HIGHER EDUCATION STUDY - BACKGROUND MEMORANDUM

STUDY RESPONSIBILITIES

The Legislative Management assigned the 2019-20 interim Higher Education Committee to study higher education institutions under the control of the State Board of Higher Education. The study must include:

- Higher education trends, including enrollment, space needs, and distance education, and their impact on higher education institutions and the state;
- Higher education research relating to agriculture, energy, and other sectors, including its economic impact, available funding, and the impact of institution and systemwide administrative structures on research;
- Higher education facilities, including campus and legislative funding expectations and the role of the new three-tier capital building fund program; and
- The role of higher education in meeting the state's workforce needs, including TrainND, dual missions, and interstate cooperation.

BACKGROUND

The North Dakota University System consists of 11 higher education institutions under the control of the State Board of Higher Education. Of the 11 institutions, 2 are doctoral-granting institutions, 2 are master's-granting institutions, 2 are universities that offer baccalaureate degrees, and 5 are colleges that offer associate and technical degrees.

Appropriations

Legislative appropriations for the 2019-21 biennium for higher education institutions, Forest Service, and the University System office total \$2,999,878,919, of which \$660,517,805 is from the general fund. The following is a history of legislative appropriations for higher education since the 1997-99 biennium:

Biennium	General Fund	Special Funds	Total
1997-99	\$306,825,098	\$323,595,863	\$630,420,961
1999-2001	\$334,449,287	\$713,538,799	\$1,047,988,086
2001-03	\$366,953,836	\$80,367,201	\$447,321,037
2003-05	\$364,029,938	\$110,546,775	\$474,576,713
2005-07	\$387,157,893	\$178,552,108	\$565,710,001
2007-09	\$472,036,237	\$165,419,701	\$637,455,938
2009-11	\$593,355,047	\$202,764,364	\$796,119,411
2011-13	\$657,838,539	\$108,817,759	\$766,656,298
2013-15	\$910,632,494	\$177,980,941	\$1,088,613,435
2015-17	\$837,849,212	\$66,644,264	\$904,493,476
2017-19	\$679,438,630 ¹	\$2,059,950,275	\$2,739,388,905
2019-21	\$660,517,805	\$2,339,361,114	\$2,999,878,919

NOTE: The special funds amounts for the 1997-99 biennium reflect the appropriation of tuition income. The special funds amounts for the 1999-2001, 2017-19, and 2019-21 bienniums reflect the appropriation of tuition and local funds.

The following is a summary of ongoing and one-time general fund appropriations for the University System since the 2007-09 biennium:

General Fund Appropriations						
Biennium	Ongoing Appropriations	One-Time Appropriations	Total			
2007-09	\$443,654,169	\$28,382,068	\$472,036,237			
2009-11	\$534,062,895	\$59,292,152	\$593,355,047			
2011-13	\$606,525,437	\$51,313,102	\$657,838,539			
2013-15	\$679,271,846	\$231,360,648	\$910,632,494			
2015-17	\$681,876,059	\$155,973,153	\$837,849,212			
2017-19	\$613,242,154	\$66,196,476 ¹	\$679,438,630			
2019-21	\$648,667,805	\$11,850,000	\$660,517,805			
¹ The 2017-19 biennium one-time amount includes \$53.6 million of supplemental funding appropriated by the 2019 Legislative						

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Assembly.

¹The 2017-19 biennium general fund amount includes \$53.6 million of supplemental funding appropriated by the 2019 Legislative Assembly.

The University System is authorized 6,609.87 full-time equivalent (FTE) positions for the 2019-21 biennium, 157.89 FTE positions fewer than the 2017-19 biennium authorized level. The schedule below summarizes the FTE changes by campus.

Institution/Agency	2017-19 Biennium FTE Positions Appropriated	2019-21 Biennium FTE Positions Appropriated	Increase (Decrease)
University System office	149.40	148.90	(0.50)
Bismarck State College	358.35	323.93	(34.42)
Lake Region State College	129.61	118.10	(11.51)
Williston State College	100.75	100.48	(0.27)
University of North Dakota	2,218.07	2,132.17	(85.90)
University of North Dakota School of Medicine and Health Sciences	435.75	485.32	49.57
North Dakota State University	1,895.66	1,870.16	(25.50)
North Dakota State College of Science	345.04	310.73	(34.31)
Dickinson State University	168.90	213.26	44.36
Mayville State University	210.53	209.27	(1.26)
Minot State University	441.65	407.58	(34.07)
Valley City State University	202.75	180.68	(22.07)
Dakota College at Bottineau	84.30	82.29	(2.01)
Forest Service	27.00	27.00	`0.0Ó
Total	6,767.76	6,609.87	(157.89)

Space Utilization

The University System reported to the Higher Education Committee during the 2017-18 interim regarding campus space utilization. The University System reported the criteria for determining space utilization includes room schedules and density. The University System's space utilization goal is for each classroom to be used at least 30 hours per week with an occupancy rate of at least 80 percent of capacity. The space utilization goal for laboratories is for each laboratory to be used at least 20 hours per week with an occupancy rate of at least 75 percent of capacity. The University System reported University System institutions generally have below average space utilization rates. Utilization rates of classrooms at institutions ranged from 34 to 80 percent while the utilization rates of laboratories at institutions range from 37 to 108 percent.

Higher Education Delivery Methods

Higher education institutions offer course delivery through several different methods. The following is a summary of various delivery methods:

Delivery Method	Description
Face-to-face on campus	A traditional classroom environment where both the instructor and students are physically located in the same classroom.
Face-to-face off campus	Both the instructor and students are physically located in the same classroom in an off-campus facility.
Correspondence	Instruction is provided through mail, email, or fax.
One-way video	A video connection that allows for the faculty member to be heard and seen by students.
Two-way video	A video and audio connection among two or more sites that allows for communication between faculty members and students.
Synchronous Internet	Online classes that require faculty members and students to be online at the same time for interactive learning.
Asynchronous Internet	Online classes in which faculty members and students are not required to be online at the same time. Faculty members provide learning materials and assignments that may be completed by a student anytime during a specified time period.
Hybrid/blended	Classes in which multiple delivery methods are utilized.

During the fall 2018 semester, the total degree credit headcount enrollment of the University System was 45,882 students. Of the total enrollment, 32,953, or 71.8 percent of students, were enrolled in at least one traditional classroom course while 12,929, or 28.2 percent of students, did not have an on-campus presence. The following schedule details the number of students at each institution that had an on-campus presence:

	Students \ On-Campus		Students Without an On-Campus Presence		
Bismarck State College	2,078	55.0%	1,700	45.0%	
Dakota College at Bottineau	522	52.4%	474	47.6%	
Lake Region State College	411	19.8%	1,661	80.2%	
North Dakota State College of Science	1,438	48.6%	1,519	51.4%	
Williston State College	667	59.3%	457	40.7%	
Dickinson State University	1,079	77.5%	313	22.5%	
Mayville State University	544	45.9%	640	54.1%	
Minot State University	2,205	69.1%	984	30.9%	
Valley City State University	809	52.3%	738	47.7%	
North Dakota State University	12,884	93.4%	912	6.6%	
University of North Dakota	10,316	74.5%	3,531	25.5%	
Total	32,953	71.8%	12,929	28.2%	

Enrollment

The University System reported a total degree credit headcount enrollment of 45,882 students and a total degree credit FTE enrollment of 36,603 students in the fall 2018 enrollment report. The following is a summary of University System degree credit headcount and FTE fall enrollments for 2009 through 2018:

	Fall Headcount Enrollment ¹									
Institution	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Bismarck State College	4,020	4,177	4,392	4,109	4,062	4,002	4,078	3,976	3,756	3,778
Dickinson State University	2,767	2,485	2,346	1,837	1,449	1,479	1,317	1,386	1,425	1,392
Lake Region State College	1,702	1,913	2,056	1,974	1,898	1,988	1,918	1,947	1,972	2,072
Mayville State University	887	982	970	1,020	1,065	1,081	1,110	1,130	1,140	1,184
Minot State University	3,649	3,866	3,657	3,560	3,533	3,410	3,348	3,412	3,216	3,189
Dakota College at Bottineau	748	863	812	774	793	753	692	811	909	996
North Dakota State College of Science	2,651	2,833	3,127	3,066	3,168	3,033	3,123	3,003	2,985	2,957
North Dakota State University	14,189	14,407	14,399	14,443	14,629	14,747	14,516	14,432	14,358	13,796
University of North Dakota	13,172	14,194	14,697	15,250	15,143	14,906	14,951	14,648	14,406	13,847
Valley City State University	1,083	1,285	1,384	1,362	1,366	1,378	1,422	1,452	1,522	1,547
Williston State College	949	932	993	808	909	883	1,038	1,039	1,098	1,124
Total	45,817	47,937	48,833	48,203	48,015	47,660	47,513	47,236	46,787	45,882

¹Headcount enrollment includes all students enrolled at an institution regardless of the number of credit-hours the student is enrolled in.

	Fall Full-Time Equivalent Enrollment ¹									
Institution	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Bismarck State College	3,160	3,208	3,209	2,990	2,955	2,909	2,912	2,860	2,646	2,611
Dickinson State University	2,187	2,054	1,959	1,454	1,201	1,176	1,070	1,114	1,128	1,090
Lake Region State College	868	921	988	973	943	978	981	971	995	1,005
Mayville State University	662	704	704	759	749	798	796	782	784	817
Minot State University	2,832	3,002	2,795	2,731	2,710	2,600	2,570	2,592	2,467	2,483
Dakota College at Bottineau	490	540	524	474	502	518	459	490	527	590
North Dakota State College of Science	2,076	2,217	2,366	2,354	2,295	2,272	2,305	2,298	2,253	2,126
North Dakota State University	12,577	12,708	12,606	12,707	12,797	12,934	12,834	12,783	12,784	12,394
University of North Dakota	11,306	12,018	12,319	12,729	12,606	12,420	12,455	12,182	11,964	11,585
Valley City State University	833	957	1,011	995	975	990	1,031	1,044	1,086	1,096
Williston State College	573	570	608	537	593	579	738	756	764	806
Total	37,564	38,899	39,089	38,703	38,326	38,174	38,151	37,872	37,398	36,603

¹The FTE enrollment of an institution is calculated by dividing undergraduate student credit-hours by 15 and by dividing graduate student credit-hours by 12. Full-time professional program students are counted as 1 FTE enrollment.

Electronic Course Enrollment

During the fall 2018 semester, 20,632 students enrolled in at least one degree-credit course with an electronic delivery method. The following table summarizes the enrollment in each type of distance delivery method:

Enrollment in Courses With Electronic Delivery Methods (Fall 2018)							
	Interactive Video	Synchronous Internet	Asynchronous Internet	Hybrid	Total ¹		
Bismarck State College	127	48	1,838		2,013		
Dakota College at Bottineau	264		383	20	667		
Lake Region State College	138		869		1,007		
North Dakota State College of Science	113	55	605	526	1,299		
Williston State College	112		603	316	1,031		
Dickinson State University	78	28	506	7	619		
Mayville State University	143		679		822		
Minot State University	63	2	1,119		1,184		
Valley City State University			902		902		
North Dakota State University	57	111	4,650	1,428	6,246		
University of North Dakota		748	4,262	1,421	6,431		
Total	1,095	992	16,416	3,718	22,221		
¹ Duplicated total in which students tak	ing courses throu	gh multiple delive	ry methods are co	unted more than	once.		

Higher Education Research

The University System reported estimated research expenditures of \$226.6 million in fiscal year 2016, including \$70.3 million at the University of North Dakota and \$156.3 million at North Dakota State University. The Legislative Assembly, in House Bill No. 1003 (2019), provided \$6.03 million from the general fund for competitive research. The following is a summary of funding for the competitive research program:

Biennium	General Fund
1995-97	\$1,980,000
1997-99	\$1,980,000
1999-2001	\$1,971,000
2001-03	\$4,000,000
2003-05	\$4,750,000 ¹
2005-07	\$5,190,000
2007-09	\$5,650,000
2009-11	\$7,050,0002
2011-13	\$7,050,000
2013-15	\$7,050,000
2015-17	\$6,588,225
2017-19	\$6,027,750
2019-21	\$6,027,750 ³

¹The 2003 Legislative Assembly provided that \$100,000 of the \$4.75 million be used for a public-private partnership for establishment of a design center at the University of North Dakota.

The Legislative Assembly, in House Bill No. 1020 (2019), appropriated \$150,161,980, including \$71,618,352 from the general fund, \$940,465 from the strategic investment and improvements fund, and \$77,603,163 from other funds, for North Dakota State University agricultural research as follows:

	2019-21 Biennium Appropriation
Main research center	\$111,360,566
Dickinson research center	7,015,862
Central grasslands research center	3,510,825
Hettinger research center	5,112,403
Langdon research center	3,052,060
North Central research center	5,137,570
Williston research center	5,286,833
Carrington research center	9,685,861
Total	\$150,161,980

The Legislative Assembly, in Senate Bill No. 2249 (2019), also established the state energy research center at the University of North Dakota Energy and Environmental Research Center and provided for 1 percent of oil and gas taxes, up to \$5 million per biennium, to be deposited in the state energy research center fund.

²The 2009 Legislative Assembly provided that \$400,000 of the \$7.05 million be used for the National Aeronautics and Space Administration Experimental Program to Stimulate Competitive Research (NASA EPSCoR).

³The 2019 Legislative Assembly provided that \$342,000 of the \$6,027,750 be used for NASA EPSCoR.

Capital Building Fund Program

The Legislative Assembly approved Section 31 of House Bill No. 1003 (2019) to provide for the State Board of Higher Education to report to the Legislative Management regarding the use of funding in each institutions' capital building fund line item, the source of matching funds, and each institutions' 5-year plan for capital construction spending. The 2019 Legislative Assembly established a capital building fund program for the 2019-21 biennium in Sections 29 and 30 of House Bill No. 1003, including one-time appropriations of \$17 million from Bank of North Dakota profits and \$2 million from the general fund which are to be matched by other institutional funds as follows:

	Ti	er II	Tier III	
	Bank of North	Institution Match	General Fund and Bank	Institution Match
	Dakota Profits	(\$1 to \$1)	of North Dakota Profits	(\$2 to \$1)
Bismarck State College	\$425,693	\$425,693	\$500,000	\$1,000,000
Dakota College at Bottineau	106,064	106,064	500,000	1,000,000
Lake Region State College	177,375	177,375	500,000	1,000,000
North Dakota State College of Science	500,695	500,695	500,000	1,000,000
Williston State College	137,947	137,947	500,000	1,000,000
Dickinson State University	268,862	268,862	500,000	1,000,000
Mayville State University	240,029	240,029	500,000	1,000,000
Minot State University	572,801	572,801	500,000	1,000,000
Valley City State University	309,137	309,137	500,000	1,000,000
North Dakota State University	2,899,596	2,899,596	2,250,000	4,500,000
University of North Dakota	4,361,801	4,361,801	2,250,000	4,500,000
Total	\$10,000,000	\$10,000,000	\$9,000,000	\$18,000,000

The funding in Tier II was appropriated directly to the institutions and the funding in Tier III was appropriated to the University System office with a directive to allocate the money as identified in the schedule above as matching funds are secured. An additional \$11.1 million from the general fund, which must be matched by each institution with \$2 from operations or other sources for each \$1 of extraordinary repairs funding used for a project, was appropriated in the capital assets line item of each institution for extraordinary repairs. This amount was considered Tier I of the capital building fund program.

Workforce Training

The University System reported the following regarding workforce training provided by TrainND between fiscal year 2014 and fiscal year 2017:

	2014	2015	2016	2017
Businesses served	1,208	1,134	1,076	843
Employees receiving training	18,491	17,948	11,908	10,917
Business satisfaction with training	99%	99%	99%	99%
Participant satisfaction with training	99%	99%	98%	98%
Businesses requesting additional training	52%	64%	67%	61%
Revenue generated from training fees (in millions)	\$6.0	\$7.5	\$4.9	\$4.4