



U.S. Municipal Bond Market

Public Higher Education - A Closer Look

Changes to Formerly Predictable Schedules – COVID-19 Responsible

College campuses thrive on regular and predictable schedules. In most cases, semesters begin and end on similar days year-to-year. Holiday and spring breaks occur on consistent timetables. That predictability is all out the window for the most part now. Campuses have emptied because of the threat the coronavirus (COVID-19) poses. Regular spring events like graduation and alumni reunions are canceled or will occur online. Classes for the rest of the semester are either canceled or also occurring online. The University of Michigan's Blue and Maize game, other spring football, and most other sporting events not only at Michigan but around the country, were canceled. Texas A&M's annual service day "The Big Event," and the University of Texas' Explore UT event were also abandoned.

The state budget process is another experience important to public universities across the country. While these are not going to be canceled, state lawmakers are gearing up for the messiest circumstances since the Great Recession. We are likely to see public universities' budgets cut, therefore exposure to state appropriations is a key factor to consider when looking at public higher-ed institutions. Now, New Jersey is moving their fiscal year end from June to the end of September.¹ This is likely going to create a host of other matters to address. It is not clear if other states are likely to follow in New Jersey's footsteps. While there may be some overlap with regard to the factors stressing public and private higher education institutions, we believe these are some of the leading issues that will influence public higher education credit in the near term:

- State budget negotiations are beginning, and we will likely see them rise in intensity in the coming weeks. The CBPP writes that funding cuts that occurred between 2008 and 2018 in public higher-ed has "had major consequences."² They are showing public higher-ed spending is down and that 41 states are spending less per student compared to 10 years ago.³ Considering the circumstances, spending will likely fall again, this time around the budget cycle. Therefore, public higher-ed institutions with a larger exposure to government appropriations could experience some revenue stress. Budgetary flexibility will be important. We show the Moody's median for the percent of government appropriation as a % of total revenue at 25%. And the range tops out at 52% with a floor of 3% for those included on pages 3-4.
- Liquidity levels for public higher-ed institutions are not as strong as they are for private institutions. The median for Moody's rated public higher-ed institutions is only 145 days cash on hand compared to the solid 338 days for privates. The range for publics is 442 to 52 days for the list of schools we included.
- The federal government's recent CARES Act allocates almost \$14 billion to higher education and \$12.5 billion of that will be allocated to institutions based on enrollment of Pell Grant and non-Pell Grant recipients. A much more meaningful amount has been allocated to public higher-ed institutions compared to private institutions. Although, these amounts are still not substantial in comparison to total operating revenues. Therefore, we expect the federal government will likely include higher education institutions in future phases of relief and stimulus. We include potential allocations by system/institution⁴ on pages 3-4.

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- Like with private institutions, the impact to public enrollment is going to depend upon how long the social distancing measures continue. Even those set up to deliver online learning or who have Massive Open Online Course (MOOC) partnerships will be impacted to a degree. We understand that courses at Univ. of Michigan, Univ. of Iowa, and Cleveland State (along with others) have moved largely to an online format. Whether this will continue for the fall 2020 semester, and whether this format can keep a solid level of enrollment if needed, remains to be seen.
- Will this service interruption be the precursor to the higher educational process transitioning to a primarily online delivery method? We think that online learning and MOOCs can supplement normal face-to-face classroom experiences. Online revenues may even be able to supplement traditional educational proceeds because of their flexible nature. Technological innovation in higher education, while valuable, has not fundamentally transformed the educational experience in a way that could fully transition to a 100% online format for a majority of students. “Good colleges have always been fundamentally human institutions,” wrote D. Chambliss and Christopher Takacs in their 2014 book, *How College Works*. It is in face-to-face meetings and interactions where teachers are able to have an “unusual influence,” write Chambliss and Takacs.⁵ It is often person-to-person interactions that inspire, motivate, and help students of every age and discipline to prioritize what is and is not important. (This factor is relevant for public and private institutions.)

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Recent Higher Education and Related Rating Agency Actions

Moody's Investor Service on Higher Education (Public and Private):

- Moody's lowered its Higher Education Sector outlook to “Negative” on March 18, 2020;

S&P Global on Higher Education Related Actions:

- S&P already assigned a “Negative” outlook to the Higher Education sector.
- S&P lowered its outlooks on all other public finance sectors to “Negative” on Wednesday April 1, 2020.
- S&P lowered its outlook on Privatized Student Housing Projects to “Negative” on March 25, 2020;

Fitch Ratings on Higher Education Outlook:

- Fitch Ratings also had a “Negative” outlook on the higher education sector before the COVID-19 pressures.

¹ Young, Elise; [New Jersey to Move Fiscal Year End to September From June](#); Bloomberg; April 1, 2020.

² Mitchell, Michael; Michael Leachman and Matt Saenz; [State Higher Education Funding Cuts Have Pushed Costs to Students, Worsened Inequality](#); Center on Budget and Policy Priorities; Oct 24, 2019.

³ *Ibid.*

⁴ According to [American Council on Education Simulations](#).

⁵ Warner, John; [How College Works](#); Inside HigherEd; Feb 3, 2014.

Please see Comparison of CARES Act Estimates and FY18 Metrics for Select Public Higher Education Institutions on pages 3-4.

Comparison of CARES Act Estimates and FY18 Metrics for Select Public Higher Education Institutions

Public University	Moody's Rating	System Description	Sim. Distrib. of CARES Act Amounts (\$000)	Oper. Rev. (\$000)	CARES Act Dist. as % of Operating Rev.	Long-Term Plant Debt (\$000)	Total Enroll. FTE	Total Cash & Invest. to Oper. Exp. (x)	Monthly Days Cash on Hand (x)	Spendable Cash & Invest. to Total Debt (x)	Annual Debt Service Cov. (x)	Gov. Approp. (% of Total Rev.)	Gov. Approp. per Student (\$)
Median/Average (268 issuers)	A1	-	44,449	283,280	1.76%	171,756	13,632	0.9	145.8	1.2	2.2	25.1	5,725
Arizona State University, AZ	Aa2	Comp. Public Uni.	63,810	2,400,370	2.66%	1,849,386	103,653	0.8	141.8	0.7	2.5	13.7	3,367
Auburn University, AL	Aa2	Comp. Public Uni.	20,852	1,238,625	1.68%	894,947	31,416	1.9	345.7	2.0	4.0	21.8	8,694
BoR of Uni. System of Georgia, GA	Aa2	Comp. Public Uni.	23,731	8,065,161	0.29%	2,921,726	288,314	0.8	93.1	1.2	3.7	28.7	8,079
California State University, CA	Aa2	Comp. Public Uni.	409,140	10,644,422	3.84%	7,623,548	440,957	0.7	145.3	1.0	2.5	42.1	10,113
City University of New York, NY	Aa2	Comp. Public Uni.	126,218	4,503,136	2.80%	5,561,380	206,536	0.4	69.8	0.3	1.0	43.2	9,473
Clemson University, SC	Aa2	Mod. Sized Pub. Uni.	14,246	1,031,711	1.38%	703,835	22,944	1.1	221.4	1.1	3.3	12.0	5,518
Cleveland State University, OH	A1	Mod. Sized Pub. Uni.	12,414	304,546	4.08%	214,755	12,760	0.9	201.9	0.8	1.6	24.8	5,876
Colorado State University, CO	Aa3	Comp. Public Uni.	22,766	1,391,897	1.64%	1,230,646	39,644	0.8	150.5	0.7	2.9	7.2	2,574
Eastern Michigan University, MI	A2	Mod. Sized Pub. Uni.	15,603	320,612	4.87%	352,123	15,950	0.5	110.8	0.4	2.4	23.9	4,452
Grand Valley State University, MI	A1	Mod. Sized Pub. Uni.	19,947	482,386	4.14%	288,723	21,482	0.8	203.6	1.1	3.4	14.5	3,245
Indiana University, IN	Aaa	Comp. Public Uni.	60,650	3,151,761	1.92%	1,027,435	81,870	1.4	210.4	2.9	2.9	18.3	7,021
Iowa State University, IA	Aa2	Comp. Public Uni.	22,917	1,276,534	1.80%	547,985	33,635	1.7	169.4	2.2	3.7	18.4	6,780
Kansas State University, KS	Aa3	Mod. Sized Pub. Uni.	13,308	803,784	1.66%	499,613	19,556	1.3	94.0	1.2	1.9	19.6	7,820
Michigan State University, MI	Aa2	Comp. Public Uni.	29,822	2,511,865	1.19%	1,225,542	46,025	1.5	251.8	2.5	3.5	13.7	7,541
Nevada System of Higher Education, NV	Aa2	Comp. Public Uni.	38,465	1,701,223	2.26%	828,093	74,988	1.0	197.6	1.8	1.9	36.3	8,323
North Carolina State University at Raleigh, NC	Aa1	Comp. Public Uni.	18,151	1,572,941	1.15%	582,333	31,922	1.4	194.4	2.7	3.9	32.8	16,648
Northern Arizona University, AZ	A1	Comp. Public Uni.	23,188	550,822	4.21%	636,092	29,383	0.7	154.2	0.5	1.6	21.0	3,912
Northern Illinois University, IL	Ba2	Mod. Sized Pub. Uni.	15,671	593,102	2.64%	341,083	14,352	0.5	52.5	0.6	2.9	52.0	20,581
Ohio State University, OH	Aa1	Comp. Public Uni.	41,598	6,741,277	0.62%	3,244,970	62,214	1.4	286.9	2.2	5.8	7.1	7,827
Ohio University, OH	Aa3	Comp. Public Uni.	22,102	743,190	2.97%	635,748	29,177	1.4	237.2	1.3	2.6	22.3	5,472
Oklahoma State University, OK	Aa3	Mod. Sized Pub. Uni.	22,201	1,095,637	2.03%	887,482	21,069	1.2	112.1	0.8	1.6	22.1	11,244
Pennsylvania State University, PA	Aa1	Comp. Public Uni.	55,903	6,453,403	0.87%	1,450,177	86,137	1.5	423.8	5.3	12.0	4.6	3,409
Purdue University, IN	Aaa	Comp. Public Uni.	35,497	2,341,813	1.52%	1,014,463	56,381	1.9	358.1	3.2	3.4	18.2	7,718
Rowan University, NJ	A2	Mod. Sized Pub. Uni.	14,070	550,362	2.56%	638,557	17,091	0.8	184.3	0.4	1.9	27.8	9,345
Rutgers, The State Uni. of New Jersey, NJ	Aa3	Comp. Public Uni.	55,482	3,941,580	1.41%	2,140,168	62,105	0.5	93.2	0.6	1.6	20.6	13,429
South Dakota Board of Regents, SD	Aa3	Comp. Public Uni.	3,409	832,727	0.41%	508,883	26,093	1.2	143.8	0.9	1.2	25.3	7,921
Southern Illinois University, IL	Ba2	Mod. Sized Pub. Uni.	11,617	1,299,523	0.89%	253,205	21,793	0.5	80.9	1.8	6.2	50.4	27,326
State System of Higher Education, PA	Aa3	Comp. Public Uni.	80,288	1,990,899	4.03%	1,078,818	85,539	1.0	241.8	0.7	1.7	22.8	5,056
State University of Iowa, IA	Aa1	Comp. Public Uni.	16,630	3,591,467	0.46%	1,365,647	29,591	1.0	117.6	2.0	3.9	6.3	7,729
State University of New York, NY	Aa2	Comp. Public Uni.	128,515	11,403,790	1.13%	12,411,950	204,912	0.5	99.1	0.4	1.5	31.3	17,401
State University System of Florida, FL	Aa2	Comp. Public Uni.	40,801	13,697,032	0.30%	1,462,270	334,720	0.9	79.2	2.1	8.1	21.9	9,126
Stephen F. Austin State University, TX	A1	Small Public University	11,159	212,509	5.25%	160,292	11,671	1.1	225.8	1.2	1.6	27.7	5,089
Temple University, PA	Aa3	Comp. Public Uni.	28,256	3,395,560	0.83%	1,204,435	36,423	0.6	113.3	1.5	3.5	3.0	2,826
Texas A&M University System, TX	Aaa	Comp. Public Uni.	80,637	4,613,141	1.75%	4,694,001	124,066	3.7	344.0	1.7	1.7	26.1	9,854
Texas State University System, TX	Aa2	Comp. Public Uni.	31,877	1,287,215	2.48%	1,150,415	65,612	0.8	243.9	0.8	1.9	27.0	5,369
Texas Tech University System, TX	Aa1	Comp. Public Uni.	27,972	1,896,412	1.47%	829,708	47,114	1.4	252.9	2.2	2.5	26.8	10,975
University of Alabama at Birmingham, AL	Aa2	Mod. Sized Pub. Uni.	11,948	3,840,695	0.31%	937,242	17,700	0.8	159.1	2.7	6.9	7.1	16,018
University of Alabama, AL	Aa2	Comp. Public Uni.	21,036	1,169,296	1.80%	1,038,373	35,800	1.9	305.9	1.3	3.3	13.4	4,351
University of Arizona, AZ	Aa2	Comp. Public Uni.	30,838	2,070,074	1.49%	1,620,527	44,376	1.0	176.8	0.8	1.8	14.4	6,734
University of Arkansas, AR	Aa2	Comp. Public Uni.	43,807	3,104,762	1.41%	1,541,492	54,972	0.9	83.9	0.9	2.5	14.4	7,967
University of California, CA	Aa2	Comp. Public Uni.	256,211	34,508,182	0.74%	23,508,777	264,500	1.0	153.7	1.3	3.1	9.8	13,124
University of Cincinnati, OH	Aa3	Comp. Public Uni.	23,584	1,222,456	1.93%	1,288,075	39,950	1.3	148.3	0.7	2.0	18.2	5,682
University of Colorado, CO	Aa1	Comp. Public Uni.	36,718	4,215,331	0.87%	1,778,648	55,684	1.1	247.8	2.2	3.9	3.4	2,636
University of Connecticut, CT	Aa3	Comp. Public Uni.	21,127	1,318,541	1.60%	2,216,181	29,284	0.7	105.2	0.2	1.1	35.9	16,208
University of Houston System, TX	Aa2	Comp. Public Uni.	53,966	1,344,435	4.01%	1,541,749	58,369	1.2	122.3	0.7	1.9	22.7	5,570
University of Illinois, IL	A1	Comp. Public Uni.	62,784	6,764,238	0.93%	1,511,767	85,743	0.9	171.2	2.9	6.2	38.7	31,312
University of Kansas, KS	Aa2	Comp. Public Uni.	15,093	1,270,711	1.19%	788,733	25,890	1.7	92.0	2.1	2.4	18.7	9,182
University of Kentucky, KY	Aa2	Comp. Public Uni.	18,159	3,377,788	0.54%	1,379,281	28,777	0.7	163.2	1.5	4.4	8.4	9,805
University of Massachusetts, MA	Aa2	Comp. Public Uni.	41,174	3,365,547	1.22%	3,089,068	65,347	0.6	138.8	0.5	2.1	22.3	11,652

Comparison of CARES Act Estimates and FY18 Metrics for Select Public Higher Education Institutions (cont.)

Public University	Moody's Rating	System Description	Sim. Distrib. of CARES Act Amounts (\$000)	Oper. Rev. (\$000)	CARES Act Dist. as % of Operating Rev.	Long-Term, Plant Debt (\$000)	Total Enroll. FTE	Total Cash & Invest. to Oper. Exp. (x)	Monthly Days Cash on Hand (x)	Spendable Cash & Invest. to Total Debt (x)	Annual Debt Service Cov. (x)	Gov. Approp. (% of Total Rev.)	Gov. Approp. per Student (\$)
University of Michigan, MI	Aaa	Comp. Public Uni.	36,045	8,530,059	0.42%	2,488,266	59,133	1.7	163.4	5.1	5.8	4.3	6,334
University of Minnesota, MN	Aa1	Comp. Public Uni.	35,556	3,524,194	1.01%	1,541,789	61,321	1.5	173.6	2.7	1.8	20.3	11,555
University of Missouri System, MO	Aa1	Comp. Public Uni.	29,128	3,527,736	0.83%	1,659,078	53,509	1.3	217.6	1.9	4.4	12.1	7,739
University of Nebraska, NE	Aa1	Comp. Public Uni.	31,921	2,098,551	1.52%	975,756	44,314	1.8	185.8	2.2	1.9	26.6	12,519
Uni. of North Carolina at Chapel Hill, NC	Aaa	Comp. Public Uni.	16,438	3,074,366	0.53%	1,446,832	27,960	1.4	121.2	2.0	2.8	16.9	18,627
Uni. of North Carolina at Charlotte, NC	Aa3	Comp. Public Uni.	23,815	656,070	3.63%	604,450	27,249	0.9	172.8	0.7	3.1	38.3	9,375
Uni. of North Texas System, TX	Aa2	Comp. Public Uni.	32,693	936,164	3.49%	816,505	37,960	0.8	201.0	0.7	1.6	29.0	7,163
University of Pittsburgh, PA	Aa1	Comp. Public Uni.	21,842	2,280,488	0.96%	833,420	32,468	2.2	442.9	4.7	5.1	7.4	5,191
University of Texas System, TX	Aaa	Comp. Public Uni.	170,412	19,532,189	0.87%	9,524,358	187,095	2.6	197.1	2.5	6.2	11.6	12,366
University of Utah, UT	Aa1	Comp. Public Uni.	19,189	5,028,016	0.38%	1,141,202	28,380	0.7	140.7	2.3	6.6	6.7	12,001
University of Virginia, VA	Aaa	Comp. Public Uni.	11,601	3,388,080	0.34%	2,127,255	23,950	3.0	172.5	3.8	3.1	5.0	7,145
University of Washington, WA	Aaa	Comp. Public Uni.	38,757	5,857,603	0.66%	2,466,161	59,505	1.0	155.6	1.7	3.3	6.2	6,229
University System of Maryland, MD	Aa1	Comp. Public Uni.	41,465	5,154,589	0.80%	1,286,257	128,280	0.8	192.6	2.7	4.2	25.8	10,368
Washington State University, WA	Aa3	Comp. Public Uni.	21,702	1,045,481	2.08%	689,047	29,353	1.2	93.1	0.5	1.8	22.3	8,193
West Virginia University, WV	Aa3	Comp. Public Uni.	18,803	1,061,239	1.77%	753,284	28,695	1.8	60.2	1.9	2.4	17.7	6,237
		Total	2,844,725	241,899,316									

Source: Moody's medians, American Council on Education simulations, and HilltopSecurities.

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