising a Stable outlook to a Negative outlook (Virginia Commonwealth, Illinois, and Drexel). Moody's affirmed the university's credit rating in 39 of 43 deals. Given the University of Arizona's size, its Stable outlook, and the clear reason for needing additional financing (i.e., losses directly traceable to COVID-19), we expect the University of Arizona's credit rating to remain at Aa2.

We also examined the Bloomberg yield curves for Higher Education Municipal bonds by credit rating. These rates are based on actual market trades of bonds within each category. If a downgrade occurs, we would almost surely move from Aa2 to Aa3. The current 10-year yields for these two categories are 1.18% and 1.27%, respectively, and the 30-year yields are 2.14% and 2.20%. These market-based estimates suggest less than 10 basis points (i.e. 0.10%) of effect on future borrowing costs from a credit rating downgrade.

Overall, the risk and cost of a credit rating downgrade appear to be minimal given bond market conditions and other universities' recent experiences. Rating agencies seem to be acknowledging the relatively short-term nature of the COVID-19 pandemic on university finances and opting not to alter their long-term outlooks on the financial prospects of higher education.

Feasibility of Bond Offering

We are aware of potential restrictions on the use of bond proceeds for operational expenses. Other universities are also subject to such restrictions, yet we have observed a very large increase in university bond offerings in the first half of 2020. Universities seem to be finding creative ways of generating cash from bond issues.

The Debt Management Guidelines for the University of Arizona provide special debt issuance authority to the university in special circumstances (p. 7 of the Debt Management Guidelines):

While adherence to these Guidelines is required in applicable circumstances, UA recognizes that changes in the capital markets, University programs and other unforeseen circumstances may produce situations that are not covered by these Guidelines or require modifications or exceptions to achieve the Guideline goals. In these cases, management flexibility is appropriate provided that any required specific authorization is obtained from the Board and, if necessary pursuant to statute, from the Arizona State Legislature.

The COVID-19 pandemic and its consequences for the University of Arizona clearly constitute "unforeseen circumstances" that more than justify a departure from normal debt issuance restrictions "in order for the University of Arizona to maintain its mission of providing excellent educational and research programs" (p. 3 of the Debt Management Guidelines). Issuing bonds rather than facing deep, painful cuts is in the best interests of the long-term health of the University of Arizona, ABOR, and the State of Arizona. In compliance with the Debt Management Guidelines, executive management at the University of Arizona should work with the Arizona Board of Regents (ABOR) to obtain authorization for a bond issuance to fund losses from the COVID-19 pandemic.

Even in the absence of using this “unforeseen circumstances” authority to issue debt, existing capital projects provide an avenue to raise cash to help with the shortfall. Spending on capital projects is occurring on our campus, and we have been using some unrestricted funds to pay for capital projects and renovations. Any of these current cash expenditures on capital projects could be replaced by debt financing, which frees up working capital. Working with ABOR to increase financial flexibility could also be helpful. For example, the Board of Curators for the University of Missouri had previously approved a new building and financing with a \$121 million in bond financing and \$100 million in unrestricted university funds. To increase the university's bond offering size, the Board removed a requirement that the building be partly funded by unrestricted university funds and approved more debt financing for that building project. The University of Missouri was thus able to keep \$100 million in cash that would have been spent on the building to help with general expenses.

To gain perspective on the potential scale of capital project spending that could be covered by a new bond issue, we examined recent spending at the University of Arizona. We currently lack complete information on ongoing capital projects, so we used information from the University of Arizona’s Capital Improvement Plan Fiscal Years 2021-2023 (dated September 2019).² We examined capital projects with “LOCAL” or “MIXED” funding sources on pp. 51-54 of that document. Shifting project financing from local to bond funding would allow us to retain unrestricted cash. Many of the mixed funding projects could also include local financing, although we currently lack specific information on the funding of these projects. Given that our data are from the 2019 fiscal year and that we lack some information, our numbers are meant to provide a general sense of scale rather than a specific dollar recommendation. We are happy to help with the development of more specific recommendations as we move forward.

As of the end of fiscal year 2019, the Estimated Total Costs of ongoing projects funded with “LOCAL” financing was \$84.0 million. Another \$217.6 million in projects were funded with “MIXED” sources. ABOR may provide us with the flexibility to shift the funding of these projects to bonds, as these capital projects qualify for debt financing under the current set of restrictions. Some of the costs for these projects have already been spent, and it is possible that ABOR would only authorize new debt to finance future cash outflows for these projects. The estimated unspent costs are \$34.3 million for “LOCAL” funding and \$118.5 million for “MIXED” funding projects. These existing capital projects may provide us with the required “need” for debt financing and support a bond offering under the current rules. In addition, the projects listed in the Capital Improvement Plan are limited to \$100,000 and higher. The university spends money on many smaller projects that could qualify as capital improvements or renovations (such as the university’s current effort to improve technology in many classrooms as we prepare for new teaching methods in the fall). It would be more than worth our time to examine our recent and current spending to identify each of the relatively small \$5,000 or \$25,000 expenditures that would qualify as capital spending. The sum of these small capital projects could help us to support a larger bond offering.

We reiterate that a bond offering without corresponding capital projects may be feasible with the cooperation of ABOR and the state legislature given COVID-19 is an unforeseen circumstance. Even in the absence of this option, we may be able to support a large bond offering based on existing capital spending from unrestricted funds. In short, we recognize the constraints on debt issuance, but we believe that

² This document is available at:
<https://public.azregents.edu/Finance%20Capital%20and%20Resources/Item%20C%20UA%202021-2023%20CIP.pdf>.

finding a way to either relax the constraints or work creatively within the constraints is important for the University of Arizona to navigate the COVID-19 pandemic.

Cash Reserves

A complementary option to weather the projected budget shortfall is to use a portion of the University's cash and investments. As of June 26, 2020, the university had \$598.7 million in cash and investments.³ As our CFO Lisa Rulney has made clear, the University needs to maintain a healthy cash reserve because: (1) ABOR requires the University to hold a certain amount of cash-on-hand, and (2) the cash flows of the University are lumpy and most of the net cash inflows occur in August and January.

Given the exceptional circumstances we face, we believe using a portion of our cash reserves to offset the furlough and pay cut plan is reasonable and will have a manageable impact. While ABOR has established a threshold for a minimum number of days cash-on-hand, based on current projections and historical data, that threshold appears to be more of a desire than a requirement. The solid line in the below figure shows that current projections forecast 109 days cash-on-hand at the end of June 2021, seven days less than the current 116 day threshold, suggesting that our current plan acknowledges some wiggle room in the threshold.⁴ Historical data also shows that days cash-on-hand dipped to 58 during the financial crisis (and subsequently recovered).⁵ We expect our peer institutions' days cash-on-hand will also be affected by the pandemic, likely lowering Moody's median which our threshold is based on. Thus, from a threshold requirement perspective, there appears to be some flexibility to use our cash reserves.

Using some of our cash reserves to cancel the furlough and pay cut plan will have a manageable impact on our financial position. For comparison to current projections, the figure shows days cash-on-hand under two alternative scenarios. First, the dashed line in the figure shows the effect of canceling the furlough and pay cut plan. Doing so would cost approximately \$75 million, or almost \$7 million per month. Adopting this option would lower days cash-on-hand by 16 days as of June 2021, which is still far above financial-crisis levels. Second, the dotted line in the figure shows the joint effect of canceling the furlough and pay cut plan while raising \$200 million in debt.⁶ Under this scenario, days cash-on-hand increases by 26 days relative to our current projections, providing additional financial security entering the 2022 academic year.

Under either scenario, the University would be able to restore our financial position in the coming years. While canceling the furlough and pay cut plan without issuing debt would leave us under our days cash-on-hand target, we overcame a much larger deficit coming out of the 2008 Financial Crisis and the target itself may be flexible.

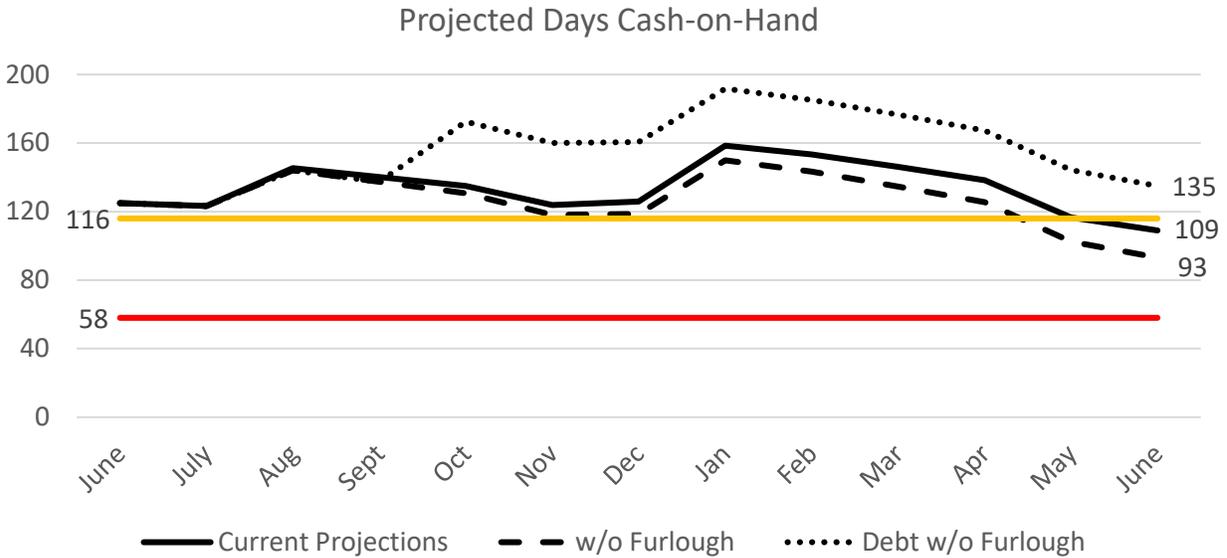
³ The numbers referenced in this report were obtained from a presentation CFO Lisa Rulney gave to the Strategic Planning and Budget Advisory Committee on July 1, 2020 available at:

<https://facultygovernance.arizona.edu/committee/34>.

⁴ The current projections in the figure come from CFO Rulney's "Operating Cash Trends" slide in the July 1, 2020 presentation. We use the numbers provided in that slide to estimate net operating cash flows for the year. We admit that this back of the envelope calculation has its limitations, and we would be happy to provide a more precise figure if given detailed data.

⁵ This number is from CFO Rulney's "FY20 Budget Summary—Days Cash-on-Hand" slide in the July 1, 2020 presentation.

⁶ For this scenario, we assume a \$200 million debt issuance that would close in October 2021.



Comparison with Furlough and Pay Cut Plan

The University of Arizona’s furlough and pay cut plan is expected to cover about \$75 million of the \$250 million shortfall. We are happy that the furlough plan was revised to protect employees at lower income levels. Despite this change, employees will still feel pain from the furlough and pay cut plan. We continue to worry about the plan's financial impact on employees who have special circumstances such as financially supporting loved ones.

Leaving the personal cost to employees aside, we in the Eller College believe that the long-term impact of the furlough and pay cut plan on the University will be very large and very negative. Three primary (and interconnected) effects are on retention, recruiting, and reputation:

- Retention:** Morale is low. Other universities have not followed with similar furlough plans (which presumably is related to the \$30 billion raised in bond markets).⁷ Outside offers are coming in, and our best and most active faculty are the most likely to receive these offers. People who have never considered leaving the U of A are now being tempted. Recruiting top-level senior replacements was already next to impossible, so retaining our best and brightest has always been our best strategy. If we lose our best researchers and teachers, the University of Arizona will feel this pain, and bear the associated real economic costs, for many years to come.
- Recruiting:** The furlough will affect our ability to recruit at both the junior and the senior levels. We are typically recruiting candidates who have multiple offers. Our outsized furloughs will be used against us by competing universities for years to come, and many high-quality potential colleagues will choose to go elsewhere to universities that placed less of the COVID-19 burden on faculty.

⁷ We aggregated information from 81 of our peer institutions, and none of these universities have implemented or announced furloughs or pay cuts that approach 20%.

- **Reputation:** Our colleagues at other universities have been frequently reaching out wondering exactly what is going on at the University of Arizona. We've heard the saying that "there's no such thing as bad publicity," but sticking out as the most extreme version of the furlough and pay cut plans does not help us in terms of our institutional reputation.

While retention was already covered above, we want to reiterate the simple, but significant and long-term cost of the morale issues caused by the furlough and pay cut plan. *People will leave. Many of our best and brightest.* And we will not be able to replace them with comparable colleagues due to the reputational concerns this leaves behind. Many of us love our colleagues, enjoy living in Tucson, and are proud to work at the University of Arizona. The furlough and pay cut plan, and the associated signal about the value the University places on its employees, threaten to disrupt all of that.

We also note that a smaller bond offering that directly replaces the savings from the furlough and pay cut plan would produce a minimal impact on the budget in future years. A \$75 million bond offering could be repaid with annual payments of about \$4.5 million per year over the next 20 years (i.e., 37.5% of the payments reflected in the \$200 million plan in Appendix A). That cost is incredibly low relative to the extremely large long-term costs of the current plan. It is also notable that the cost of the debt plan can be easily quantified. In contrast, it is difficult to estimate or reverse the large unintended damage of the current furlough and pay cut plan related to retention, recruiting, and reputation.

Offer to Help

Many faculty members in the Eller College are available to help in whatever ways we can. We have expertise in finance, budgeting, financial markets, accounting, and auditing. Please feel free to reach out.

Conclusion

We believe that using some combination of the cash and investment reserves and debt is a far better option than real economic costs the University will incur from losing their best faculty and staff from the furlough and pay cut plan. We look forward to your response, and standby to provide immediate assistance with next steps (e.g., ABOR and creditor communication) if you support the recommendations within this proposal.

Appendix A: Example of Bond Issue Design

Description of 20 bonds to be issued with total face value of \$200 million:

Maturity Date	Principal Amount	Yield
8/1/2021	\$8,520,000	0.677%
8/1/2022	\$8,620,000	0.807%
8/1/2023	\$8,720,000	0.953%
8/1/2024	\$8,820,000	1.154%
8/1/2025	\$8,920,000	1.284%
8/1/2026	\$9,020,000	1.512%
8/1/2027	\$9,120,000	1.602%
8/1/2028	\$9,320,000	1.666%
8/1/2029	\$9,520,000	1.766%
8/1/2030	\$9,720,000	1.866%
8/1/2031	\$9,920,000	1.966%
8/1/2032	\$10,120,000	2.113%
8/1/2033	\$10,320,000	2.191%
8/1/2034	\$10,520,000	2.234%
8/1/2035	\$10,720,000	2.246%
8/1/2036	\$11,020,000	2.272%
8/1/2037	\$11,320,000	2.311%
8/1/2038	\$11,620,000	2.349%
8/1/2039	\$11,920,000	2.617%
8/1/2040	\$12,220,000	2.607%

Schedule of cash flows for debt service:

Date	Principal Payment	Interest Payment	Total Payment
8/1/2021	\$8,520,000.00	\$3,740,241.67	\$12,260,241.67
8/1/2022	\$8,620,000.00	\$3,682,561.27	\$12,302,561.27
8/1/2023	\$8,720,000.00	\$3,612,997.87	\$12,332,997.87
8/1/2024	\$8,820,000.00	\$3,529,896.27	\$12,349,896.27
8/1/2025	\$8,920,000.00	\$3,428,113.47	\$12,348,113.47
8/1/2026	\$9,020,000.00	\$3,313,580.67	\$12,333,580.67
8/1/2027	\$9,120,000.00	\$3,177,198.27	\$12,297,198.27
8/1/2028	\$9,320,000.00	\$3,031,095.87	\$12,351,095.87
8/1/2029	\$9,520,000.00	\$2,875,824.67	\$12,395,824.67
8/1/2030	\$9,720,000.00	\$2,707,701.47	\$12,427,701.47
8/1/2031	\$9,920,000.00	\$2,526,326.27	\$12,446,326.27
8/1/2032	\$10,120,000.00	\$2,331,299.07	\$12,451,299.07
8/1/2033	\$10,320,000.00	\$2,117,463.80	\$12,437,463.80
8/1/2034	\$10,520,000.00	\$1,891,383.16	\$12,411,383.16
8/1/2035	\$10,720,000.00	\$1,656,327.86	\$12,376,327.86
8/1/2036	\$11,020,000.00	\$1,415,528.07	\$12,435,528.07
8/1/2037	\$11,320,000.00	\$1,165,128.82	\$12,485,128.82
8/1/2038	\$11,620,000.00	\$903,485.14	\$12,523,485.14
8/1/2039	\$11,920,000.00	\$630,552.79	\$12,550,552.79
8/1/2040	\$12,220,000.00	\$318,566.76	\$12,538,566.76

Appendix B: Recent Peer University Bond Issues

University	Date	Amount	Moody's Rating	Rating Chg	Outlook Chg
University of Missouri	5/1/2020	\$590,200,000	Aa1	No	No
Duke University	5/15/2020	\$1,279,255,000	Aa1	No	No
Purdue University	5/15/2020	\$112,140,000	Aaa	No	No
Emory University	5/19/2020	\$943,750,000	Aa2	No	No
Brown University	5/20/2020	\$300,000,000	Aa1	No	No
Marquette University	5/22/2020	\$150,000,000	A2	No	No
Northwestern University	5/22/2020	\$300,000,000	Aa1	No	No
University of Texas Sys	5/26/2020	\$401,870,000	Aaa	No	No
Emory University	5/27/2020	\$486,470,000	Aa2	No	No
Boston University	5/29/2020	\$200,000,000	Aa3	No	No
Stanford University	6/2/2020	\$750,000,000	Aaa	No	No
Yale University	6/4/2020	\$1,500,000,000	Aaa	No	No
Notre Dame	6/5/2020	\$155,000,000	Aaa	No	No
Princeton University	6/10/2020	\$500,000,000	Aaa	No	No
Seton Hall University	6/10/2020	\$112,220,000	Baa1	From A3	No
University of Michigan	6/12/2020	\$988,455,000	Aaa	No	No
Yale University	6/12/2020	\$194,530,000	Aaa	No	No
University of Utah	6/16/2020	\$104,750,000	Aa1	No	No
Virginia Commonwealth	6/16/2020	\$96,880,000	Aa3	From Aa2	Stbl to Neg
Ohio State University	6/17/2020	\$185,995,000	Aa1	No	No
Syracuse University	6/18/2020	\$339,355,000	Aa3	No	No
Indiana University	6/19/2020	\$99,860,000	Aaa	No	No
University of Illinois	6/22/2020	\$90,590,000	A1	No	Stbl to Neg
Univ of North Texas	6/23/2020	\$114,775,000	Aa2	No	No
North Carolina State U	6/23/2020	\$266,780,000	Aa1	No	No
University of Alaska	6/23/2020	\$54,585,000	Baa1	No	No
Miami University	6/25/2020	\$128,470,000	Aa3	No	No
Northeastern University	6/26/2020	\$403,480,000	A1	No	No
Tulane University	6/26/2020	\$187,770,000	A2	No	No
Univ of Pennsylvania	6/29/2020	\$300,000,000	Aa1	No	No
University of Colorado	7/1/2020	\$365,885,000	Aa1	No	No
Univ of California Sys	7/1/2020	\$2,318,755,000	Aa2	No	No
Drexel University	7/2/2020	\$262,845,000	A3	No	Stbl to Neg
Ferris State University	7/2/2020	\$39,255,000	A1	No	No
University of Iowa	Soon	\$32,800,000	Aa1	No	No
Temple University	Soon	\$177,500,000	Aa3	No	No
State Univ of New York	Soon	\$328,000,000	Aa3	No	No
Wichita State University	Soon	\$80,000,000	Aa3	No	No
Texas Tech University	Soon	\$293,000,000	Aa1	No	No
Rowan University	Soon	\$74,700,000	A2	No	No
Texas A&M University	Soon	\$167,000,000	Aaa	No	No
Auburn University	Soon	\$300,000,000	Aa2	No	No
University of Louisville	Soon	\$46,600,000	A1	No	No